

RAJANIKANTH JAMMALAMADAKA

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Objective: Internship: available May 2006 to Aug 2006  
OR Regular Full-Time/RCG position: available Dec 2006

Interest: Challenging position in Software Development.

Education: The University of Arizona.  
Ph. D. Major: Computer Engineering  
Minor: Applied Mathematics  
Expected Graduation: December 2006 GPA: 3.4/4.0

The University of Arizona.  
MS, Electrical and Computer Engineering (Dec 2003) GPA: 3.4/4.0

Courses:

Software Tools for Engineers, Object Oriented Simulation, Distributed Simulation, Integrated Telecommunication Networks, Computer Vision, Random Processes in Engineering Applications, Computer Networks, Continuous System Simulation, Applied Partial Differential Equations, Software Engineering concepts, Advanced Digital Signal Processing

Skills/Languages:

C, C++, Visual C++, MPI, Perl, Shell Scripting, Operating Systems: Windows, Linux, and Solaris. Applications: MATLAB, Rational Rose (for UML).

Experience:

- INTEL CORPORATION, Folsom, CA, Jan 05-July 05  
Software Validation Engineer (Intern), Supervisor-Mark P. Gianopulos, (916) 356-2800
1. Work involved collecting performance numbers for the Intel Matrix Storage Manager for the Research, Marketing and Development teams.
  2. Automated PCMARK 04 and Iometer benchmarking tools for collecting the performance numbers.
  3. Made enhancements to a MFC application called "Test Manager" which automates the process of testing.
  4. Worked to increase the coverage using the Code Coverage tool.

Graduate Research Assistant

Activity Characterization of Spatial Models: Application to Discrete Event Solution of Partial Differential Equations (M.S. Thesis)

#### Projects:

1. Implemented the LMS algorithm for Adaptive Noise Cancellation using UNIX, C
2. The LMS (Least Mean Squares) algorithm is used to reduce the back ground noise inherent in any given system.
3. Optical Character Recognition using UNIX, MATLAB
4. Implemented a matrix class using templates in UNIX, C++
5. Implemented a Data-base program using STL in UNIX, C++
6. Data Mining – Implemented a scanning program in Shell (bash), Regular Expressions

#### Publications:

1. B. P. Zeigler, R.Jammalamadaka, S. Akerkar. "Continuity and Change (Activity) are Fundamentally Related in DEVS Simulation of Continuous Systems", Keynote Talk at AI, Simulation and Planning AIS'04, October 4-6, Korea. Revised Selected Papers, Lecture Notes in Computer Science, Volume 3397 /2005 (ed: Tag Gon Kim), Springer-Verlag, NY, pp. 1-17
2. An Introduction to STL. CVu, The journal of the ACCU, October 2004.
3. C++ Templates: A Simple Example. CVu, The journal of the ACCU, August 2004.
4. J.J.Nutaro, B.P. Zeigler, R. Jammalamadaka, S. Akerkar: Discrete Event Solution of Gas Dynamics within the DEVS Framework. International Conference on Computational Science 2003: 319-328
5. R. Jammalamadaka., J.J.Nutaro, M.E. Gettings, B.P. Zeigler "DEVS Re-Implementation of an Agent-Based Valley Fever Model", 2005 Spring Simulation Multiconference, SpringSim'05, San Diego, April
6. A.Muzy, A.Aiello, P.A.Santoni, B.P. Zeigler, J.J.Nutaro, R. Jammalamadaka: Discrete Event simulation of large-scale spatial continuous systems. In Proceedings of IEEE International Conference on Systems, Man and Cybernetics SMC' 05, Hawaii 2005
7. R. Jammalamadaka, B.P.Zeigler, J.J. Nutaro, A. Muzy, and P.A.Santoni: Discrete Event Models of Continuous Processes: Using the Activity Measure to Predict Simulation Efficiency. Submitted to Simulation: transactions of the society of modeling and simulation international.
8. A.Muzy, P.A. Santoni, R.Jammalamadaka, B.P.Zeigler, J.J.Nutaro: Quantization-Based PDE Solution Methods: Application to Discrete Event Solution of Diffusion Processes, Submitted to the Numerical Heat Transfer Journal.

Citizenship Status: Student Visa