

# Michael K. Mabey

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## Current Address:

505 W Baseline Rd Apt 1150  
Tempe, AZ 85283  
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## Permanent Address:

2183 W 7175 S  
West Jordan, UT 84084

## EDUCATION

### **M.S. Computer Science, Information Assurance**

Arizona State University

GPA 3.75

Tempe, AZ

May 2011

### **B.S. Computer Science, Information Systems**

Utah State University

GPA 3.26

Logan, UT

May 2009

## PROGRAMMING SKILLS

Python

PHP

HTML/XHTML

wxPython

C++

CSS

JavaScript

Virtual Machines

Java

GWT

MySQL/phpMyAdmin

Linux Programming

## WORK EXPERIENCE

### **Research Assistant**

Security Engineering for Future Computing (SEFCOM) Lab, ASU

Advisor: Prof. Gail-Joon Ahn

Sponsors: Department of Energy and National Science Foundation.

Tempe, AZ

Nov 2009 – Present

- Designed and implemented the core components of a modular, highly scalable, collaboration-centric digital forensic framework using cloud computing, Java, & Google Web Toolkit.
- Researched methods for performing forensic acquisition on Android devices.
- Implemented algorithms & a graphical tool for NTree graph recognition and approximation.
- Leader and deployment point of contact of the 2009 ASU team in the International Capture the Flag competition sponsored by University of California, Santa Barbara.

### **Graduate Student Recruitment Specialist/Webmaster**

Electrical & Computer Engineering Department, USU

Logan, UT

Jul 2006 – Aug 2009

- Primary responsibilities included maintaining and augmenting the department website using PHP, MySQL, and other basic web technologies like CSS, JavaScript, and an SMTP server.
- Replaced a MS Access database by porting the old data to a MySQL server and creating a set of Python programs with the Dabo framework that interfaced with the database.
- Wrote Python scripts to convert tab-delimited and Excel formatted data to SQL entries.
- Created a testing environment using an Apache web server, PHP, MySQL, and SVN.
- Gathered statistics on web visitors, inquiries from students, and applicants' credentials for the purpose of improving graduate student recruitment processes for the department.
- Responded to inquiries from potential domestic and international graduate students.

## Technician Aid

Electrical & Computer Engineering Department, USU

Logan, UT  
Sep 2006 – Aug 2009

- Built and maintained computers for department faculty and student labs.
- Installed and configured various software on Windows based machines.
- Created backup images of lab computers using Norton Ghost and Acronis TrueImage.
- Protected lab computers using Faronics Deep Freeze.

## RELEVANT SCHOOL PROJECTS

- Implemented a “robot” for the Google Wave platform that translated hex and binary to ASCII as well as interpreted MBRs and VBRs. See <http://code.google.com/p/forensic/>.
- Created a web-based interactive learning module designed to teach basic principles of password strength and symmetrical encryption using Python, JavaScript, and Ajax.
- Wrote a program in C++ that accepted a file containing cipher text created with a symmetrical encryption algorithm and attempted to discover the original key and plain text.
- Demonstrated a buffer overflow attack on a C++ program using gdb and properly injected malicious data.
- Configured a Linux machine to be a DNS server, a DHCP server, and a web server that used SSL and authentication via htaccess rules.
- Learned and wrote iptables rules for various firewall configurations, including blocking ICMP packets, forwarding with NAT, and restricting communication from given hosts.
- Set up a basic logging system in Linux with Snort and syslog.
- Created a map of local wireless networks by war-walking while running NetStumbler.
- Analyzed Internet Explorer vulnerabilities using Security Innovation’s Holodeck program.

## REFERENCES

### Dr. Gail-Joon Ahn

Title: Associate Professor in Computer Science and Engineering Department

Relation: Faculty Advisor and Supervisor in the SEFCOM Lab from Dec 2009 – Present

Phone: 480-965-9007

Email: [Gail-Joon.Ahn@asu.edu](mailto:Gail-Joon.Ahn@asu.edu)

### Mary Lee Anderson

Title: Graduate Advisor

Relation: Supervisor in the ECE Department from Jul 2006 – Aug 2009

Phone: 435-797-8340

Email: [marylee@engineering.usu.edu](mailto:marylee@engineering.usu.edu)

### Dr. Chad Mano

Title: Assistant Professor in the Computer Science Department

Relation: Computer Security teacher from Aug 2008 – May 2009

Phone: 435-797-0959

Email: [chad.mano@usu.edu](mailto:chad.mano@usu.edu)

### Heidi Harper

Title: Store Coordinator

Relation: Supervisor in the ECE Department from Jun 2005 – Aug 2008

Phone: 435-797-3430

Email: [heidi@engineering.usu.edu](mailto:heidi@engineering.usu.edu)