

## EDUCATION

### **Drexel University** (Philadelphia, PA)

- Master of Science in Computer Science
- Bachelor of Science in Computer Science

Concentrations: Human-Computer Interaction, Artificial Intelligence, Software Management

*Anticipated Graduation: June 2010*

Cumulative GPA: **4.00**

Cumulative GPA: **3.98**

## COMPUTER SKILLS

### **Operating Systems**

- Microsoft Windows
- Mac OS X
- Linux
- Unix

### **Programming Languages**

- Java
- C / C++
- JavaScript
- Python
- Ruby / Rails
- Lisp / Scheme
- HTML / XML
- CSS
- OWL-S
- UML
- SQL
- VHDL

### **Software Packages and Frameworks**

- Microsoft Visual Studio
- Borland JBuilder
- Subversion / TortoiseSVN
- Rational (ClearQuest, Rose)
- Eclipse SDK
- Mac Xcode
- NetBeans IDE
- Adobe Photoshop

## EXPERIENCE

### **National Security Agency (NSA)**

#### *Software Engineer*

**Fort Meade, MD**

*January 2009 – March 2009*

- Created a program that read in network frames, identified them by their headers, and sorted them out from useless bits and noise; resulted in greater ability for other organizations to use data in the frames
- Modified script used to read in and manipulate data so it could be ingested by databases for processing
- Added new data stream to office's database by engineering a program to parse, aggregate, and input data

#### *Computer Systems Researcher*

*January 2008 – March 2008*

- Installed webcams and client software for customers; explained software's functions and goals
- Redesigned software's graphical user interface to improve usability based on customer feedback
- Created software that extracts document concepts by reverse engineering an existing web service

#### *Global Network Vulnerability Analyst*

*January 2007 – March 2007*

- Utilized knowledge of various network protocols in research and analysis of vulnerabilities across a wide range of open-source service providers; resulted in significantly more powerful detection tools
- Helped revitalize division's build machine by applying multiple methods for automated builds and test techniques; resulted in verifiable improvement in software robustness
- Authored comprehensive software development guide to train division's engineers on new plug-in based client-server architecture

#### *Software Development Specialist*

*September 2006 – December 2006*

- Employed rigid software development cycle: wrote requirements, developed design flowcharts, coded using Java, and tested programs against requirements and customer needs
- Assisted with converting and releasing over ten cryptographic key generation programs from PL1 to Java

### **Drexel University**

#### *Team Leader for Senior Design Project*

**Philadelphia, PA**

*July 2009 – Present*

- Worked with team to plan and develop a mash-up visual programming system that will enable users to create, compile, and run mash-ups of web services on a multi-touch screen or traditional interface
- Produced and submitted a project plan, requirements, design, implementation, tests, and presentation
- Organized team meetings, coordinated with advisors and customers, created itineraries, and delegated work

#### *Geometric and Intelligent Computing Laboratory Research Assistant*

*June 2007 – Present*

- Constructed template for classifying CAD formats and used it to create registry with eight formats
- Refined listing of research papers by professors and students in program to improve usefulness
- Organized and ported research papers and other content from old websites to a new wiki-style page
- Created course database by compiling content from eight professors into different robot-related topics

#### *Course Undergraduate Teaching Assistant*

*April 2007 – June 2007*

- Taught weekly lab session of about 20 students and helped troubleshoot student programming issues
- Graded laboratory reports for students; held office hours for student homework and laboratory help

#### *S.T.A.R. Program Research Assistant*

*June 2006 – September 2006*

- Contributed ideas and code to a software program used to study driver distraction from cell phones
- Researched and studied the implementation of iPod use while driving into the same software package

## HONORS AND AWARDS

- Earned 2009 William Utzy Scholarship totaling **\$1,775** from College of Engineering: September 2009
- Acquired 2009 Boeing Engineering Scholarship worth **\$2,000** from College of Engineering: February 2009
- Awarded **\$1,000** national Upsilon Pi Epsilon Computing Honors Society Scholarship: September 2008
- Earned "C.S. Award for Outstanding Academic Performance" from College of Engineering: February 2007
- Selected for membership in the Drexel University Pennoni Honors College: 2005 – Present
- Awarded an A.J. Drexel Academic Scholarship and a Drexel **Valedictorian** Scholarship: 2005 – Present
- Received Drexel University's Dean's List distinction: **At the end of every quarter, Fall 2005 – Present**

## TOP SECRET / SENSITIVE COMPARTMENTED ACCESS SECURITY CLEARANCE (TS//SI//TK)

- Agency Special Background Investigation with Counterintelligence and Lifestyle Polygraphs: 2006 – Present