

**Javier Verdú Mulá**  
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## Most relevant skills

Special interest in architectural aspects of stateful applications. Research in embedded architectures towards exploiting heavy multithreaded applications. Knowledge on bottlenecks and profiling of the workloads generated by stateful applications (e.g. intrusion detection, monitoring). Elaboration and configuration of stateful benchmarks. Architectural simulation and binary code instrumentation. Research in new architectures for exploiting heavy multithreaded applications. Experience and collaboration in the research team focused on the development of a network processor in a startup company.

## Education

**Sep 01 – Present** Ph D. Student in Computer Architecture at Computer Architecture Department, Universitat Politècnica de Catalunya, Barcelona (Spain).  
*High Performance Computing on Stateful Applications.*  
Advisors: Mateo Valero, Mario Nemirovsky, and Jorge García.

**Sep 99 – Sep 01 M.S. (Computer Science)**

Third best student of the year.

*Facultad de Informática, Universidad de Las Palmas de Gran Canaria (ULPGC), Spain.*

**Sep 96 – Sep 99 B.S. (Computer Science)**

*Escuela de Informática, Universidad de Las Palmas de Gran Canaria (ULPGC), Spain.*

## Publications

### Conferences

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "Architectural Impact of Stateful Networking Applications". In Procs. of 1st Symposium on Architecture for Networking and Communications Systems (ANCS-I). Princeton, NJ, October 2005.*

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "Workload Analysis of Networking Applications". XVI Jornadas de Paralelismo. Granada, Spain, September 2005.*

*Javier Verdú, Mario Nemirovsky, Jorge García, and Mateo Valero, "Workload Characterization of Stateful Networking Applications". In 6th International Symposium on High Performance Computing (ISHPC-VI). Nara, Japan, September 2005. Also appears as Lecture Notes on Computer Science, .*

*Raimir Holanda, Javier Verdú, Jorge García, and Mateo Valero, "Performance Analysis of a New Packet Trace Compressor based on TCP Flow Clustering". In Procs. of IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS). Austin, TX, March 2005.*

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "The Impact of Traffic Aggregation on the Memory Performance of Networking Applications". In Workshop on Memory performance: Dealing with Applications, systems, and architecture (MEDEA), held in conjunction with PACT. Antibes - Juan Les Pins, France, September 2004.*

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "Analysis of Traffic Traces for Stateful Applications". XV Jornadas de Paralelismo. Almería, Spain, September 2004.*

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "Analysis of Traffic Traces for Stateful Applications". In Workshop on Network Processors & Applications (NP3), held in conjunction with HPCA-10. Madrid, Spain, February 2004.*

*Javier Verdú, Jesús Corbal, Jorge García, and Mateo Valero, "Retos en el diseño de Network Processors". XIII Jornadas de Paralelismo. Lleida, Spain, September 2002.*

### **Journals**

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "The Impact of Traffic Aggregation on the Memory Performance of Networking Applications ". To appear in a special issue of Journal of Embedded Computing (JEC), 2006.*

*Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero, "The Impact of Traffic Aggregation on the Memory Performance of Networking Applications ". In ACM SIGARCH Computer Architecture News, Special Issue: MEDEA 2004 Workshop, pg. 57-62, volume 33, issue 3, June, 2005.*

### **Professional Experience**

#### **Mar 06 – May 06 Consentry Networks Inc., San Jose (California, USA)**

Colaboration for improving the performance of multithreaded applications (Mario Nemirovsky).

#### **Oct 05 – Nov 05 Consentry Networks Inc., San Jose (California, USA)**

Analysis of stateful applications on multithreaded architectures (Mario Nemirovsky).

#### **Sep 02 – Oct 02 FlowStorm Inc., San Jose (California, USA)**

Study of bottlenecks in stateful applications (Mario Nemirovsky).

### **Language Knowledge**

*Spanish:* native.

*Catalan:* native.

*English:* intermediate spoken and written English.