



Beatriz Otero Calviño

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**Beatriz Otero Calviño**

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Contact city: Barcelona
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Current professional situation

Employing entity: Universitat Politècnica de Catalunya **Type of entity:** University
Department: Department of Computer Architecture
Professional category: Sotsdirector/a de Departament **Educational Management (Yes/No):** No
City employing entity: Barcelona, Spain
Phone: 93 4054046 **Email:** botero@ac.upc.edu
Start date: 01/09/2015

Employing entity: Universitat Politècnica de Catalunya **Type of entity:** University
Department: Department of Computer Architecture, Barcelona School of Telecommunications Engineering (ETSETB)
Professional category: Tenure-track 2 lecturers **Educational Management (Yes/No):** Yes
City employing entity: Barcelona, Spain
Phone: 93 4054046
Start date: 01/05/2015
Type of contract: Permanent employment contract **Dedication regime:** Full time
Performed tasks: Agregat/da

Previous positions and activities

	Employing entity	Professional category	Start date
1	Universitat Politècnica de Catalunya	Collaborating lecturer with an open-ended contract	17/04/2007



	Employing entity	Professional category	Start date
2	Universitat Politècnica de Catalunya	Collaborator	01/09/2003
3	Universitat Politècnica de Catalunya	Adjunct lecturers	16/09/2002
4	Universitat Politècnica de Catalunya	Adjunct lecturers	20/10/2000
5	Universitat Politècnica de Catalunya	Research fellow	01/11/2000

- 1** **Employing entity:** Universitat Politècnica de Catalunya **Type of entity:** University
Department: Department of Computer Architecture, Barcelona School of Telecommunications Engineering (ETSETB)
City employing entity: Barcelona, Spain
Professional category: Collaborating lecturer with an open-ended contract **Educational Management (Yes/No):** Yes
Phone: 93 4054046
Start-End date: 17/04/2007 - 30/04/2015 **Duration:** 8 years - 14 days
Type of contract: Permanent employment contract
Dedication regime: Full time
Performed tasks: Col·laborador/a doctor
- 2** **Employing entity:** Universitat Politècnica de Catalunya **Type of entity:** University
Department: Department of Computer Architecture, Castelldefels School of Telecommunications and Aerospace Engineering (EETAC)
Professional category: Collaborator **Educational Management (Yes/No):** Yes
Start-End date: 01/09/2003 - 16/04/2007 **Duration:** 3 years - 7 months - 16 days
Type of contract: Temporary employment contract
Dedication regime: Full time
Performed tasks: Professor/a col·laborador/a no doctor/a
- 3** **Employing entity:** Universitat Politècnica de Catalunya **Type of entity:** University
Department: Castelldefels School of Telecommunications and Aerospace Engineering (EETAC)
Professional category: Adjunct lecturers **Educational Management (Yes/No):** Yes
Start-End date: 16/09/2002 - 31/08/2003 **Duration:** 11 months - 19 days
Type of contract: Temporary employment contract
Dedication regime: Part time
Performed tasks: Professor Associat
- 4** **Employing entity:** Universitat Politècnica de Catalunya **Type of entity:** University
Department: Castelldefels School of Telecommunications and Aerospace Engineering (EETAC)
Professional category: Adjunct lecturers **Educational Management (Yes/No):** Yes
Start-End date: 20/10/2000 - 06/06/2002 **Duration:** 1 year - 7 months - 18 days
Type of contract: Temporary employment contract
Dedication regime: Part time
Performed tasks: Professor Associat
- 5** **Employing entity:** Universitat Politècnica de Catalunya **Type of entity:** University
Department: Castelldefels School of Telecommunications and Aerospace Engineering (EETAC)



Professional category: Research fellow
Start-End date: 01/11/2000 - 30/11/2000
Type of contract: Becari FI-G
Dedication regime: Full time
Performed tasks: Becari FI-G

Educational Management (Yes/No): No
Duration: 29 days



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

- 1 University degree:** Others
Name of qualification: Enginyer En Informàtica
Date of qualification: 19/12/1996
- 2 University degree:** Higher degree
Name of qualification: Enginyeria Informàtica
Degree awarding entity: Universidad Central de Venezuela
Date of qualification: 19/12/1996
Foreign qualification: Enginyeria Informàtica
Type of entity: R&D Centre

Doctorates

- 1 Doctorate programme:** Arquitectura y tecnología de computadores
Degree awarding entity: Universitat Politècnica de Catalunya
City degree awarding entity: Barcelona, Spain
Date of degree: 13/04/2007
European doctorate: No
Thesis title: Estrategias de Descomposición en Dominios para entornos Grid
Thesis director: Brigida Molina
Obtained qualification: Excellent Cum Laude
Special doctorate award: No
- 2 Doctorate programme:** Ciencias de la Computación
Degree awarding entity: Universidad Central de Venezuela
City degree awarding entity: Venezuela
Date of degree: 17/07/2006
European doctorate: No
Thesis title: Diseño de lentes progresivos mediante optimización no lineal
Thesis director: Jose M. Cela Espin
Obtained qualification: Pass
Special doctorate award: No

**Other postgraduate university studies****Type of education:** Postgraduate**Postgraduate qualification:** Magister Scientaurum en Ciencias de la Computación**Degree awarding entity:** Universidad Central de Venezuela**Type of entity:** R&D Centre**Date of qualification:** 12/11/1999**Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)****1 Training title:** Introducció pràctica a la realització i difusió de vídeos docents a baix cost**City awarding entity:** barcelona, Spain**Awarding entity:** Instituto de Ciencias de la Educación, UPC**Type of entity:** R&D Centre**End date:** 21/03/2011**Duration in hours:** 22 days**2 Training title:** Com pots millorar la teva capacitat d'argumentació?**City awarding entity:** barcelona, Spain**Awarding entity:** Instituto de Ciencias de la Educación, UPC**Type of entity:** R&D Centre**End date:** 31/03/2010**Duration in hours:** 2 months**3 Training title:** Los 7 secretos para dirigir con éxito una tesis (1a edición)**City awarding entity:** barcelona, Spain**Awarding entity:** Instituto de Ciencias de la Educación, UPC**Type of entity:** R&D Centre**End date:** 19/06/2009**Duration in hours:** 1 day**Attended advanced, improvement and innovative teacher training and new technology courses and seminars focused on improving teaching****1 Title of course/seminar:** Teoria i pràctica del treball en equip**City organizing entity:** Barcelona, Spain**Organising entity:** Institute of Education Sciences**Type of entity:** University Research Institute**Duration in hours:** 13 hours**Start-End date:** 23/10/2015 - 20/11/2015**2 Title of course/seminar:** Reducció del treball del professorat**City organizing entity:** Barcelona, Spain**Organising entity:** Institute of Education Sciences**Type of entity:** University Research Institute**Duration in hours:** 5 hours**Start-End date:** 03/11/2015 - 03/11/2015**3 Title of course/seminar:** Introducció al software estadístic R**City organizing entity:** Barcelona, Spain**Organising entity:** Institute of Education Sciences**Type of entity:** University Research Institute



Duration in hours: 9 hours
Start-End date: 08/07/2015 - 15/07/2015

- 4 Title of course/seminar:** JORNADA D'INNOVACIÓ DOCENT UPC: RIMA 2014
City organizing entity: Tarragona, Spain
Organising entity: Institute of Education Sciences **Type of entity:** University Research Institute
Duration in hours: 5 hours
Start-End date: 03/07/2014 - 03/07/2014
- 5 Title of course/seminar:** Eines web 2.0 a l'abast de la docència
City organizing entity: Barcelona, Spain
Organising entity: Institute of Education Sciences **Type of entity:** University Research Institute
Duration in hours: 4 hours
Start-End date: 05/05/2014 - 05/05/2014
- 6 Title of course/seminar:** Jornada d'innovació docent UPC: RIMA 2013
City organizing entity: Terrassa, Spain
Organising entity: Institute of Education Sciences **Type of entity:** University Research Institute
Duration in hours: 4 hours
Start-End date: 08/07/2013 - 08/07/2013
- 7 Title of course/seminar:** Com aprèn el nostre estudiantat
City organizing entity: Barcelona, Spain
Organising entity: Institute of Education Sciences **Type of entity:** University Research Institute
Duration in hours: 8 hours
Start-End date: 14/01/2013 - 15/01/2013
- 8 Title of course/seminar:** Coaching directiu
City organizing entity: Barcelona, Spain
Organising entity: Institute of Education Sciences **Type of entity:** University Research Institute
Duration in hours: 4 hours
Start-End date: 18/04/2012 - 18/04/2012
- 9 Title of course/seminar:** Planning for the effective use of ICTs for teaching in higher education
City organizing entity: Barcelona,
Start-End date: 14/03/2008 - 14/03/2008
- 10 Title of course/seminar:** Els Estudis d'Enginyeria de Telecomunicació a les Portes de Bologna (Taula Rodona: Experiències d'adaptació a Bolonia en assignatures de primers cursos)
City organizing entity: Barcelona, Spain
Start-End date: 13/06/2007 - 13/06/2007
- 11 Title of course/seminar:** Curso de catalán: Básico 1
City organizing entity: Barcelona,
Start-End date: 26/09/2006 - 18/12/2006 **Length:** 2 months - 23 days
- 12 Title of course/seminar:** El portfoli del professor: una eina docent per documentar i avaluar la docència
City organizing entity: Barcelona,
Start-End date: 15/10/2004 - 15/10/2004



- 13** **Title of course/seminar:** Anàlisi de la gravació d'una de les teves classes/SeSAC
City organizing entity: Barcelona,
Start-End date: 22/03/2004 - 30/06/2004 **Length:** 3 months - 9 days
- 14** **Title of course/seminar:** L'avaluació de l'aprenentatge
City organizing entity: Barcelona,
Start-End date: 17/06/2004 - 18/06/2004 **Length:** 1 day
- 15** **Title of course/seminar:** La docència a l'EEES. Què hi ha de diferent?
City organizing entity: Barcelona,
Start-End date: 07/06/2004 - 07/06/2004
- 16** **Title of course/seminar:** Assaig d'una experiència d'aprenentatge actiu
City organizing entity: Barcelona,
Start-End date: 19/03/2004 - 28/05/2004 **Length:** 2 months - 9 days
- 17** **Title of course/seminar:** Com parlar millor en públic
City organizing entity: Barcelona,
Start-End date: 09/02/2004 - 10/02/2004 **Length:** 1 day
- 18** **Title of course/seminar:** L'educació de la veu
City organizing entity: Barcelona,
Start-End date: 04/02/2004 - 06/02/2004 **Length:** 2 days
- 19** **Title of course/seminar:** Definició dels objectius d'una assignatura
City organizing entity: Barcelona,
Start-End date: 15/09/2003 - 01/02/2004 **Length:** 4 months - 19 days
- 20** **Title of course/seminar:** Com motivar els estudiants
City organizing entity: Barcelona,
Start-End date: 29/01/2004 - 29/01/2004
- 21** **Title of course/seminar:** Guia per a les classes expositives
City organizing entity: Barcelona,
Start-End date: 30/10/2003 - 30/10/2003

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
Catalan	B1	B1	A1	A1	A1
Spanish	B1	B1	B1	B1	B1
English	B1	B1	C1	C1	B1



