Kostadin Damevski <damevski@cs.utah.edu>

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OBJECTIVE

To be a key member of a team developing the next generation parallel computing systems.

EDUCATION

University of Utah Ph.D. in Computer Science

2002-2006

- Thesis: "Component Model Interoperability for Scientific Computing"
- Advisor: Dr. Steven Parker
- GPA: 3.98/4.00

University of Utah M.S. in Computer Science

2001-2002

• Thesis: "Parallel Component Interaction using an IDL Compiler"

• GPA: 3.95/4.00

University of Central Oklahoma B.S. in Computer Science

1997-2000

• GPA: 3.75/4.00

PROFESSIONAL EXPERIENCE

University of Utah

2006-present

Postdoctoral Research Associate

- Collaborated with a large group of people from industrial and government institutions to draft component software specifications in the Common Component Architecture (CCA) Forum. The CCA Forum (http://www.cca-forum.org) is a standards body aimed at producing a high-performance component architecture for scientific computing.
- Responsible for part of CCA specification for M-by-N parallel component interaction and event service.
- Worked on team to release alpha version of SCIRun2 problem-solving environment that includes support for parallel and distributed software components.
- Guided and advised graduate student research.

University of Utah Research Assistant

2002-2006

Designed and implemented several core features of the SCIRun/SCIRun2 problem-solving environments. SCIRun is a computational workbench that composes a complex application from a group of modules and enables computational steering and visualization.

University of Utah Teaching Assistant (CS3500 - Software Engineering) Fall 2001

Grub.org 2000-2001 Software Architect

Designed and implemented client-side of Grub distributed crawler engine. The Grub server distributes
crawling assignments (URLs) to a number of client crawlers. The challenging design tasks were:
providing resiliency from malicious client attacks, efficiently compressing the payload, and traffic
throttling.

SELECTED PUBLICATIONS

- K. Damevski and S. Parker. "M-by-N Data Redistribution through Parallel Remote Method Invocation". *International Journal of High-Performance Computing Applications* 2005.
- K. Damevski. "Generating Bridges Between Heterogeneous Component Models". *Proceedings of the 7th Generative Programming and Component Engineering (GPCE) Young Researchers Workshop*, 2005.
- F. Bertrand, R. Bramley, K. Damevski, D. Bernholdt, J. Kohl, J. Larson and A. Sussman "Data Redistribution and Remote Method Invocation in Parallel Component Architectures". *Proceedings of the 19th International Parallel and Distributed Processing Symposium (IPDPS 2005) (Best Paper Award)*, 2005.
- K. Damevski and S. Parker. "Imprecise Exceptions in Distributed Parallel Components". Proceedings
 of the 9th European Conference on Parallel Computing (EURO-PAR 2004), 2004.
- K. Zhang, K. Damevski, V. Venkatachalapathy, and S. Parker. "SCIRun2: A CCA Framework for High Performance Computing". Proceedings of the 9th International Workshop on High-Level Parallel Programming Models and Supportive Environments (HIPS 2004), 2004.

RESEARCH INTERESTS

- Distributed and Parallel High Performance Computing
- Component Architectures
- Parallel Programming
- Visual Programming
- Peer to Peer Computing

SKILLS

- Languages: C, C++, Java, Scheme, various assembly languages.
- Software: MPI, Eclipse, Lex, Yacc, Make, Autotools, TCP/IP, CVS/SVN etc.
- Operating Systems: Linux, Windows.
- Other: Component Software, Threads, TCP/IP Sockets, Semaphores, PBS.