

## Matthew J. Miller

Cisco Systems

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## Work Experience

*Summary:* Experienced in Linux-based development. Interested in most any opportunity to solve problems, learn new technology, and apply my research, design, and implementation expertise.

*Senior Software Engineer, Cisco Systems, January 2007–present*  
Developer for IOS-XE on the ASR-1000 router and IOS on the 7600 router.

## Education

*Ph.D., Computer Science, December 2006*  
University of Illinois at Urbana-Champaign, GPA: 3.94/4.0

- *National Science Foundation Fellowship* (16.2% acceptance rate)
- *ASEE National Defense Science and Engineering Graduate Fellowship* (21.3% acceptance rate)
- Awarded 3 NSF student travel grants

*M.S., Computer Science, December 2003*  
University of Illinois at Urbana-Champaign, GPA: 3.94/4.0

*B.S., Computer Engineering, May 2001*  
Clemson University, GPA: 4.0/4.0

## Technical Experience

- Developer for Cisco's IOS and IOS-XE operating systems. Lead designer and developer for control plane code for several features including NAT (Network Address Translation), NAT64, and Performance Routing (PfR). Accomplishments included several substantial performance and scalability improvements.
- Graduate research focus was wireless networking, specifically energy efficient protocols and security. Work included extensive network simulation (*ns-2*, which uses C++ and OTcl), a sensor hardware implementation (TinyOS/NesC), a user-level ad hoc routing implementation, Perl scripts for data parsing and graphing as well as simple simulators, and LaTeX for reports and documentation.

## Publications

- A primary author of 9 peer-reviewed conference and journal papers, including outlets such as *IEEE Transactions on Mobile Computing*, *ACM Transactions on Sensor Networks*, *IEEE Infocom* (18% acceptance rate), and *IEEE International Conference on Distributed Computing Systems (ICDCS)* (13.8% acceptance rate). All publications and presentations are available at [www.matthewjmiller.net/publications/](http://www.matthewjmiller.net/publications/).
- External reviewer for several conferences, *IEEE Transactions* journals, and Cisco Research proposals.

## Extracurricular

- Member of IEEE since 1997
- 2004-05 Large Group Coordinator for UIUC Graduate InterVarsity Christian Fellowship

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