# Ricardo A. Baratto

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Research INTERESTS

Remote display systems, desktop virtualization, thin-client computing, ubiquitous and pervasive computing.

EDUCATION

- ♦ Columbia University, New York, NY, USA Ph.D. in Computer Science, graduation date: October 2007 Advisor: Jason Nieh
- ♦ Columbia University, New York, NY, USA M.S. in Computer Science, Oct. 2003
- ♦ University of Puerto Rico, Rio Piedras, PR. B.S. in Computer Science - Magna Cum Laude, May 2001.
- ♦ Scholarships
  - · Columbia University Presidential Fellowship (Sept. 2001 Aug. 2005)
  - · University of Puerto Rico Computer Science NSF Fellowship (Aug. 2000 May 2001)

- PUBLICATIONS 
  Oren Laadan, Ricardo Baratto, Dan Phung, Shaya Potter, and Jason Nieh. DejaView: A Personal Virtual Computer Recorder. In Proceedings of the Twenty-first ACM Symposium on Operating Systems Principles (SOSP 2007), Stevenson, WA, October 14-17, 2007.
  - ♦ Kenneth Ocheltree, Steven Millman, David Hobbs, Martin McDonnell, Jason Nieh, and Ricardo A. Baratto. Net2Display: A Proposed VESA Standard for Remoting Displays and I/O Devices over Networks. In Proceedings of the 2006 Americas Display Engineering and Applications Conference (ADEAC 2006), Atlanta, Georgia, October 23-26, 2006.
  - ♦ Joeng Kim, Ricardo A. Baratto, and Jason Nieh. An Application Streaming Service for Mobile Handheld Devices, In Proceedings of the IEEE International Conference on Services Computing (SCC 2006), Chicago, IL, September 18-22, 2006.
  - ♦ Joeng Kim, Ricardo A. Baratto, and Jason Nieh. pTHINC: A Thin-Client Architecture for Mobile Wireless Web. In Proceedings of the Fifteenth International World Wide Web Conference (WWW 2006), Edinburgh, Scotland, May 23-26, 2006.
  - ♦ Debra Cook, Ricardo A. Baratto, and Angelos Keromytis. Remotely Keyed CryptoGraphics: Secure Remote Display Access Using (Mostly) Untrusted Hardware. In *Proceedings* of the Seventh International Conference on Information and Communications Security (ICICS 2005), Beijing, China, December 10-13, 2005.
  - ♦ Ricardo A. Baratto, Leonard Kim, and Jason Nieh. THINC: A Virtual Display Architecture for Thin-Client Computing. In Proceedings of the Twentieth ACM Symposium on Operating Systems Principles (SOSP 2005), Brighton, United Kingdom, October 23-26,
  - ♦ Ricardo A. Baratto, Shaya Potter, Gong Su, and Jason Nieh. MobiDesk: Mobile Virtual Desktop Computing. In Proceedings of the Tenth Annual ACM International Conference

### Ricardo A. Baratto

on Mobile Computing and Networking (MobiCom 2004), Philadelphia, PA, USA, Sept 26-Oct 1, 2004.

Best Student Paper Award.

PROFESSIONAL & Member of VESA Net2Display working group. The group is developing a VESA standard ACTIVITIES for remoting displays and I/O devices over networks.

# RESEARCH PROJECTS

- Project leader of THINC, a remote display system for X-based applications.
   Advisor: Jason Nieh. Network Computing Laboratory Columbia University (New York, NY, USA. September 2001 - present)
- Developed SNMP support for the SIP Express Router.
   Advisor: Dorgham Sisalem. Fokus: Fraunhofer Insitute for Open Communication Systems (Berlin, Germany. May 2002 - August 2002)
- Member of the group developing a network monitoring and intrusion detection system for the Internet2 network of the University of Puerto Rico.
   Advisor: Guy Cormier. High Performance Computing Facility - U.P.R.
   (San Juan, Puerto Rico. August 2000 – July 2001)
- Initiated project to investigate the use of stereoscopic visualization techniques and equipment as teaching aids.
  - Advisor: George Barbastathis. Mechanical Engineering Dept, Massachusetts Institute of Technology.

(Cambridge, MA, USA. May 2000 – August 2000)

Designed, built and administered 16-node Linux beowulf cluster computer.
 Advisor: Ronald E. Kulak. Reactor Engineering Divison, Argonne National Laboratory, DOE.

(Chicago, IL, USA. January 2000 – May 2000)

♦ Created framework for drawing 3D graphics in the GeoWebCad project, a distributed CAD/CAM system.

Advisor: Fuhua Cheng. Graphics and Geometric Modeling Lab, University of Kentucky (Lexington, KY, USA. May 1999 – August 1999)

### Work Experience

- ♦ Member of Technical Staff, VMware (June 2006 August 2006)
- ♦ System Administration Assistant, High Performance Computing Facility, U.P.R. (August 2000 July 2001)
  - · Set up and maintenance of teaching/visualization lab's main NFS/NIS Server
  - · General maitenance of Linux computers used in visualization lab
- MIS Assistant, MIS Office, School of Natural Sciences, U.P.R. (November 1998 December 1999)
  - · School's network infrastructure and equipment maintenance
  - $\cdot$  System administration assistance and technical support, primarily for Linux users

## Skills $\diamond$ C

- ♦ X Window System programming and server architecture
- ♦ bash, perl, python, Unix TCP/IP, OpenGL
- ♦ Linux, BSDs
- Native Spanish speaker, fluent spoken/written English, basic German

### References Available on request.