# Siddarth Senthilkumar

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#### **EDUCATION**

# Georgia Institute of Technology

Atlanta, GA

B.S. in Computer Science, GPA: 3.80

Expected December, 2017

Systems & Networks Specializations

Elective Coursework: Number Theory, Compilers, Databases

## **EXPERIENCE**

# Georgia Institute of Technology

Atlanta, GA

High Performance Computing Undergraduate Research Assistant

Fall 2016

- Optimized streaming graph data structures for use on high end GPUs and CPUs.
- Remodeled dynamic graph structures by limiting system calls and maximizing parallelization.

# Georgia Institute of Technology

Atlanta, GA

CS 2200 Teaching Assistant, Computer Systems & Networks

Fall 2016

- Conducted in-class demonstrations about operating systems and computer architecture concepts.
- Fielded students' questions, held recitations, and graded assignments.
- Covered: Assembly, Pipelined Processing, CPU Scheduling, Memory Systems, Network Protocols

#### **ACTIVITIES**

# GreyHat Information Security Club

President

August 2016 - Present

- Gave weekly presentations on security topics to the Georgia Tech community.
- Taught basic skills in cryptanalysis, penetration testing, reverse engineering, and steganography.

## **GreyHat Information Security Club**

Cybersecurity Competition Team Captain

August 2015 - May 2016

- Led Georgia Tech's cybersecurity CTF competition team over the course of a year.
- Placed 13th out of 1000s of competitors in a national cybersecurity competition (CSAW CTF).
- Authored problems for Georgia Tech's \$400 funded cybersecurity competition, GreyH@t CTF.

## **PROJECTS**

Travel Planner (HTML, CSS, Materialize, Python, Flask, MySQL)

• Created a Flask website that interacts with a MySQL database to plan and pay for vacation trips.

# Malloc/Free Algorithm Simulator (C)

- Developed a simulator of the C programming language's memory allocation algorithms, in C.
- Dynamic allocation and re-allocation implemented using two schemes; address and size ordering.

Web Data Extractor (Python, BeautifulSoup, Selenium WebDriver)

- Saved local homeowner association hundreds of dollars in costs by assisting in server backup.
- Automated the downloading of over 900 internal documents from old data server using Python.
- Created physical backups of web data by developing scrapers to save the data to spreadsheets.

#### **SKILLS**

Languages Java, Python, C, HTML

Frameworks JavaFX, Swing, Bootstrap, Materialize, Flask, PyQt, Selenium, BeautifulSoup

Tools Linux, Vim, Git