# Siddarth Senthilkumar

 $sidsenkumar11@gmail.com \cdot sidsenkumar11.github.io$ U.S. Citizen

#### **EDUCATION**

University of California, Santa Barbara

M.S. in Computer Science, GPA: 4.00

September 2018 - Present

Santa Barbara, CA

Georgia Institute of Technology

B.S. in Computer Science, GPA: 3.84

Atlanta, GA August 2014 - December 2017

### **EXPERIENCE**

#### Cruise Automation

San Francisco, CA

— Application Security Intern

June 2019 - Present

- Performing security assessments; identifying exposed endpoints, credentials, and injections.
- Introduced automated AuthZ testing for application endpoints to save time on future assessments.
- Working to create Docker images for vuln scanners to asynchronously alert the security team on issues.
- Exploring IAM configuration issues in Google Cloud Platform.

## Cisco Systems, Inc.

San Jose, CA

— Software Build Intern

May 2018 - August 2018

- Identified dependency issues affecting build quality for thousands of Cisco engineers around the world.
- Programatically fixed dependency issues by migrating gmake build to new build system called Ninja.
- Reduced parse times from 10 mins to 45 secs, projected savings \$500,000/month in dev hours for Cisco.

## **Booz Allen Hamilton**

Annapolis Junction, MD

January 2018 - May 2018

- Reverse Engineering Consultant
  - Researched vulnerabilities in SCADA systems by analyzing firmware updates for the QNX RTOS.
  - Reverse engineered FFS3 filesystem and wrote decoder to extract all files and directories from an image.
  - Analyzed PowerPC ELFs to exploit weak client-side authentication routines.
- Malware Analysis Intern

June 2017 - August 2017

- Developed Python modules to automate malware analyst workflows via Phantom modules.
- Reverse engineered and wrote decoders to extract crypto-keys and protocol info from open malware.

# **PROJECTS**

## Automatic JNI Crash Triaging

- Extending Java capabilities for UC Santa Barbara's open-source program analysis framework called "angr".
- Developing capabilities for crash triaging and guided fuzzing of Java applications that make JNI calls.

### AWARDS

Place SB CTF - Invoca, Bugcrowd, OWASP

February 2019

Place UMD CTF - University of Maryland, College Park

April 2018

• 3rd Place Kaizen CTF - Booz Allen Hamilton

June 2017

• 13th Place CSAW CTF - NYU Tandon

October 2015

## **SKILLS**

Languages
Frameworks
Tools

Python, C, Java, Verilog, HTML/CSS. < 6 Months: Scala, C++, Kotlin, JavaScript Flask, PyQt, Selenium, BeautifulSoup, Java Native Interface (JNI), Bootstrap, Materialize Vagrant, Docker, Linux (Arch, Debian), Vim, Git, gdb, tmux, zsh, IDA Pro, Burp Suite