# Mia Gil Epner

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github.com/miagilepner

## EXPERIENCE

### Qadium, Inc.
*Software Engineer*

July 2017 - Present

Program and research Internet sensing technologies to allow customers to understand their networks, discover changes across the global Internet, and make informed decisions using our quantified network measurements.

### University of California, Berkeley
*Undergraduate Student Instructor of Computer Security*

January 2017 - May 2017

Led discussion sections, held office hours, created and graded homeworks and exams for the Berkeley course Introduction to Computer Security.

### University of California, Berkeley
*Research Assistant*

January 2016 - September 2016

Assisted UC Berkeley PhD candidate David Fifield with research relating to the development of Snowflake, a pluggable transport for the Tor Project.

### National Security Agency
*Software Engineering Intern*

May 2014 - August 2016

**Special Tactics and Techniques, Summer 2016**: Developed a user–space, UNIX data collection tool in C to support strategic intelligence requirements.
**Backbone Technologies Branch, Summer 2015**: Developed a program in C and Python in an embedded Linux environment to perform an integrity check of modules loaded on external machines.
**Geographic Technologies Center, Summer 2014:** Coded a geocoder using a custom auto–complete text form to query databases in Javascript.
Mapped location records into an Elasticsearch database in Java, indexed the data, and provided server maintenance.

## EDUCATION

### University of California, Berkeley
*B.A. in Computer Science*
*B.A. in Near Eastern Languages and Literatures*

August 2013 - May 2017

## SKILLS

Software development, embedded systems development, reverse engineering, test and documentation creation.

Top Secret/SCI Security Clearance.

## LANGUAGES

C, Python, Java, Ruby, Bro IDS, MIPS, PowerPC, Javascript, CSS, Dojo libraries, JQuery

Fluent in Modern Standard Arabic. Conversational in Egyptian Colloquial Arabic.

## PROJECTS

### Malicious Tor Hidden Service Directories

https://github.com/miagilepner/Tor-HSDir-Research

Parsed and analyzed 1 year of Tor consensus documents using Python to discover malicious hidden service directories.

### The Fingerprintability of WebRTC

https://github.com/miagilepner/DTLS-fingerprint

Created a DTLS fingerprint generator using Bro, a network analysis language, to survey WebRTC connections.

### Medium Propagation Multiplexing

https://github.com/loriopatrick/EE122

Constructed an algorithm for a receiver to decode signals from multiple transmitters on the same frequency. Created a virtual environment in Java to deploy the algorithm.

### PintOS

Project available upon request.

Implemented kernel threads, user programs, and a Unix file system in C for a lightweight OS.