Teaching experience

General teaching experience

- 1 Name of the course:** Fundamentals of Computers
Type of programme: Graduat/da
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2016
End date: 2016
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2017
Type of hours/ ECTS credits: Credits
- 2 Name of the course:** Graphic Cards and Accelerators
Type of programme: Graduat/da
Type of subject: Optional
Course given: 3 (Segon Quadrimestre)
Start date: 02/2016
End date: 2016
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Informatics
End date: 06/2016
Type of hours/ ECTS credits: Credits
- 3 Name of the course:** Fundamentals of Computers
Type of programme: Graduat/da
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2015
End date: 2015
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2016
Type of hours/ ECTS credits: Credits
- 4 Name of the course:** Graphic Cards and Accelerators
Type of programme: Graduat/da
Type of subject: Optional
Course given: 3 (Segon Quadrimestre)
Start date: 02/2015
End date: 2015
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Informatics
End date: 06/2015
Type of hours/ ECTS credits: Credits
- 5 Name of the course:** Fundamentals of Computers
Type of programme: Graduat/da
Type of subject: Obligatory



Course given: 1 (Primer Cuatrimestre)

Start date: 09/2014

End date: 2014

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: Barcelona School of Telecommunications Engineering

End date: 01/2015

Type of hours/ ECTS credits: Credits

6 Name of the course: Fundamentals of Computers

Type of programme: Graduat/da

Type of subject: Obligatory

Course given: 1 (Primer Cuatrimestre)

Start date: 09/2013

End date: 2013

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: Barcelona School of Telecommunications Engineering

End date: 01/2014

Type of hours/ ECTS credits: Credits

7 Name of the course: Fundamentals of Computers

Type of programme: Graduat/da

Type of subject: Obligatory

Course given: 1 (Primer Cuatrimestre)

Start date: 09/2012

End date: 2012

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: Barcelona School of Telecommunications Engineering

End date: 01/2013

Type of hours/ ECTS credits: Credits

8 Name of the course: Fundamentals of Computers

Type of programme: Graduat/da

Type of subject: Obligatory

Course given: 1 (Primer Cuatrimestre)

Start date: 09/2011

End date: 2011

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: Barcelona School of Telecommunications Engineering

End date: 01/2012

Type of hours/ ECTS credits: Credits

9 Name of the course: Tópicos especiales en Matemáticas de la computación: Optimización de simulaciones numéricas en ingeniería

Type of programme: Doctorate

Type of subject: Optional

University degree: Ciencias de la Computación

Course given: Postgrado (Segon Cuatrimestre)

Start date: 02/2011

End date: 2011

Hours/ECTS credits: 2

Entity: Central de Venezuela

Faculty, institute or centre: Central de Venezuela

End date: 06/2011

Type of hours/ ECTS credits: Credits



- 10** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2010
End date: 2010
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2011
Type of hours/ ECTS credits: Credits
- 11** **Name of the course:** Fundamentals of Computers
Type of programme: Graduat/da
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2010
End date: 2010
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2011
Type of hours/ ECTS credits: Credits
- 12** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Segon Quadrimestre)
Start date: 02/2010
End date: 2010
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 06/2010
Type of hours/ ECTS credits: Credits
- 13** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2009
End date: 2009
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2010
Type of hours/ ECTS credits: Credits
- 14** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2008
End date: 2008
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2009
Type of hours/ ECTS credits: Credits



- 15** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Segon Quadrimestre)
Start date: 02/2008
End date: 2008
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 06/2008
Type of hours/ ECTS credits: Credits
- 16** **Name of the course:** Computer Architecture and Operating Systems I
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 2 (Primer Quadrimestre)
Start date: 09/2007
End date: 2007
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2008
Type of hours/ ECTS credits: Credits
- 17** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Primer Quadrimestre)
Start date: 09/2007
End date: 2007
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 01/2008
Type of hours/ ECTS credits: Credits
- 18** **Name of the course:** Computer Architecture and Operating Systems I
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 2 (Segon Quadrimestre)
Start date: 02/2007
End date: 2007
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 06/2007
Type of hours/ ECTS credits: Credits
- 19** **Name of the course:** Introduction to Computers
Type of programme: Enginyer/a
Type of subject: Obligatory
Course given: 1 (Segon Quadrimestre)
Start date: 02/2007
End date: 2007
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: Barcelona School of Telecommunications Engineering
End date: 06/2007
Type of hours/ ECTS credits: Credits



- 20** **Name of the course:** INTRODUCTION TO COMPUTER SYSTEMS
Type of programme: Engineering
Type of subject: Obligatory
Start date: 09/2006 **End date:** 01/2007
End date: 2006 **Type of hours/ ECTS credits:** Credits
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: UPC
- 21** **Name of the course:** INTRODUCTION TO COMPUTER SYSTEMS
Type of programme: Engineering
Type of subject: Obligatory
Start date: 02/2006 **End date:** 06/2006
End date: 2006 **Type of hours/ ECTS credits:** Credits
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: UPC
- 22** **Name of the course:** INTRODUCTION TO COMPUTER SYSTEMS
Type of programme: Engineering
Type of subject: Obligatory
Start date: 09/2005 **End date:** 01/2006
End date: 2005 **Type of hours/ ECTS credits:** Credits
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: UPC
- 23** **Name of the course:** INTRODUCTION TO COMPUTER SYSTEMS
Type of programme: Engineering
Type of subject: Obligatory
Start date: 09/2004 **End date:** 01/2005
End date: 2004 **Type of hours/ ECTS credits:** Credits
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: UPC
- 24** **Name of the course:** INTRODUCTION TO COMPUTER SYSTEMS
Type of programme: Engineering
Type of subject: Obligatory
Start date: 09/2003 **End date:** 01/2004
End date: 2003 **Type of hours/ ECTS credits:** Credits
Hours/ECTS credits: 6
Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: UPC
- 25** **Name of the course:** INTRODUCTION TO COMPUTER SYSTEMS
Type of programme: Engineering
Type of subject: Obligatory
Start date: 02/2003 **End date:** 06/2003
End date: 2003 **Type of hours/ ECTS credits:** Credits
Hours/ECTS credits: 6



Entity: Universitat Politècnica de Catalunya
Faculty, institute or centre: UPC

26 Name of the course: INTRODUCTION TO COMPUTER SYSTEMS

Type of programme: Engineering

Type of subject: Obligatory

Start date: 09/2002

End date: 01/2003

End date: 2002

Type of hours/ ECTS credits: Credits

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: UPC

27 Name of the course: INTRODUCTION TO COMPUTER SYSTEMS

Type of programme: Engineering

Type of subject: Obligatory

Start date: 02/2002

End date: 06/2002

End date: 2002

Type of hours/ ECTS credits: Credits

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: UPC

28 Name of the course: INTRODUCTION TO COMPUTERS

Type of programme: Engineering

Type of subject: Modular

Start date: 09/2001

End date: 01/2002

End date: 2001

Type of hours/ ECTS credits: Credits

Hours/ECTS credits: 9

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: UPC

29 Name of the course: INTRODUCTION TO COMPUTER SYSTEMS

Type of programme: Engineering

Type of subject: Obligatory

Start date: 02/2001

End date: 06/2001

End date: 2001

Type of hours/ ECTS credits: Credits

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: UPC

30 Name of the course: INTRODUCCIÓ ALS COMPUTADORS

Type of programme: Engineering

Type of subject: Obligatory

Start date: 09/2000

End date: 01/2001

End date: 2000

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: UPC

31 Name of the course: INTRODUCTION TO COMPUTER SYSTEMS

Type of programme: Engineering

Type of subject: Obligatory

Start date: 02/2000

End date: 06/2000



End date: 2000

Hours/ECTS credits: 6

Entity: Universitat Politècnica de Catalunya

Faculty, institute or centre: UPC

Type of hours/ ECTS credits: Credits

Experience supervising doctoral thesis and/or final year projects

- 1 Project title:** Automated User-Generated Content Curation with Deep Learning Techniques
Type of project: Pla de recerca
Co-director of thesis: Ruben Tous Liesa
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Cruz De la cruz, Stalin Leonel
Obtained qualification: Satisfactori
Date of reading: 02/02/2017
- 2 Project title:** Evaluación de algoritmos de multiplicación de matrices dispersas portados a un entorno GPU
Type of project: Treball de fi de grau
Co-director of thesis: Agustin Fernandez Jimenez
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Marcual Medina, Joan
Obtained qualification: Very Good
Date of reading: 26/01/2017
- 3 Project title:** Optimización y paralelización de un simulador sísmico en arquitecturas multi-core
Type of project: Treball de fi de grau
Co-director of thesis: Agustin Fernandez Jimenez
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Garriga Estradé, Carles
Obtained qualification: Pass
Date of reading: 24/01/2017
- 4 Project title:** Disseny i desenvolupament d'una aplicació mòbil per concertar cites
Type of project: Pfc ii (sense especialitat)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Camps Hernando, Neus
Obtained qualification: Excellent
Date of reading: 28/10/2016
- 5 Project title:** Diseño e implementación de una herramienta de validación e inventario de routers
Type of project: Pfc ii (sense especialitat)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Quintero Valero, Andres Alberto
Obtained qualification: Excellent
Date of reading: 28/10/2016



- 6** **Project title:** Parallelization of Finite Difference Methods: Nodal and Mimetic solutions of the wave equation
Type of project: Projecte de fi de carrera ii
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Moya Arrayás, Ferran
Obtained qualification: Excellent
Date of reading: 28/09/2016
- 7** **Project title:** Aplicación móvil para identificación de productos según intolerancias alimentarias
Type of project: Pfc ii (sense especialitat)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Rojas Macias, Carlos
Obtained qualification: Matrícula d'Honor
Date of reading: 22/07/2016
- 8** **Project title:** Design and implementation of a mobile application for image recognition and its managing tool
Type of project: Treball de fi de grau
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Camps Oller, Albert
Obtained qualification: Excellent
Date of reading: 15/07/2016
- 9** **Project title:** Millora de l'Atenció a la Diversitat al aula i al centre en general
Type of project: Treball de fi de màster
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Pardo De donlebún matilla, Lucas
Obtained qualification: Very Good
Date of reading: 30/06/2016
- 10** **Project title:** Ús de la tecnologia a l'aula i de la correcció automàtica per a l'Avaluació Contínua de l'alumnat
Type of project: Treball de fi de màster
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Gomez Marmolejo, Zeus
Obtained qualification: Excellent
Date of reading: 30/06/2016
- 11** **Project title:** DISSENY I IMPLEMENTACIÓ D'UNA APLICACIÓ MÒBIL PER AL RECONeixEMENT D'ART PICTÒRIC
Type of project: Treball de fi de grau
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Blanch Torras, Rem
Obtained qualification: Excellent
Date of reading: 23/05/2016



- 12** **Project title:** Disseny i desenvolupament d'una aplicació per l'elaboració automàtica d'informes amb extracció d'informació de bases de dades
Type of project: Pfc ii (sense especialitat)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Llopart Garcia, Guillem
Obtained qualification: Excellent
Date of reading: 05/05/2016
- 13** **Project title:** Paralelización de un simulador de ondas sísmicas usando GPGPU
Type of project: Projecte de fi de carrera ii
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Garcia Ramon, Gerard
Obtained qualification: Matrícula d'Honor
Date of reading: 28/10/2015
- 14** **Project title:** Diseño e implementación de una herramienta para analizar imágenes extraídas de redes sociales, usando la librería OpenCV
Type of project: Pfc ii (sense especialitat)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Ramos Alférez, Albert
Obtained qualification: Very Good
Date of reading: 25/03/2015
- 15** **Project title:** Mobile application for obtain information from our geolocation TRAVEL GUIDE
Type of project: Treball de fi de grau
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Sevil Montoro, Sergi
Obtained qualification: Matrícula d'Honor
Date of reading: 17/02/2015
- 16** **Project title:** Diseño e implementación de una aplicación móvil y web para el reconocimiento de imagen de especies
Type of project: Treball de fi de grau
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Quiroga Bertolin, Alberto
Obtained qualification: Matrícula d'Honor
Date of reading: 16/02/2015
- 17** **Project title:** Optimización y paralelización de un código para la simulación de problemas acústicos
Type of project: PFC II (SENSE ESPECIALITAT)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Rodríguez Cruz, Robert
Obtained qualification: Matrícula d'Honor
Date of reading: 26/06/2014



