

KENNETH SIU

Sunnyvale, CA 94089 | (949) 302 0294 | kennethsiu96@yahoo.com
<https://github.com/kennethsiu> | <https://www.linkedin.com/in/kennethsiu>

EDUCATION

University of California, San Diego

B.S. Computer Science

June 2018

Cum Laude (GPA: 3.73/4.00)

SKILLS

Programming Languages: Python, Java, C++, C, JavaScript, Scala, PHP, HTML, CSS, Shell Script

Frameworks: Kafka, Flink, Prometheus, Grafana, Ansible, Django, Play, SQL, PostgreSQL, MongoDB

Operating Systems: Linux, Windows, Mac

EXPERIENCE/ACTIVITIES

Proofpoint | *Software Engineer*

Aug. 2018 - Present

- Working on the Threat Intelligence Engineering team to gather threat related intelligence to prevent attacks and reduce risk
- Building a web tool which allows threat researchers to create, edit, validate, and export network IDS (intrusion detection system) signatures using Scala, Play framework, and MySQL
- Developing API calls to allow customers to have download access to Emerging Threats Pro Rulesets, a compilation of IDS/IPS signatures updated daily, using Python, Django framework, Ansible, and PostgreSQL
- Creating system and functional metrics monitoring systems using Prometheus, AlertManager, and Grafana dashboards to visualize telemetry data on our customers downloading the Emerging Threats Pro Rulesets
- Building a near real-time data pipeline to process new object type reputations (URL, IP, SSL, Domain) using Kafka and Flink

Symantec | *Software Engineer Intern*

Nov. 2017 - Jun. 2018

- Worked on the ID Analytics team to automate ETL workflows, including the process of generating consumer reports for fraud and credit risk management using Python for automation and Pandas and Numpy for data manipulation
- Developed a load balancing algorithm to distribute consumer report generation across different servers
- Generated post-processing data workflows to present business analysts with easy-to-interpret diagnostics to assess the validity of model output using Matplotlib on Jupyter Notebooks
- Prototyped decision tree machine learning models using Scikit-learn with custom weighting parameters to isolate records with desired characteristics and generated a GraphViz representation of the decision tree using Sklearn

Cisco | *Software Engineer Intern*

June 2017 - Sept. 2017

- Worked on the application development team to develop a big data web application to analyze data for Cisco's Unified Computing System Manager using Python for parsing and PyMongo for query scripts
- Managed the database using MongoDB, which stored parsed hardware components data from over 60,000 log files
- Created a form builder using PHP, HTML, and CSS to allow hundreds of users to easily query and filter searches
- Generated dynamic CSV files and graphs using Plotly to help users visualize and analyze data
- Implemented a caching system using cronjobs to generate static CSV files and graphs generated on a daily basis

CalTeach | *Intern*

Sept. 2016

- Assisted the teaching of engineering courses to over 100 high school students
- Researched how to effectively teach engineering-related material
- Prepared and presented modern-day problems in engineering classes, and provided solutions on how to improve the education system

Microsoft | *Software Engineer Intern*

July 2015 - Sept. 2015

- Worked on the application development team to create a live voting mobile application for Television Broadcasts Limited using C# on Microsoft Visual Studio
- Managed the database using SQL which stored hundreds of thousands of live user votes on a daily basis for several weeks
- Created the development testing plan and wrote testing scripts to ensure the proper data collection of user votes
- Assisted in the system design for applications for sales industry in Hong Kong

PROJECTS

RandomMessenger | *Android Application Developer*

Sept. 2016 – Dec. 2016

- Developed a mobile application that allows users to connect to other users at random on Android Studio using Java
- Implemented messaging, login, and theme selection functionality
- Managed the database using Google Firebase which stored user messages, user authentication, and user profile information