

Pablo Diaz-Gutierrez

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EDUCATION

Ph.D. Computer Science

University of California, Irvine. (Expected 2008)

Current GPA: 3.917

M.S. Computer Science (concentration on Visual Computing)

University of California, Irvine – March 2005

B.S. Computer Science

Universidad de Granada, Spain – June 2002

INDUSTRY EXPERIENCE

Research Intern

Jun - Sep 2006

IBM Almaden Research Center - San Jose, CA

- Contributed to novel compression method under memory constraints.
- Design and C++/Shell implementation of prototype software on Unix.

Software Engineer

Oct 2002 - Jul 2003

Visual Systems Group - ESPELSA, Madrid (SPAIN)

- C/C++ graphics software development on Windows NT
- Designed and developed map cache for in-house GIS.
- Analyzed and refactored several software modules.
- Reverse-engineered competitor's proprietary map format.
- Significant improvements gave ESPELSA an edge in Eurofighter contract.

ACADEMIC EXPERIENCE

Teaching Assistant

Fall'03 – present (several quarters)

School of Information and Computer Science, UC Irvine

- Winter 04: Fundamental Data Structures (reader)
- Spring 04: Advanced Project in Computer Graphics
- Fall 05, 06: Videogame Development
- Fall 04, Winter 05, 06: Introduction to Computer Graphics
- Some student review comments: “Extremely knowledgeable”, “very helpful and always available”, “the course was great because of Pablo”, “the best TA that ever breathed”.

Research Assistant

Fall'03 – present

Computer Graphics Lab, UC Irvine, under advice of Prof. M. Gopi

- Mesh stripification, simplification, compression, etc.
- Image and sketch-based modeling
- Surface sampling and reconstruction
- Mesh layouts for interactive processing
- Geometric data compression
- Published several papers in major conferences and journals.
- Development of C/C++/Python/Shell Script software for all projects.

Relevant graduate courses taken

Fall'03 – present

- Advanced Computer Graphics (3 times)
- Computer Graphics
- Data Compression
- Data Structures
- Introduction to Manifolds and Geometry
- Principles of Data Management
- Programmable Graphics Hardware

HONORS

- 2007 ACM-VRST Service Award; Volunteer Program Chair.
- 2007 ICS hITEC Product Competition runner-up.
- 2007 Butterworth Award winner.
- 2006/07 Emulex/Cal(IT)² Fellowship recipient.
- 2005 Eurographics 2nd best paper award.
- 2005 Google's Summer of Code participant.
- 2003/04 UCI-ICS School Fellowship.
- 2001/02 UC's Education Abroad Program reciprocity fellowship, UCI.
- 1997-2001 Several merit-based tuition redemptions, University of Granada.
- 1997 Silver medal in Spanish Chemistry Olympiad.

OTHER INFORMATION

Availability: September 2008.

Visa status: F1 student visa with OPT/CPT options.

Foreign languages: Native Spanish speaker; Intermediate Mandarin.

SELECTED PUBLICATIONS

P. Diaz-Gutierrez and M. Gopi, "*Gaussian Sphere sampling based Surface Approximation*", UCI-ICS #07-08 Technical Report.

P. Diaz-Gutierrez, D. Eppstein and M. Gopi, "*Single Triangle Strip and Loop on Manifolds with Boundaries*", SIBGRAPI 2006.

P. Diaz-Gutierrez, A. Bhushan, M. Gopi, and R. Pajarola, "*Single-Strips for Fast Interactive Rendering*", The Visual Computer, 2006.

P. Diaz-Gutierrez, M. Gopi, R. Pajarola, "*Hierarchyless Simplification, Stripification and Compression of Triangulated Two-Manifolds*", Computer Graphics Forum (Eurographics), 2005 (2nd best paper award).

P. Diaz-Gutierrez and M. Gopi "*Quadrilateral and Tetrahedral Mesh Stripification Using 2-Factor Partitioning of the Dual Graph*", The Visual Computer, 2005.

P. Diaz-Gutierrez, A. Bhushan, M. Gopi, and R. Pajarola, "*Constrained strip generation and management for efficient interactive 3D rendering*", Computer Graphics International, 2005.

K. Das, P. Diaz-Gutierrez and M. Gopi "*Sketching Free-form Surfaces Using Network of Curves*", in Eurographics Workshop on Sketch Based Interfaces and Modeling, 2005.

O. Le, A. Bhushan, P. Diaz-Gutierrez and M. Gopi "*Capturing and View-Dependent Rendering of Billboard Models*", in International Symposium on Visual Computing, 2005.

REFERENCES

Academic and industrial references provided on request.

PERSONAL

- Involved in entrepreneurial activities, continuing hITEC competition project.
- Rugby, soccer and chess player.
- Casual free software contributor; ACM student member.