- 18** **Project title:** Optimización y paralelización de un algoritmo para evaluar la fiabilidad "all-terminal" de una red
Type of project: PFC II (SENSE ESPECIALITAT)
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Pascual Martínez, Maria Silvia
Obtained qualification: Matrícula d'Honor
Date of reading: 05/07/2012
- 19** **Project title:** Sistema de soporte para la decisión de asignación de recursos en sistemas pervasivos basados en sistemas móviles
Type of project: PROJECTE DE FI DE CARRERA
Co-director of thesis: Maria Luisa Gil Gómez
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Medina Fernández, Carlos
Obtained qualification: Excellent
Date of reading: 18/01/2012
- 20** **Project title:** Operación stencil en plataformas multi-core y many-core
Type of project: Master Thesis
Co-director of thesis: José Ramón Herrero Zaragoza
Entity: Barcelona School of Informatics (FIB) **Type of entity:** University Centres and Structures and Associated Bodies
City of entity: Barcelona,
Student: Bernardo Garcés Chaperó
Date of reading: 29/06/2011
- 21** **Project title:** Estudio del impacto del formato de almacenamiento sobre el rendimiento de la operación matriz dispersa por vector
Type of project: End of course project
Co-director of thesis: José Ramón Herrero Zaragoza
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Pasarin , Marc
Obtained qualification: Excellent
Date of reading: 29/11/2010
- 22** **Project title:** Implementación y evaluación de la factorización de Cholesky mediante TBB y threads en arquitecturas multicore
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Bordas Perez , Francisco
Obtained qualification: Matrícula d'Honor
Date of reading: 08/10/2010
- 23** **Project title:** Optimització i paral.lelització d'un codi de propagació d'ones elàstiques
Type of project: End of course project
Co-director of thesis: José Ramón Herrero Zaragoza
Student: Ferrer Avila, Miguel
Obtained qualification: Excellent Cum Laude



Date of reading: 02/07/2010

- 24** **Project title:** GPS Tracker : seguimiento de terminales moviles
Type of project: End of course project
Entity: Politecnica de Cataluña (ETSETB) **Type of entity:** University
Student: Carrere Bach , Sergi
Obtained qualification: Excellent
Date of reading: 15/02/2010
- 25** **Project title:** Desenvolupament d'un videojoc educatiu per a Iphone
Type of project: End of course project
Co-director of thesis: Javier Alonso López
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Llorente Vives, Gerard
Obtained qualification: Excellent Cum Laude
Date of reading: 27/01/2010
- 26** **Project title:** Ahorro de energía y balanceo de carga en centros de datos
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Sahuquillo , Salvador
Obtained qualification: Excellent Cum Laude
Date of reading: 03/04/2009
- 27** **Project title:** APLICACIONES WEB PARA EL DESARROLLO SOSTENIBLE A TRAVÉS DE ONGs
Type of project: End of course project
Co-director of thesis: Javier Alonso López
Student: Garcia Miguel, Daniel
Obtained qualification: Excellent
Date of reading: 13/11/2008
- 28** **Project title:** QTGPROG: HERRAMIENTA PARA LA VISUALIZACIÓN DE TIPOS DE DATOS EN LENGUAJE C
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Martinez Gomez, Ivan
Obtained qualification: Very Good
Date of reading: 26/06/2008
- 29** **Project title:** Goomufler: buscador para un sistema de conocimiento
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Corbella Casino, Lluís Miquel
Obtained qualification: Excellent
Date of reading: 30/10/2006



- 30** **Project title:** Programa de promoción del investigador
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Marmelo Insua, Alejandro
Obtained qualification: Excellent
Date of reading: 07/07/2006
- 31** **Project title:** Auditoria i seguretat d'una empresa de serveis
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Marcos Delgado, Javier
Obtained qualification: Excellent
Date of reading: 21/06/2006
- 32** **Project title:** Reingeniería sistema cliente-servidor para la gestión y el cálculo de nóminas
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Felip Nart, Ramon Juan
Obtained qualification: Excellent
Date of reading: 21/06/2006
- 33** **Project title:** Red Argonnet: mejoras de diseño e integración de servicios
Type of project: End of course project
Entity: Universitat Politècnica de Catalunya **Type of entity:** University
City of entity: BARCELONA, Catalonia, Spain
Student: Mateu Puig, Carlos
Obtained qualification: Excellent
Date of reading: 21/06/2006

Teaching experience in courses and seminars for university teacher training

Type of event: Curs o seminari pedagògic
Name of the event: Els Estudis d'Enginyeria de Telecomunicació a les Portes de Bologna (Taula Rodona: Experiències d'adaptació a Bolonia en assignatures de primers cursos)
City organizing entity: Barcelona, Spain
Hours of teaching: 1
Teaching date: 13/06/2007

Educational or pedagogical publications, books, articles, etc.

- 1** Marta Jimenez Castells; Beatriz Otero Calviño. Arquitectura IA-32: Una arquitectura real.
Name of the materials: Arquitectura IA-32: Una arquitectura real
Format: Notes
Position of signature: 2
- 2** Marta Jimenez Castells; Beatriz Otero Calviño. Arquitectura básica de un computador.
Name of the materials: Arquitectura básica de un computador
Format: Notes
Position of signature: 2
- 3** Marta Jimenez Castells; Beatriz Otero Calviño. Matrices en C.
Name of the materials: Matrices en C
Format: Notes
Position of signature: 2
- 4** Beatriz Otero Calviño; Silvia Llorente Viejo; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 5: IA32 (Gestión de tipos de datos estructurados).
Name of the materials: Colección de problemas propuestos. Tema 5: IA32 (Gestión de tipos de datos estructurados)
Format: Notes
Position of signature: 1
- 5** Beatriz Otero Calviño; Teresa Monreal Arnal. Colección de problemas adicionales. Tema 5: IA32 (Gestión de tipos de datos estructurados).
Name of the materials: Colección de problemas adicionales. Tema 5: IA32 (Gestión de tipos de datos estructurados)
Format: Notes
Position of signature: 1
- 6** Beatriz Otero Calviño; Silvia Llorente Viejo; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 6: Gestión de subrutinas.
Name of the materials: Colección de problemas propuestos. Tema 6: Gestión de subrutinas
Format: Notes
Position of signature: 1
- 7** Beatriz Otero Calviño; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección problemas propuestos. Tema 1: Empezando a programar.
Name of the materials: Colección problemas propuestos. Tema 1: Empezando a programar
Format: Notes
Position of signature: 1
- 8** Beatriz Otero Calviño; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 4: Funciones.
Name of the materials: Colección de problemas propuestos. Tema 4: Funciones
Format: Notes
Position of signature: 1



- 9** Beatriz Otero Calviño; Eduard Lara. Colección de problemas adicionales. Tema 4: Funciones.
Name of the materials: Colección de problemas adicionales. Tema 4: Funciones
Format: Notes
Position of signature: 1
- 10** Beatriz Otero Calviño; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 3: Tipos estructurados de datos (structs).
Name of the materials: Colección de problemas propuestos. Tema 3: Tipos estructurados de datos (structs)
Format: Notes
Position of signature: 1
- 11** Beatriz Otero Calviño; Eduard Lara. Colección de problemas adicionales. Tema 3: Tipos estructurados de datos (structs).
Name of the materials: Colección de problemas adicionales. Tema 3: Tipos estructurados de datos (structs)
Format: Notes
Position of signature: 1
- 12** Beatriz Otero Calviño; Manel Guerrero Zapata. Colección de problemas adicionales. Tema 6: Gestión de subrutinas.
Name of the materials: Colección de problemas adicionales. Tema 6: Gestión de subrutinas
Format: Notes
Position of signature: 1
- 13** Beatriz Otero Calviño; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 3: Tipos estructurados de datos (vectores).
Name of the materials: Colección de problemas propuestos. Tema 3: Tipos estructurados de datos (vectores)
Format: Notes
Position of signature: 1
- 14** Beatriz Otero Calviño; Silvia Llorente Viejo; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 5: IA32 (Introducción al IA32).
Name of the materials: Colección de problemas propuestos. Tema 5: IA32 (Introducción al IA32)
Format: Notes
Position of signature: 1
- 15** Beatriz Otero Calviño; Eduard Lara. Colección de problemas adicionales. Tema 3: Tipos estructurados de datos (vectores).
Name of the materials: Colección de problemas adicionales. Tema 3: Tipos estructurados de datos (vectores)
Format: Notes
Position of signature: 1
- 16** Beatriz Otero Calviño; Marta Jimenez Castells; Eva Rodriguez Luna; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 2: Sentencias condicionales.
Name of the materials: Colección de problemas propuestos. Tema 2: Sentencias condicionales
Format: Notes
Position of signature: 1
- 17** Beatriz Otero Calviño; Juan Luis Perez Rico. Colección de problemas adicionales. Tema 1: Empezando a programar.
Name of the materials: Colección de problemas adicionales. Tema 1: Empezando a programar
Format: Notes

**Position of signature: 1**

- 18** Beatriz Otero Calviño; Marta Jimenez Castells; Gladys Miriam Utrera Iglesias. Colección de problemas propuestos. Tema 2: Sentencias iterativas.
Name of the materials: Colección de problemas propuestos. Tema 2: Sentencias iterativas
Format: Notes
Position of signature: 1
- 19** Beatriz Otero Calviño; Juan Luis Perez Rico. Colección de problemas adicionales. Tema 2: Sentencias condicionales.
Name of the materials: Colección de problemas adicionales. Tema 2: Sentencias condicionales
Format: Notes
Position of signature: 1
- 20** Beatriz Otero Calviño; Juan Luis Perez Rico. Colección de problemas adicionales. Tema 2: Sentencias iterativas.
Name of the materials: Colección de problemas adicionales. Tema 2: Sentencias iterativas
Format: Notes
Position of signature: 1
- 21** Beatriz Otero Calviño; Marta Jimenez Castells. Conceptos básicos necesarios en la asignatura de Fundamentos de Ordenadores.
Name of the materials: Conceptos básicos necesarios en la asignatura de Fundamentos de Ordenadores
Format: Notes
Position of signature: 1
- 22** Marta Jimenez Castells; Beatriz Otero Calviño; Esther Salamí San Juan; Gladys Miriam Utrera Iglesias. Manual del 80386. pp. 21. 03/2008. Available on-line at: <<http://studies.ac.upc.edu/ETSETB/ARISO1/#material>>.
Name of the materials: Manual del 80386
Format: Manual
Position of signature: 2
- 23** Pau Bofill Soliguer; Beatriz Otero Calviño; Muñoz Xesco. Problemes resultats per Introduccio als Ordinadors. pp. 200. 02/2006. Available on-line at: <<http://pctudons.ac.upc.es/moodle/primavera06/>>.
Name of the materials: Problemes resultats per Introduccio als Ordinadors
Position of signature: 2

Participation in innovative teaching projects

Project title: Ayuda a proyectos de mejora a la docencia, ICE-UPC 2006, para el desarrollo de un libro interactivo ECTS

