

# NICHOLAS HURLEY

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## PROFILE

I am a senior-level software engineer with a passion for systems, networking, and security in those areas. I am committed to making software that is robust and that provides an unparalleled user experience, whether the user be another software engineer, a systems or network administrator/engineer, or a regular end-user. I am always looking for a challenge, and always eager to learn new technologies in order to advance both my career and my knowledge of the field.

## EXPERIENCE

### SOFTWARE ENGINEER

*Arbor Networks; Ann Arbor, Michigan*

*2005-Present*

Software developer on the Peakflow X and Service Logic System (SLS) engineering team. On Peakflow X, I was responsible for the user identity tracking solution (AuthX) which integrated Microsoft Active Directory and Novell eDirectory with Peakflow X for user-level traffic identification. This involved writing code and managing outside contractors. I was also responsible for mitigation capabilities, which enabled users to disable switch ports of misbehaving devices, thus removing harmful traffic from the network. This is in addition to many other major and minor features, both back-end and user-visible, over 6 releases of Peakflow X. On SLS, I was the lead developer on the Python SOAP interface to integrate with Java components. Other tasks included developing a system for user notification of events via email, syslog, and SNMP, and implementing an incremental backup and restore system. I also assisted a re-architecting of our reporting technology for the Reporting Manager. In addition to these projects, I was also the sole developer for LBAD (Log-Based Anomaly Detection), which allowed a customer to monitor their router logs for anomalous behavior by network operators.

### GRADUATE TEACHING ASSISTANT

*University of Illinois at Urbana-Champaign Department of Computer Science; Urbana, Illinois*

*2004-2005*

During my time at UIUC, I was a teaching assistant for CS450 (Numerical Analysis) and CS420 (Parallel Programming). For CS450, I was responsible for grading programming assignments in C. For CS420, I both designed and graded programming assignments using pthreads, MPI, and OpenMP for parallel processing on multi-core and distributed systems.

### SYSTEMS OPERATOR/CONSULTANT SUPERVISOR

*The Ohio State University Department of Computer Science; Columbus, Ohio*

*2003-2004*

As a systems operator, I was responsible for first-level technical support for the Department of Computer Science. In addition to those responsibilities, I was tasked with developing an online system for tracking equipment that the department loaned to faculty in order to reduce losses. In my role as consultant supervisor, I was responsible for hiring, scheduling, and managing approximately 25 departmental lab attendants. As part of this role, I developed software for the lab attendants to submit their quarterly work availability which was then used to determine their scheduled hours.

### UNDERGRADUATE GRADER

*The Ohio State University Department of Computer Science; Columbus, Ohio*

*2003-2004*

As a grader for CS560 (System Software Design and Development), I was responsible for designing the programming assignments of an assembler, a linker, and a hardware emulator for a simple, SPARC-like machine. In addition, I was responsible for testing and grading the students' code, as well as grading their end-user documentation for the machine.

### INTERN

*Bank One; Columbus, Ohio*

*2002*

During my internship at Bank One (now Chase), I was on a team that was tasked with transitioning the telephone systems to direct company control from a third-party contractor. In preparation for this transition, I was a member of, and later led, the group that traveled to various remote sites to inventory the equipment and connections in the telephone network.

### STUDENT PROGRAMMER

*Ohio Supercomputer Center; Columbus, Ohio*

*2001-2002*

I was a member of the team that ran the Computational Chemistry List (CCL), a mailing list and website for computational chemists around the world. In addition to standard list and systems maintenance tasks, I developed a plugin for the website to translate email addresses into images in the archives to prevent spam bots from harvesting list members' email addresses.

### STUDENT RESEARCHER

*The Ohio State University Department of Computer Science; Columbus, Ohio*

*2000-2002*

I participated in the EUROPA research group, a group aimed at developing undergraduate interest in Computer Science research. During my time with EUROPA, I participated in weekly review sessions of other group members' research, as well as assisting in the development of a secure I/O stream library for the internal research language.

## SKILLS

Highly knowledgeable and proficient with C, Python and bash/ksh on Unix and similar platforms. Proficient in standard Unix development environments (gcc, make, subversion, etc.) and APIs. Knowledge of HTML, Javascript, CSS and associated web technologies. Exposure to C++, Perl, and Common Lisp. Limited exposure to raw Win32 programming and C#/.NET.

## EDUCATION

### THE OHIO STATE UNIVERSITY

*Columbus, Ohio — Bachelor of Science, Summa Cum Laude - Computer Science, 2004*