Type of participation: Collaborator

Name of the main researcher: Beatriz Otero

Number of participants: 1

Amount awarded: 4.000 €

Geographical area: National

Start-End date: 01/01/2006 - 31/12/2006

Duration: 12 months - 4 days

Participation in conferences with talks focused on teacher training

- 1** **Name of the event:** XII
Type of participation: Participatory - others
City of event: Alicante, Spain
Date of presentation: 03/07/2014
Publication type: Scientific-technical report
Laboratorio virtual basado en MATLAB para la docencia de Acústica en el Grado de Telecomunicación. XIII Jornadas de Redes de Investigación en Docencia Universitaria: nuevas estrategias organizativas y metodológicas en la formación universitaria para responder a la necesidad de adaptación y cambio = XIII Jornades de Xarxes d'Investigació en Docència Universitària: noves estratègies organitzatives i metodològiques en la formació universitària per a respondre a la necessitat d'adaptació i canvi. pp. 978 - 987. 03/07/2014. ISBN 978-84-697-0709-8
Handle: <http://hdl.handle.net/2117/27033>
- 2** **Name of the event:** XV Jornadas de Enseñanza Universitaria de la Informática
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of presentation: 10/07/2009
Publication type: Scientific-technical report
La presencia de la mujer en las carreras tecnológicas. Actas de las XV Jornadas de Enseñanza Universitaria de la Informática. pp. 295 - 302. 07/2009. ISBN 978-84-692-2758-9
Legal deposit: B.30.394-2009
- 3** **Name of the event:** XII Jornadas Docentes del Departamento de Arquitectura de Computadores
Type of event: Workshop
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of presentation: 13/02/2009
Publication type: Scientific-technical report
Telecomunicación e Informática: ¿tienen nombre de mujer?. Actas de las XII Jornadas Docentes del Departamento de Arquitectura de Computadores. pp. 0 - 0. 2009. ISBN 978-84-692-3563-8
- 4** **Name of the event:** I Jornada Mujeres en Informática (Muln'2008)
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of presentation: 18/04/2008
Publication type: Scientific-technical report
El futuro de Internet: Utilizar los recursos Web para ofrecer servicios de forma autónoma. pp. 0 - 0.
- 5** **Name of the event:** XII Jornadas de Enseñanza Universitaria de la Informática
Type of participation: Participatory - oral communication
City of event: Bilbao, Spain
Date of presentation: 13/07/2006
Publication type: Scientific-technical report
Introducción a los Ordenadores: Una forma diferente de aprender y de enseñar. pp. 0 - 0.



6 Name of the event: XII Jornadas de Enseñanza Universitaria de la Informática
Type of participation: Participatory - oral communication
City of event: Bilbao, Spain
Date of presentation: 12/07/2006
Publication type: Scientific-technical report
 Introducción a los Ordenadores: Una forma diferente de aprender y de enseñar. pp. 0 - 0.

7 Name of the event: Jornada d'Innovació Docent UPC 2006
Type of event: Workshop
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of presentation: 28/02/2006
Publication type: Scientific-technical report
 La metodología ANCORA aplicada a la asignatura "Introducción a los ordenadores" de la ETSETB-UPC. pp. 0 - 0.

Awards received for innovation in the field teaching

- 1 Name of the prize:** Ajut Ice Ajuts ICE de millora a la docència Projecte: llibre interactiu ECTS
- 2 Name of the prize:** Ajut Upc Ajut UPC-2006 per projectes específics dins la planificació estratègica Projecte: desenvolupament d'un llibre interactiu ECTS

Other activities/achievements not included above

- 1 Description of the activity:** Responsable d'assignatures. Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya) **Type of entity:** University
End date: 2015
- 2 Description of the activity:** Responsable d'assignatures. Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya) **Type of entity:** University
End date: 2014
- 3 Description of the activity:** Responsable d'assignatures. Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya) **Type of entity:** University
End date: 2013



- 4** **Description of the activity:** Responsable d'assignatures. Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2012
- 5** **Description of the activity:** Responsable d'assignatures. Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2011
- 6** **Description of the activity:** Participació en projectes lligats a l'EEES (ECTS/Pla pilot DURSI). Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2010
- 7** **Description of the activity:** Implantació Noves assignatures (Obligatòries/Categoria-A). Assignatura: Fundamentals of Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2010
- 8** **Description of the activity:** Responsable d'assignatures. Assignatura: Introduction to Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2010
- 9** **Description of the activity:** Responsable d'assignatures. Assignatura: Introduction to Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2009
- 10** **Description of the activity:** Responsable d'assignatures. Assignatura: Introduction to Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2008



- 11 Description of the activity:** Responsable d'assignatures. Assignatura: Introduction to Computers
City of activity: BARCELONA,
Organising entity: Barcelona School of Telecommunications Engineering (Universitat Politècnica de Catalunya)
Type of entity: University
End date: 2007

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1 Name of the project:** Computación de altas prestaciones V: arquitecturas, compiladores, sistemas operativos, herramientas y aplicaciones
Geographical area: National
Degree of contribution: Researcher
Entity where project took place: Departament d'Arquitectura de Computadors
City of entity: Barcelona, Catalonia,
Name principal investigator (PI, Co-PI....): Mateo Valero Cortes
Nº of researchers: 60
Funding entity or bodies: Ministerio de Educación, Política Social y Deporte **Type of entity:** State agency
Code according to the funding entity: TIN2007-60625
Start-End date: 01/10/2007 - 31/03/2013 **Duration:** 5 years - 6 months
Participating entity/entities: Universidad de Zaragoza
Total amount: 3.014.110 €
- 2 Name of the project:** Desarrollo de Algoritmos Escalables y Tolerantes a Fallos Basados en Métodos Probabilísticos
Geographical area: Non EU International
Degree of contribution: Researcher
Entity where project took place: CAP - High Performace Computing Group
Name principal investigator (PI, Co-PI....): José Ramón Herrero Zaragoza; Juan A. Acebrón de Torres
Nº of researchers: 5
Funding entity or bodies: Gobierno de España. Ministerio de Economía y Competitividad **Type of entity:** State agency
Start-End date: 01/01/2011 - 31/12/2012 **Duration:** 2 years
Total amount: 10.000 €
- 3 Name of the project:** 9º ALE (ACTIVE LEARNING IN ENGINEERING EDUCATION)
Geographical area: National
Degree of contribution: Researcher
Entity where project took place: Department of Optics and Optometry
City of entity: Terrassa,
Name principal investigator (PI, Co-PI....): Jesús Armengol Cebrian



Nº of researchers: 1

Funding entity or bodies:

Ministerio de Ciencia e Innovación (MICINN)

Type of entity: Ministerio

Code according to the funding entity: TIN2008-05193-E

Start-End date: 01/02/2009 - 15/10/2009

Duration: 8 months - 15 days

Total amount: 3.000 €

4 Name of the project: Computación de Altas Prestaciones IV: arquitecturas, compiladores, sistemas operativos, herramientas y aplicaciones

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: Department of Computer Architecture

City of entity: Barcelona,

Name principal investigator (PI, Co-PI....): Mateo Valero Cortes

Nº of researchers: 16

Funding entity or bodies:

Ministerio de Educación, Política Social y Deporte

Type of entity: Body, others

Code according to the funding entity: TIN2004-07739-C02-01

Start-End date: 13/12/2004 - 12/12/2007

Duration: 2 years - 12 months - 4 days

Participating entity/entities: UPC, URV, UZ, DAC

Total amount: 1.533.500 €

5 Name of the project: Computación de Altas Prestaciones III: Arquitecturas, Compiladores, Sistemas Operativos, Herramientas y Algoritmos, ref. TIC2001-0995-C02-01

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: Department of Computer Architecture

City of entity: Barcelona,

Name principal investigator (PI, Co-PI....): Mateo Valero Cortes

Nº of researchers: 18

Funding entity or bodies:

Ministerio de Ciencia y Tecnología

Type of entity: Ministerio

Start-End date: 01/12/2001 - 01/12/2004

Duration: 3 years - 1 day

Participating entity/entities: UPC, URV, UZ, DAC

Total amount: 1.161.564,08 €

6 Name of the project: Computación de Altas Prestaciones II: Arquitecturas, Compiladores, Sistemas Operativos, Herramientas y Aplicaciones

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: Department of Computer Architecture

City of entity: Barcelona,

Name principal investigator (PI, Co-PI....): Mateo Valero Cortes

Nº of researchers: 15

Funding entity or bodies:

CICYT, DAC

Type of entity: R&D Centre

Code according to the funding entity: TIC98-0511-C02-01

Start-End date: 30/09/1998 - 29/09/2001

Duration: 3 years

Participating entity/entities: UPC



Total amount: 724.934,79 €

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** Otero, B.; Frances, J.; Rodriguez-Cruz, R.; Rojas, O.; Solano, F.; Guevara-Jordan, J.A performance analysis of a mimetic finite difference scheme for acoustic wave propagation on GPU platforms. Concurrency and computation. Practice and experience. 29 - 4, pp. 1 - 18. 01/02/2017. Available on-line at: <<http://onlinelibrary.wiley.com/doi/10.1002/cpe.3880/abstract>>. ISSN 1532-0626

Handle: <http://hdl.handle.net/2117/101242>
DOI: 10.1002/cpe.3880

Type of production: Scientific paper
Position of signature: 1

Total no. authors: 6
Impact source: ISI

Impact index in year of publication: 0.942
Position of publication: 59

Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Category: COMPUTER SCIENCE, THEORY & METHODS
Journal in the top 25%: No
No. of journals in the cat.: 105
- 2** Otero, B.; Rodriguez, E.Un modelo para diseñar actividades de aprendizaje en la enseñanza de ingenierías. Red U: revista de docencia universitaria (online). 14 - 2, pp. 79 - 101. (Spain): Red Estatal de Docencia Universitaria, 01/11/2016. Available on-line at: <<http://polipapers.upv.es/index.php/REDU/article/view/5698/7145>>. ISSN 1887-4592

Handle: <http://hdl.handle.net/2117/100186>
DOI: 10.4995/redu.2016.5698

Type of production: Scientific paper
Position of signature: 1
Total no. authors: 2

Impact source: ERIH Plus - European Reference Index for the Humanities and Social Sciences
Impact index in year of publication: 0.0

Format: Journal
- 3** Otero, B.; Rodriguez, E.; Ventura, J.SURF-based mammalian species identification system. Multimedia tools and applications. pp. 1 - 15. 31/05/2016. Available on-line at: <<http://link.springer.com/article/10.1007%2Fs11042-016-3602-0>>. ISSN 1380-7501

DOI: 10.1007/s11042-016-3602-0
Handle: <http://hdl.handle.net/2117/91379>

Type of production: Scientific paper
Position of signature: 1

Total no. authors: 3
Impact source: ISI
Impact index in year of publication: 1.346

Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee



- 4** Córdova, L.; Rojas, O.; Otero, B.; Castillo, J. Compact finite difference modeling of 2-D acoustic wave propagation. *Journal of computational and applied mathematics*. 295, pp. 83 - 91. 15/03/2016. Available on-line at: <<http://www.sciencedirect.com/science/article/pii/S0377042715000618>>. ISSN 0377-0427
Handle: <http://hdl.handle.net/2117/85841>
DOI: 10.1016/j.cam.2015.09.037
Type of production: Scientific paper
Position of signature: 3
Total no. authors: 4
Impact source: ISI
Impact index in year of publication: 1.266
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Citations: 3
- 5** Solano, F.; Guevara-Jordan, J.; Rojas, O.; Otero, B.; Rodriguez, R. A new mimetic scheme for the acoustic wave equation. *Journal of computational and applied mathematics*. 295, pp. 2 - 12. 15/03/2016. Available on-line at: <<http://www.sciencedirect.com/science/article/pii/S0377042715005051>>. ISSN 0377-0427
Handle: <http://hdl.handle.net/2117/83776>
DOI: 10.1016/j.cam.2015.09.037
Type of production: Scientific paper
Position of signature: 4
Total no. authors: 5
Impact source: ISI
Impact index in year of publication: 1.266
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Citations: 3
- 6** Otero, B.; Rodriguez, E.; Royo, P. Teaching engineering with autonomous learning activities. *Journal of technology and science education*. 5 - 3, pp. 86 - 106. Omnia Publisher SL (OmniaScience), 01/09/2015. Available on-line at: <<http://www.jotse.org/index.php/jotse/article/view/164>>. ISSN 2013-6374
Handle: <http://hdl.handle.net/2117/79238>
DOI: 10.3926/jotse.164
Legal deposit: B-2000-2012
Type of production: Scientific paper
Position of signature: 1
Total no. authors: 3
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 7** Francés, J.; Otero, B.; Bleda, S.; Gallego, S.; Neipp, C.; Urbano-Márquez, A.; Beléndez, A. Multi-GPU and multi-CPU accelerated FDTD scheme for vibroacoustic applications. *Computer physics communications*. 191, pp. 43 - 51. 01/06/2015. Available on-line at: <<http://dx.doi.org/10.1016/j.cpc.2015.01.017>>. ISSN 0010-4655
Handle: <http://hdl.handle.net/2117/81842>
DOI: 10.1016/j.cpc.2015.01.017
Type of production: Scientific paper
Position of signature: 2
Total no. authors: 7
Impact source: ISI
Impact index in year of publication: 3.112
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Citations: 1



- 8** Otero, B.; Astudillo, R.; Castillo, Z. A parallelizable scheme for pseudospectra computing of large matrices. *Revista internacional de métodos numéricos para cálculo y diseño en ingeniería*. 31 - 1, pp. 8 - 12. 01/01/2015. Available on-line at: <<http://dx.doi.org/10.1016/j.rimni.2013.10.004>>. ISSN 0213-1315
Handle: <http://hdl.handle.net/2117/26196>
DOI: 10.1016/j.rimni.2013.10.004
Type of production: Scientific paper
Position of signature: 1
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 3
Impact source: ISI
Impact index in year of publication: 0.423
- 9** Francés, J.; Bleda, S.; Márquez, A.; Neipp, C.; Gallego, S.; Otero, B.; Beléndez, A. Performance analysis of SSE and AVX instructions in multi-core CPUs and GPU computing on FDTD scheme for solid and fluid vibration problems. *Journal of supercomputing*. 2013 - 2, pp. 514 - 526. 01/11/2014. Available on-line at: <<http://link.springer.com/article/10.1007/s11227-013-1065-x>>. ISSN 0920-8542
DOI: 10.1007/s11227-013-1065-x
Handle: <http://hdl.handle.net/2117/21250>
Type of production: Scientific paper
Position of signature: 6
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 7
Impact source: ISI
Impact index in year of publication: 0.858
Citations: 2
- 10** Gil, Marisa; Otero, B. Modular design for smart urban WSN applications. *International journal of computer technology and applications*. 5 - 2, pp. 270 - 277. 01/03/2014. Available on-line at: <<http://www.ijcta.com/vol5issue2.php>>. ISSN 2229-6093
Type of production: Scientific paper
Position of signature: 2
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 2
- 11** Rojas, O.; Otero, B.; Castillo, J.; Day, S. Low dispersive modeling of Rayleigh waves on partly staggered grids. *Computational geosciences*. 18 - 1, pp. 1 - 17. 02/2014. Available on-line at: <<http://link.springer.com/article/10.1007/s10596-013-9380-0>>. ISSN 1420-0597
Handle: <http://hdl.handle.net/2117/21220>
DOI: 10.1007/s10596-013-9380-0
Type of production: Scientific paper
Position of signature: 2
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 4
Impact source: ISI
Impact index in year of publication: 1.868
Citations: 2



- 12** Otero, B.; Gil, Marisa. Ambientes: on-the-fly usage of available resources through personal devices. International Journal of Ad hoc, Sensor & Ubiquitous Computing (IJASUC). 4 - 5, pp. 1 - 11. 10/2013. Available on-line at: <<http://airccse.org/journal/ijasuc/papers/4513ijasuc01.pdf>>. ISSN 0976-1764
Handle: <http://hdl.handle.net/2117/21048>
DOI: 10.5121/ijasuc.2013.4501
Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 2
- 13** Otero, B.; Pascual, S.; Rocco, C. Performance optimization of a Monte Carlo simulation code for estimating the all-terminal reliability of a network. Journal of Computing. 4 - 11, pp. 1 - 7. 03/11/2012. Available on-line at: <<http://www.journalofcomputing.org/volume-4-issue-11-november-2012>>. ISSN 2151-9617
Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 3
- 14** Marcé-Nogué, J.; Salan, N.; Aragoneses, A.; Bernat, E.; Escrig, C.; Otero, B.; Rupérez de Gracia, E.; Illescas, S. Teaching engineering with autonomous learning tools: good practices in GRAPAU-RIMA. Procedia - Social and behavioral sciences. 46, pp. 629 - 634. 03/09/2012. Available on-line at: <<http://www.sciencedirect.com/science/article/pii/S1877042812013043>>. ISSN 1877-0428
DOI: 10.1016/j.sbspro.2012.05.175
Handle: <http://hdl.handle.net/2117/17192>
Type of production: Scientific paper **Format:** Journal
Position of signature: 6 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 8
Impact source: SJR - SCImago Journal Rank
Impact index in year of publication: 0.245
- 15** Gil, Marisa; Otero, B. Dynamic resource usage based on on-the-fly availability of personal devices. IEEE pervasive computing. 10 - 2, pp. 46 - 46. 01/06/2011. Available on-line at: <<http://dx.doi.org/10.1109/MPRV.2011.24>>. ISSN 1536-1268
DOI: 10.1109/MPRV.2011.24
Type of production: Scientific paper **Format:** Journal
Position of signature: 2 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 2
Impact source: ISI
Impact index in year of publication: 1.554
- 16** Otero, B.; Gil, Marisa. Strategies of Domain Decomposition to Partition Mesh-Based Applications onto Computational Grids. Journal of Computing. 3 - 4, pp. 130 - 139. 01/04/2011. Available on-line at: <<http://www.scribd.com/doc/54846841/Strategies-of-Domain-Decomposition-to-Partition-Mesh-Based-Applications-onto-Computational-Grids>>. ISSN 2151-9617
Handle: <http://hdl.handle.net/2117/12966>
Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 2



- 17** Otero, B.; Cela, J.; Badia, R.M.; Labarta, J. Performance Analysis of Domain Decomposition Applications Using Unbalanced Strategies in Grid Environments. Lecture notes in computer science. 3795, pp. 1031 - 1042. 12/2005. ISSN 0302-9743
Type of production: Scientific paper
Position of signature: 1
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 4
Impact source: ISI
Impact index in year of publication: 0.402
- 18** Otero, B.; Cela, J.; Badia, R.M.; Labarta, J. Data Distribution Strategies for Domain Decomposition Applications in Grid Environments. Lecture notes in computer science. 3719, pp. 214 - 224. 10/2005. ISSN 0302-9743
Type of production: Scientific paper
Position of signature: 1
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 4
Impact source: ISI
Impact index in year of publication: 0.402
- 19** Otero, B.; Cela, J.; Badia, R.M.; Labarta, J. Domain Decomposition Strategy for GRID Environments. Lecture notes in computer science. 1 - 3241, pp. 353 - 361. 09/2004. ISSN 0302-9743
Type of production: Scientific paper
Position of signature: 1
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 4
Impact source: ISI
Impact index in year of publication: 0.513
- 20** Fontdecaba, E.; Cela, J.; Otero, B. Different surface models for progressive lenses and their effect in parallelization. Modeling and simulation. pp. 443 - 448. 09/2003. ISSN 1021-8181
Type of production: Scientific paper
Position of signature: 3
Format: Journal
Total no. authors: 3
Impact source: SJR - SCImago Journal Rank
Impact index in year of publication: 0.0
- 21** Gil, Marisa; Otero, B. Learning engineering skills through creativity and collaboration: A game-based proposal. Gamification-based e-learning strategies for computer programming education. pp. 14 - 29. (United States of America): IGI Global, 01/01/2017. Available on-line at: <<http://www.igi-global.com/chapter/learning-engineering-skills-through-creativity-and-collaboration/163699>>. ISBN 9781522510352
DOI: 10.4018/978-1-5225-1034-5.ch002
Type of production: Book chapter
Position of signature: 2
Format: Book
Degree of contribution: Author or co-author of chapter in book
Total no. authors: 2
- 22** Jimenez, M.; Otero, B. Fundamentos de ordenadores: programación en C. Ediciones UPC, 31/10/2013. Available on-line at: <<http://ebooks.upc.edu/product/fundamentos-de-ordenadores>>. ISBN 9788476539965
Type of production: Scientific book or monograph
Position of signature: 2
Format: Book



Degree of contribution: Author or co-author of entire book

Total no. authors: 2

23 Garces, B.; Herrero, J.; Otero, B. Operación stencil en CUDA. 29/11/2011.

Handle: <http://hdl.handle.net/2117/17911>

Type of production: Scientific-technical report

Position of signature: 3

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 3

24 Otero, B. Los videos como una herramienta para evaluar las competencias transversales de aprendizaje autónomo y de trabajo en grupo. 15/11/2011.

Handle: <http://hdl.handle.net/2117/13895>

Type of production: Scientific-technical report

Position of signature: 1

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 1

25 Pasarin, M.; Otero, B.; Herrero, J. Estudio y evaluación de formatos de almacenamiento para matrices dispersas en arquitecturas multi-core. 01/11/2011.

Handle: <http://hdl.handle.net/2117/15230>

Type of production: Scientific-technical report

Position of signature: 2

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 3

26 Gil, Marisa; Jimenez, M.; Otero, B. ICT4Girls: from high school to university: an approach. 20/06/2011.

Handle: <http://hdl.handle.net/2117/16301>

Type of production: Scientific-technical report

Position of signature: 3

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 3

27 Otero, B.; Sahuquillo, S.; Barlet, P.; Spadaro, S.; Solé-Pareta, J. Self-* algorithms and autonomic communication systems. 02/2009.

Type of production: Scientific-technical report

Position of signature: 1

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 5

28 Otero, B.; Barlet, P.; Spadaro, S.; Solé-Pareta, J. Mapping Ecology to Autonomic communication Systems. 01/2009.

Type of production: Scientific-technical report

Position of signature: 1

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 4

29 Otero, B.; Cela, J. Latencia y ancho de banda para simular ambientes GRID. 07/2004.

Type of production: Scientific-technical report

Position of signature: 1

Format: Scientific and technical document or report

Degree of contribution: Author or co-author of scientific or technical document for the general public



Total no. authors: 2

- 30** Otero, B.; Cela, J.; Fontdecaba, E. Paralelización de la factorización del hessiano utilizando OpenMP: Diferentes representaciones de la superficie y solución de un problema de optimización. 10/2003.

Type of production: Scientific-technical report

Format: Scientific and technical document or report

Position of signature: 1

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 3

- 31** Otero, B.; Cela, J.; Fontdecaba, E. Modelización de superficies ópticas para su implementación en máquinas paralelas. 05/2002.

Type of production: Scientific-technical report

Format: Scientific and technical document or report

Position of signature: 1

Degree of contribution: Author or co-author of scientific or technical document for the general public

Total no. authors: 3

Works submitted to national or international conferences

- 1** **Title of the work:** A mimetic wave equation discretization with absorbing boundary condition: Formulation and application

Name of the conference: XIII Congreso Internacional de Métodos Numéricos en Ingeniería y Ciencias Aplicadas

Geographical area: Non EU International

Type of participation: Participatory - oral communication

Reasons for participation: Review before acceptance

City of event: Baruta, Venezuela

Date of event: 2016

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Type of contribution: Scientific-technical report

Solano-Feo, F.; Guevara-Jordan, J.; Rojas_Ulacio, O.; González-Ramirez, C.; Otero, B. "A mimetic wave equation discretization with absorbing boundary condition: Formulation and application". En: Memorias del Congreso Internacional de Métodos Numéricos en Ingeniería y Ciencias Aplicadas, CIMENICS. pp. 695 - 705. 2016. ISBN 978-980-7161-05-3

Handle: <http://hdl.handle.net/2117/97153>

- 2** **Title of the work:** A new finite difference mimetic scheme for acoustic reflection modeling

Name of the conference: 2016 AAPG/SEG International Conference and Exhibition

Geographical area: Non EU International

Type of participation: Participatory - oral communication

Reasons for participation: Review before acceptance

City of event: Barcelona, Spain

Date of event: 2016

Publication in conference proceedings: Yes

With external admission assessment committee: Yes

Type of contribution: Scientific-technical report

Otero, B.; Rodriguez, R.; Guevara-Jordan, J.; Solano, F.; Rojas, O. "A new finite difference mimetic scheme for acoustic reflection modeling". En: SEG Global Meeting Abstracts International Conference and Exhibition. pp. 312 - 312. Society of Exploration Geophysicists (SEG), 2016. ISBN 2159-6832

DOI: 10.1190/ice2016-6497149.1



- 3** **Title of the work:** Compact finite difference schemes for the acoustic wave equation
Name of the conference: 78th European Association of Geoscientists & Engineers Conference & Exhibition
Geographical area: European Union
Type of participation: Participatory - oral communication
Reasons for participation: Review before acceptance
City of event: Vienna, Austria
Date of event: 2016
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Type of contribution: Scientific-technical report
Córdova, L.; Rojas, O.; Otero, B.; Castillo, J."Compact finite difference schemes for the acoustic wave equation". En: 78th EAGE Conference and Exhibition 2016: workshops. 2016.
Handle: <http://upcommons.upc.edu/urlFiles?idDrac=18965253>
DOI: 10.3997/2214-4609.201601668
- 4** **Title of the work:** Simulación de propagación de onda acústica mediante diferencias finitas compactas con parámetros miméticos óptimos
Name of the conference: XXVIII Jornadas Venezolanas de Matemáticas
Type of event: Workshop
Type of participation: Participatory - oral communication
Reasons for participation: Open access
City of event: Caracas, Venezuela
Date of event: 2015
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Type of contribution: Scientific-technical report
Córdova, L.; Otero, B.; Rojas, O."Simulación de propagación de onda acústica mediante diferencias finitas compactas con parámetros miméticos óptimos". En: XXVIII Jornadas Venezolanas de Matemáticas: Asociación Matemática Venezolana, Universidad Central de Venezuela: libro de resúmenes. pp. 32 - 32. Universidad Central de Venezuela, 2015.
Handle: <http://upcommons.upc.edu/urlFiles?idDrac=17235349>
- 5** **Title of the work:** Elaboración de aplicaciones interactivas para la docencia en el grado Grado de Telecomunicación
Name of the conference: XII Jornades de Xarxes d'Investigació en Docència Universitària
Type of participation: Participatory - oral communication
Reasons for participation: Open access
City of event: Alicante,
Date of event: 2014
Publication in conference proceedings: Yes
With external admission assessment committee: Yes
Type of contribution: Scientific-technical report
Francés, J.; Bleda, S.; Vera, J.; Calzado, E.; Heredia, S.; Otero, B.; Hernández, A.; Hidalgo, A.; Méndez, D.; Yebra, M."Elaboración de aplicaciones interactivas para la docencia en el grado Grado de Telecomunicación". En: XIII Jornades de Redes de Investigación en Docencia Universitaria: nuevas estrategias organizativas y metodológicas en la formación universitaria para responder a la necesidad de adaptación y cambio = XIII Jornades de Xarxes d'Investigació en Docència Universitària: noves estratègies organitzatives i metodològiques en la formació universitària per a respondre a la necessitat d'adaptació i canvi. pp. 2256 - 2267. Universidad de Alicante, 2015. ISBN 978-84-606-8636-1
Handle: <http://hdl.handle.net/2117/79440>



- 6 Title of the work:** Second-order mimetic discretization of the seismic wave equation in heterogeneous media
Name of the conference: VIII Pan-American workshop
Type of participation: Participatory - others **Reasons for participation:** Review before acceptance
City of event: Barranquilla, Colombia
Date of event: 2014
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Solano, F.; Guevara-Jordan, J.; Rojas, O.; Otero, B.; Rodriguez, R."Second-order mimetic discretization of the seismic wave equation in heterogeneous media". En: VIII Pan-American Workshop: Applied and computational mathematics. pp. 1 - 1. 2014.
- 7 Title of the work:** Compact finite difference modeling 2-D acoustic wave propagation
Name of the conference: VIII Pan-American workshop
Type of participation: Participatory - others **Reasons for participation:** Review before acceptance
City of event: Barranquilla, Colombia
Date of event: 2014
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Cordova, L.; Rojas, O.; Otero, B.; Castillo, J."Compact finite difference modeling 2-D acoustic wave propagation". En: VIII Pan-American Workshop: Applied and computational mathematics. pp. 1 - 1. 2014.
- 8 Title of the work:** Performance analysis of a mimetic finite difference scheme for acoustic problems: CPU versus GPU computing
Name of the conference: VIII Pan-American workshop
Type of participation: Participatory - others **Reasons for participation:** Review before acceptance
City of event: Barranquilla, Colombia
Date of event: 2014
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Rodriguez, R.; Otero, B.; Frances, J.; Solano, F.; Rojas, O.; Guevara-Jordan, J."Performance analysis of a mimetic finite difference scheme for acoustic problems: CPU versus GPU computing". En: VIII Pan-American Workshop: Applied and computational mathematics. pp. 1 - 1. 2014.
- 9 Title of the work:** Estudio comparativo de dos métodos en diferencias finitas compactos: standard. vs. mimético
Name of the conference: Jornadas de Investigación y Extensión. Facultad de Ciencias 2014
Type of event: Workshop **Geographical area:** Non EU International
Type of participation: Participatory - oral communication **Reasons for participation:** Open access
City of event: Caracas, Venezuela
Date of event: 2014
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report



Córdova, L.; Rojas, O.; Otero, B.; Castillo, J."Estudio comparativo de dos métodos en diferencias finitas compactos: standard. vs. mimético". En: Jornadas de Investigación y Extensión. Facultad de Ciencias 2014: 12 al 16 de Mayo 2014: Facultad de Ciencias, Universidad Central de Venezuela: libro de resúmenes. pp. 1 - 1. 2014.

- 10 Title of the work:** A comparative study of two compact finite difference methods: standard vs. mimetic
Name of the conference: XII Congreso Internacional de Métodos Numéricos en Ingeniería y Ciencias Aplicadas
Geographical area: Non EU International
Type of participation: Participatory - oral communication
City of event: Isla de Margarita, Venezuela
Date of event: 2014
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Córdova, L.; Rojas, O.; Otero, B.; Castillo, J."A comparative study of two compact finite difference methods: standard vs. mimetic". En: Ingeniería y ciencias aplicadas: modelos matemáticos y computacionales: memorias del XII Congreso Internacional de Métodos Numéricos en Ingeniería y Ciencias Aplicadas: CIMENICS'2014: Isla de Margarita, Venezuela, 24 al 26 de marzo de 2014. pp. 1 - 6. Sociedad Venezolana de Métodos Numéricos en Ingeniería, 2014. ISBN 978-980-7161-04-6
Handle: <http://hdl.handle.net/2117/24578>
- 11 Title of the work:** A domain decomposition technique for pseudospectra computations
Name of the conference: IX Congreso Colombiano de Métodos Numéricos. Simulación en ciencias y aplicaciones industriales
Geographical area: Non EU International
Type of participation: Participatory - oral communication **Reasons for participation:** Open access
City of event: Cali, Colombia
Date of event: 2013
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Astudillo, R.; Castillo, Z.; Otero, B."A domain decomposition technique for pseudospectra computations". En: Métodos numéricos y sus aplicaciones en diferentes áreas: IX Congreso Colombiano de Métodos Numéricos: simulación en ciencias y aplicaciones industriales, IX CCMN 2013, Agosto, 21-23, 2013, UAO Cali, Colombia. pp. 102 - 109. 2013. ISBN 978958873502
Handle: <http://hdl.handle.net/2117/26926>
- 12 Title of the work:** Performance analysis of SSE instructions in multi-core CPUs and GPU computing on FDTD scheme for solid and fluid vibration problem
Name of the conference: 13th International Conference on Computational and Mathematical Methods in Science and Engineering
Type of participation: Participatory - oral communication **Reasons for participation:** Review before acceptance
City of event: Cabo de Gata, Almeria, Spain
Date of event: 2013
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Francés, J.; Bleda, S.; Márquez, A.; Neipp, C.; Gallego, S.; Otero, B.; Beléndez, A."Performance analysis of SSE instructions in multi-core CPUs and GPU computing on FDTD scheme for solid and fluid vibration problem". En: Proceedings of the 2013 International Conference on Computational and Mathematical



Methods in Science and Engineering: Cabo de Gata, Almería, Spain: June 24-27, 2013. pp. 681 - 692.
2013. ISBN 978-84-616-2723-3
DOI: 10.1007/s11227-013-1065-x
Handle: <http://hdl.handle.net/2117/22451>

- 13** **Title of the work:** Modelado de superficies libres en medios elásticos usando diferencias finitas miméticas de cuarto orden
Name of the conference: JIFI-EAI 2012
Type of event: Workshop
Type of participation: 'Participatory - poster **Reasons for participation:** Review before acceptance
City of event: Caracas-Venezuela,
Date of event: 2012
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Rojas, O.; Otero, B.; Castillo, J."Modelado de superficies libres en medios elásticos usando diferencias finitas miméticas de cuarto orden". En: Publicación de resúmenes en dispositivo USB. pp. 1 - 15. 2012.
- 14** **Title of the work:** Parallel algorithm for pseudospectra computation
Name of the conference: XXV Jornadas Venezolanas de Matemáticas
Type of participation: Participatory - oral communication **Reasons for participation:** Review before acceptance
City of event: Caracas, Venezuela
Date of event: 2012
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B.; Castillo, Z.; Astudillo, R."Parallel algorithm for pseudospectra computation". En: XXV Jornadas Venezolanas de Matemáticas : resúmenes aceptados sesión: modelación matemática y análisis numérico. pp. 30 - 30. 2012.
- 15** **Title of the work:** Teaching engineering with autonomous learning tools: good practices in GRAPAU-RIMA
Name of the conference: 4th World Conference on Educational Sciences
Type of participation: Participatory - oral communication **Reasons for participation:** Review before acceptance
City of event: Barcelona,
Date of event: 2012
Publication in conference proceedings: No **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Marcé-Nogué, J.; Salan, N.; Aragoneses, A.; Bernat, E.; Escrig, C.; Illescas, S.; Otero, B.; Rupérez de Gracia, E."Teaching engineering with autonomous learning tools: good practices in GRAPAU-RIMA". En: 4th World Conference on Educational Sciences: 02-05 February, 2012; Barcelona, Spain. 2012.
Handle: <http://upcommons.upc.edu/e-prints/urlFiles?idDrac=9791401>
- 16** **Title of the work:** All-terminal reliability evaluation through a Monte Carlo simulation based on an MPI implementation
Name of the conference: Annual European Safety and Reliability Conference 2012
Type of participation: Participatory - oral communication **Reasons for participation:** Review before acceptance
City of event: Helsinki, Finland



Date of event: 2012

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Pascual, S.; Otero, B.; Rocco, C. "All-terminal reliability evaluation through a Monte Carlo simulation based on an MPI implementation". En: 11th International Probabilistic Safety Assessment and Management Conference and the Annual European Safety and Reliability Conference 2012 (PSAM11 ESREL 2012) Helsinki, Finland 25-29 June 2012. pp. 1 - 6. 2012. ISBN 978-1-62276-436-5

Handle: <http://hdl.handle.net/2117/18039>

17 Title of the work: Mobile resource management for better user experience: an audio case study

Name of the conference: 4th Symposium of Ubiquitous Computing and Ambient Intelligence

Geographical area: Non EU International

Type of participation: Participatory - oral communication

Reasons for participation: Review before acceptance

City of event: Valencia, Spain

Date of event: 2010

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Morales, R.A.; Otero, B.; Gil, Marisa. "Mobile resource management for better user experience: an audio case study". En: Actas del IV International Symposium of Ubiquitous Computing and Ambient Intelligence (UCAml 2010). pp. 169 - 178. 2010. ISBN 978-84-92812-61-5

Handle: <http://hdl.handle.net/2117/11293>

Legal deposit: IBERGARCETA PUBLICACIONES, S.L., Madrid

18 Title of the work: Self-organized server farms for energy savings

Name of the conference: The 6th International Conference on Autonomic Computing and Communications

Type of participation: Participatory - oral communication

Reasons for participation: Open access

City of event: Barcelona,

Date of event: 2009

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Sahuquillo, S.; Solé-Pareta, J.; Otero, B.; Ferrari, L.; Manzalini, A.; Moiso, C. "Self-organized server farms for energy savings". En: Proceedings of the 2009 ACM/IEEE Conference on International Conference on Autonomic Computing. pp. 39 - 40. 2009. ISBN 978-1-60558-564-2

DOI: 10.1145/1555312.1555320

19 Title of the work: Mapping Ecology to Autonomic Communication Systems

Name of the conference: Budapest Tutorial and Workshop on Autonomic Communications and Component-ware

City of event: Budapest, Hungary

Date of event: 2008

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B.; Barlet, P.; Solé-Pareta, J.; Spadaro, S. "Mapping Ecology to Autonomic Communication Systems". En: Budapest Tutorial and Workshop on Autonomic Communications and Component-ware. pp. 1 - 5. acm, 2008. ISBN 978-963-8111-69-2



- 20** **Title of the work:** Mapping Ecology to Autonomic Communication Systems
Name of the conference: Budapest Tutorial and Workshop on Autonomic Communications and Component-ware
Type of participation: Participatory - oral communication
City of event: Budapest, Hungary
Date of event: 2008
Publication in conference proceedings: No **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B. "Mapping Ecology to Autonomic Communication Systems". pp. 0 - 0. 2008.
- 21** **Title of the work:** ¿Es cierto que el clima cambia?: Una valoración estadística para la asignatura de Introducción a los Ordenadores
Name of the conference: XIV Jornadas de Enseñanza Universitaria de la Informática
City of event: Granada, Spain
Date of event: 2008
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B.; Jimenez, M. "¿Es cierto que el clima cambia?: Una valoración estadística para la asignatura de Introducción a los Ordenadores". En: Jornadas de Enseñanza Universitaria de la Informática JENUUI 2008. pp. 469 - 476. Composición y Edición Libro Tex, ISBN 978-84-612-4475-1
- 22** **Title of the work:** Es cierto que el clima cambia?: Una valoración estadística para la asignatura de Introducción a los Ordenadores
Name of the conference: XIV Jornadas de Enseñanza Universitaria de la Informática
Type of participation: Participatory - oral communication
City of event: Granada, Spain
Date of event: 2008
Publication in conference proceedings: No **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B. "Es cierto que el clima cambia?: Una valoración estadística para la asignatura de Introducción a los Ordenadores". pp. 0 - 0. 2008.
- 23** **Title of the work:** El futuro de Internet: Utilizar los recursos Web para ofrecer servicios de forma autónoma
Name of the conference: I Jornada Mujeres en Informática (MuIn'2008)
City of event: Madrid, Spain
Date of event: 2008
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B. "El futuro de Internet: Utilizar los recursos Web para ofrecer servicios de forma autónoma". En: I Jornada Mujeres en Informática (MuIn'2008). pp. 1 - 1. xxxx,
- 24** **Title of the work:** Una experiencia docente orientada a incrementar el trabajo personal del estudiante
Name of the conference: XIII Jornadas de Enseñanza Universitaria de la Informática
Type of event: Workshop
City of event: Teruel, Spain
Date of event: 2007
Publication in conference proceedings: Yes



With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B.; Martí-Farré, J.; Garriga, E.; Alonso, Arantxa; LLUIS, P.; Prat, L. "Una experiencia docente orientada a incrementar el trabajo personal del estudiante". En: Actas de las XIII Jornadas de enseñanza universitaria de la informática (JENUI 2007). pp. 293 - 300. Thomson, ISBN 978-84-9732-620-9

25 Title of the work: Las fases del aprendizaje como pauta para el diseño de un libro interactivo de Introducción a los Ordenadores

Name of the conference: XIII Jornadas de Enseñanza Universitaria de la Informática

Type of event: Workshop

City of event: Teruel, Spain

Date of event: 2007

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B.; Bofill, P. "Las fases del aprendizaje como pauta para el diseño de un libro interactivo de Introducción a los Ordenadores". En: XIII Jornadas de Enseñanza Universitaria de la Informática. pp. 561 - 562. xxx, ISBN 978-84-9732-620-9

26 Title of the work: A workload distribution pattern for grid environments

Name of the conference: 2007 International Conference on Grid Computing and Applications (CGA 2007)

City of event: Las Vegas, United States of America

Date of event: 2007

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B.; Cela, J. "A workload distribution pattern for grid environments". En: Proceedings of the 2007 International Conference on Grid Computing and Applications (CGA 2007). pp. 56 - 62. CSREA Press, USA, ISBN 1-60132-032-9

27 Title of the work: Proyecto de un libro interactivo para Introducción a los Ordenadores

Name of the conference: IV Jornades de Docència del Departament d'Arquitectura de Computadors

Type of event: Workshop

Geographical area: Regional

City of event: Barcelona, Spain

Date of event: 2007

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Bofill, P.; Otero, B. "Proyecto de un libro interactivo para Introducción a los Ordenadores". En: X Jornadas docentes del Departamento de Arquitectura de Computadores (JoDoDac 2007). pp. 1 - 2. xxx, ISBN 978-84-611-6420-2

28 Title of the work: Què passaria si no féssim exàmens

Name of the conference: IV Jornades de Docència del Departament d'Arquitectura de Computadors

Type of event: Workshop

Geographical area: Regional

City of event: Barcelona, Spain

Date of event: 2007

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report



Bofill, P.; Otero, B. "Què passaria si no féssim exàmens". En: Jornades de Docència del Departament d'Arquitectura de Computadors. 10 Anys de Jornades. pp. 1 - 10. ISBN 978-84-611-6420-2

- 29** **Title of the work:** L'experiència ANCORA per al primer trimestre de l'ETSETB
Name of the conference: IV Jornades de Docència del Departament d'Arquitectura de Computadors
Type of event: Workshop **Geographical area:** Regional
City of event: Barcelona, Spain
Date of event: 2007
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Bofill, P.; Otero, B. "L'experiència ANCORA per al primer trimestre de l'ETSETB". En: Jornades de Docència del Departament d'Arquitectura de Computadors. 10 Anys de Jornades. pp. 1 - 10. ISBN 978-84-611-6420-2
- 30** **Title of the work:** Introduccion a los Ordenadores: Una forma diferente de aprender y de enseñar
Name of the conference: XII Jornadas de Enseñanza Universitaria de la Informática
City of event: Bilbao, Spain
Date of event: 2006
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B.; Bofill, P. "Introduccion a los Ordenadores: Una forma diferente de aprender y de enseñar". En: XII Jornadas de Enseñanza Universitaria de la Informatica. pp. 331 - 337. Deli, ISBN 84-9732-545-1
- 31** **Title of the work:** La metodología ANCORA aplicada a la asignatura "Introducción a los ordenadores" de la ETSETB-UPC
Name of the conference: Jornada d'Innovació Docent UPC 2006
Type of event: Workshop
City of event: Barcelona, Spain
Date of event: 2006
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Bofill, P.; Otero, B. "La metodología ANCORA aplicada a la asignatura "Introducción a los ordenadores" de la ETSETB-UPC". En: La metodología ANCORA aplicada a la asignatura "Introducción a los ordenadores" de la ETSETB-UPC. pp. 1 - 6. DSpace.E-prints,
- 32** **Title of the work:** Áncora, aprendizaje organizado por tareas
Name of the conference: XI Jornadas de Enseñanza Universitaria de la Informática
Type of participation: Participatory - others
City of event: Villaviciosa de Odón, Madrid, Spain
Date of event: 2005
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Bofill, P.; Otero, B.; Toribio, E.; Aroca, J.; Breitman, M.; Garcies, P.; Sanchó, J. "Áncora, aprendizaje organizado por tareas". En: Actas de las XI Jornadas de Enseñanza Universitaria de la Informática. pp. 71 - 78. Thomson, 2005. ISBN 84-9732-421-8



- 33** **Title of the work:** Performance Analysis of Domain Decomposition . Applications Using Unbalanced Strategies in Grid Environments
Name of the conference: The fourth International Conference on Grid and Cooperative Computing
City of event: Beijing, Taiwan
Date of event: 2005
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B.; Cela, J.; Badia, R.M.; Labarta, J."Performance Analysis of Domain Decomposition . Applications Using Unbalanced Strategies in Grid Environments". En: Grid and Cooperative Computing. pp. 1031 - 1042. Springer, ISBN 3-540-30510-6
- 34** **Title of the work:** Performance Analysis of Domain Decomposition Applications Using Unbalanced Strategies in Grid Environments
Name of the conference: The fourth International Conference on Grid and Cooperative Computing
Type of participation: Participatory - oral communication
City of event: Beijing, Taiwan
Date of event: 2005
Publication in conference proceedings: No **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B."Performance Analysis of Domain Decomposition Applications Using Unbalanced Strategies in Grid Environments". pp. 0 - 0. 2005.
- 35** **Title of the work:** Data Distribution Strategies for Domain Decomposition Applications in Grid Environments
Name of the conference: 6th International Conference on Algorithms and Architectures for Parallel Processing, ICA3PP
Geographical area: Non EU International
City of event: Melbourne, Australia
Date of event: 2005
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B.; Cela, J.; Badia, R.M.; Labarta, J."Data Distribution Strategies for Domain Decomposition Applications in Grid Environments". En: Distributed and Parallel Computing. pp. 214 - 224. Springer, ISBN 3-540-29235-7
- 36** **Title of the work:** La asignatura Introducción a los ordenadores en el contexto de la experiencia Áncora, en la ETSETB-UPC
Name of the conference: XI Jornadas de Enseñanza Universitaria de la Informática
City of event: Villaviciosa de Odon, Madrid, Spain
Date of event: 2005
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
Otero, B.; Bofill, P."La asignatura Introducción a los ordenadores en el contexto de la experiencia Áncora, en la ETSETB-UPC". En: Jeniu 2005 XI Jornadas de enseñanza Universitaria de la Informática. pp. 229 - 236. Thomson, ISBN 84-9732-421-8
- 37** **Title of the work:** Actas de las XI Jornadas de Enseñanza Universitaria de la Informática
Name of the conference: XI Jornadas de Enseñanza Universitaria de la Informática
City of event: Villaviciosa de Odon, Madrid, Spain



Date of event: 2005

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Bofill, P.; Otero, B.; Toribio, E.; Aroca, J.; Breitman, M.; Garcies, P.; Sanchó, J."Actas de las XI Jornadas de Enseñanza Universitaria de la Informática". En: Jeniu 2005 XI Jornadas de enseñanza Universitaria de la Informatica. pp. 71 - 78. Thomson, ISBN 84-9732-421-8

38 Title of the work: ANCORA: Aprendizaje Organizado por Tareas

Name of the conference: XI Jornadas de Enseñanza Universitaria de la Informática

City of event: Villaviciosa de Odon, Madrid, Spain

Date of event: 2005

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Bofill, P.; Otero, B.; Toribio, E.; Aroca, J.; Breitman, M.; Garcies, P.; Sanchó, J."ANCORA: Aprendizaje Organizado por Tareas". En: Jeniu 2005 XI Jornadas de enseñanza Universitaria de la Informatica. pp. 71 - 77. Thomson, ISBN 84-9732-421-8

39 Title of the work: A Domain Decomposition Strategy for GRID Environments

Name of the conference: Recent Advances in Parallel Virtual Machine and Message Passing Interface

City of event: Budapest, Spain

Date of event: 2004

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B.; Cela, J.; Badia, R.M.; Labarta, J."A Domain Decomposition Strategy for GRID Environments". En: Recent Advances in Parallel Virtual Machine and Message Passing Interface. pp. 353 - 361. Springer, ISBN 3-540-23163-3

40 Title of the work: A Domain Decomposition Strategy for GRID Environments

Name of the conference: Recent Advances in Parallel Virtual Machine and Message Passing Interface

Type of participation: Participatory - oral communication

City of event: Budapest, Spain

Date of event: 2004

Publication in conference proceedings: No

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B."A Domain Decomposition Strategy for GRID Environments". pp. 0 - 0. 2004.

41 Title of the work: Different Surface Models for Progressive Lenses and their Effect in Parallelization

Name of the conference: 3rd IASTED International Conference on Power and Energy Systems

City of event: Marbella, Spain

Date of event: 2003

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific-technical report

Otero, B.; Cela, J.; Fontdecaba, E."Different Surface Models for Progressive Lenses and their Effect in Parallelization". En: Proceedings of the 3rd IASTED International Conference on Power and Energy Systems. pp. 443 - 448. [C. Álvarez, M. H. Hamza : ACTA Press], ISBN 0-88986-366-5



- 42** **Title of the work:** Different surface models for progressive lenses and their effect in parallelization
Name of the conference: 3rd IASTED International Conference on Power and Energy Systems
Type of participation: Participatory - oral communication
City of event: Marbella, Spain
Date of event: 2003
Publication in conference proceedings: No **With external admission assessment committee:** Yes
Type of contribution: Scientific-technical report
 Otero, B. "Different surface models for progressive lenses and their effect in parallelization". pp. 0 - 0. 2003.

Works submitted to national or international seminars, workshops and/or courses

- 1** **Title of the work:** Tópicos en análisis numérico: Optimización de simulaciones numéricas en ingeniería
Name of the event: Tópicos en análisis numérico: Optimización de simulaciones numéricas en ingeniería
Reasons for participation: Upon invitation
City of event: Caracas, Venezuela
Date of event: 2012
Publication in conference proceedings: No
Type: Scientific-technical report
 Otero, B.. "Tópicos en análisis numérico: Optimización de simulaciones numéricas en ingeniería".
- 2** **Title of the work:** Optimización y paralelización de la operación stencil en arquitecturas multicore y manycore
Name of the event: Optimización y paralelización de la operación stencil en arquitecturas multicore y manycore
Type of event: Workshop
Reasons for participation: Speaker
City of event: Caracas, Venezuela
Date of event: 2011
Publication in conference proceedings: No
Type: Scientific-technical report
 Otero, B.. "Optimización y paralelización de la operación stencil en arquitecturas multicore y manycore".

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

- 1** **Committee title:** JENUI 2015
City: Andorra, Andorra
Start-End date: 08/07/2015 - 10/07/2015
- 2** **Committee title:** 10th International Conference on Parallel Processing and Applied Mathematics
City: Poland,
Start-End date: 08/09/2013 - 11/09/2013
- 3** **Committee title:** PPAM2011
City: Poland,
Start-End date: 11/09/2011 - 14/09/2011



Organization of R&D activities

Title of the activity: 8th European Computer Science Summit
Type of activity: Conference
City of event: barcelona, Spain
Type of participation: Organiser
Start date: 2012

Other achievements

Stays in public or private R&D centres

- 1** **Entity:** Instituto Superior Técnico (IST) - Universidade Lisboa **Type of entity:** State agency
City of entity: Lisboa, Portugal
Start-End date: 03/02/2017 - 05/03/2017 **Duration:** 1 month - 3 days
Goals of the stay: Guest
Provable tasks: Desarrollo e implementación de un algoritmo para el cálculo de operadores matriciales.
- 2** **Entity:** INESC-ID-Lisboa **Type of entity:** R&D Centre
City of entity: Lisboa, Portugal
Start-End date: 24/01/2016 - 28/03/2016 **Duration:** 2 months - 5 days
Goals of the stay: Guest
Provable tasks: Diseño e implementación de algoritmos paralelos de métodos probabilísticos para el cálculo de funciones matriciales (inversa, exponencial de una matriz).
- 3** **Entity:** Center for Mathematics and its Applications **Type of entity:** University Research Institute
City of entity: Lisboa, Portugal
Start-End date: 16/03/2012 - 30/03/2012 **Duration:** 15 days
Goals of the stay: Guest
Provable tasks: Colaboración en la implementación de códigos paralelos que utilizan algoritmos probabilísticos y técnicas de descomposición en dominios para resolver problemas derivados de Ecuaciones en Derivadas Parciales. Evaluación de diferentes herramientas software para realizar las implementaciones. Instalación y estudio de FreeFem++ en arquitecturas paralelas.
- 4** **Entity:** Universidad Central de Venezuela **Type of entity:** University
City of entity: Caracas, Venezuela
Start-End date: 01/06/2011 - 31/08/2011 **Duration:** 3 months
Goals of the stay: Guest
Provable tasks: Implementacion de versiones paralelas de códigos para realizar el cálculo del pseudo-espectro de matrices ralas y grandes. Estudio y mejora del cálculo de una nueva métrica que permita medir el error (considerando la amplitud y la frecuencia de onda de las señales) en simulaciones de propagaciones de onda.
- 5** **Entity:** Universidad Central de Venezuela **Type of entity:** R&D Centre
City of entity: Caracass, Venezuela
Start-End date: 01/03/2005 - 30/07/2005 **Duration:** 5 months
Goals of the stay: Guest



Provable tasks: Cal afegir les tasques

- 6** **Entity:** Universidad Central de Venezuela **Type of entity:** R&D Centre
City of entity: Caracass, Venezuela
Start-End date: 01/03/2005 - 30/07/2005 **Duration:** 5 months
Goals of the stay: Others
Provable tasks: Cal afegir les tasques

Obtained grants and scholarships

- 1** **Name of the grant:** Becas para la investigación UPC - La Caixa
City awarding entity:
Aims: Post-doctoral
Awarding entity: Obra Social "La Caixa" **Type of entity:** Foundation
Amount of the grant: 1.000 €
Conferral date: 03/02/2017 **Duration:** 1 month - 3 days
End date: 05/03/2017
- 2** **Name of the grant:** Becas Santander Iberoamérica Jóvenes Profesores e Investigadores y alumnos de doctorado. España 2015
City awarding entity:
Aims: Post-doctoral
Awarding entity: Banco Santander **Type of entity:** Associations and Groups
Amount of the grant: 5.000 €
Conferral date: 24/01/2016 **Duration:** 2 months - 5 days
End date: 28/03/2016
- 3** **Name of the grant:** Ayuda UPC Iniciació i reincorporació a l'activitat de recerca
City awarding entity: BARCELONA, Catalonia, Spain
Awarding entity: Universitat Politècnica de Catalunya **Type of entity:** University
Amount of the grant: 8.900 €
Conferral date: 01/07/2009 **Duration:** 2 years
End date: 30/06/2011

Periods of research activity

- 1** **Nº of recognized periods:** 1
Date of recognition: 01/01/2016
- 2** **Nº of recognized periods:** 1
Geographical area: Regional
Certifying entity: AQU - Agència de la Qualitat Universitària de Catalunya **Type of entity:** State agency
City certifying entity: Barcelona, Catalonia, Spain
Date of recognition: 01/01/2016



Obtained accreditations/recognitions

- 1** **Description:** CONTRACTAT DOCTOR, ANECA
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA) **Type of entity:** R&D Centre de la Calidad y Acreditación (ANECA)
City accrediting entity: Madrid, Community of Madrid, Spain
Date of recognition: 15/04/2015
- 2** **Description:** Mèrits bàsics docència (Quinquenni)
Accrediting entity: Universitat Politècnica de Catalunya **Type of entity:** University
City accrediting entity: BARCELONA, Catalonia, Spain
Date of recognition: 01/01/2013
- 3** **Description:** Mèrits add. docència (Compl. autonòmic)
Accrediting entity: AQU - Agència de la Qualitat Universitària de Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Date of recognition: 01/01/2013
- 4** **Description:** Mèrits bàsics docència (Quinquenni)
Accrediting entity: Universitat Politècnica de Catalunya **Type of entity:** University
City accrediting entity: BARCELONA, Catalonia, Spain
Date of recognition: 01/01/2009
- 5** **Description:** INFORME ACTIVITAT DOCENT, Període avaluació: 2000-2007
Accrediting entity: Universitat Politècnica de Catalunya **Type of entity:** University
City accrediting entity: BARCELONA, Catalonia, Spain
Date of recognition: 09/07/2008
- 6** **Description:** Mèrits add. docència (Compl. autonòmic)
Accrediting entity: AQU - Agència de la Qualitat Universitària de Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Date of recognition: 01/01/2008
- 7** **Description:** INFORME FAVORABLE DE COL·LABORADOR
Accrediting entity: AQU - Agència de la Qualitat Universitària de Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Date of recognition: 15/12/2003
- 8** **Description:** INFORME FAVORABLE DE COL·LABORADOR
Accrediting entity: Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA) **Type of entity:** R&D Centre de la Calidad y Acreditación (ANECA)
City accrediting entity: Madrid, Community of Madrid, Spain
Date of recognition: 20/06/2003



Summary of other achievements

Description of the achievement: Librería tortuga (librería gráfica).

Conferral date: 10/2005