

ANA SELVARAJ

Github: ana13S

<https://ana13s.github.io/>

SKILLS

Python C C++ C# Javascript Java React Node Swift Bash SQL HTML
Docker Kubernetes Istio Maven Ant Git Android Unity Angular

EDUCATION

University of California, San Diego — *Computer Science*

July 2017 - Present

Expected Graduation: MARCH 2021, GPA: 3.97 (Provost Honors)

EXPERIENCE

UCSD Computer Science and Engineering Department — *Teaching Assistant*

September 2019 - present

- Tutoring students on the principles of operating systems including multi-threading, semaphores, system calls, memory management, virtual memory, file systems, and process scheduling.
- Debugging student projects in the instructional operating system, Nachos, with test cases written in C.

Mitchell International — *Software Engineering Intern*

June 2019 - September 2019

- Formulated a proof of concept for the breakdown of monolithic JBOSS API integration services into microservice-style Kubernetes pods with Docker. Implemented traffic routing, telemetry, authentication and extensive logging of the clusters with the service mesh Istio.
- Automated the creation of Docker containers, the deployment of pods in Kubernetes and the routing of ingress and egress traffic with Istio using Python scripts.
- Developed microservice API services in JBOSS with test cases automated in Microsoft Test Manager.
- Developed file utilities in Java to test the mapping of data fields in XML files.

Sysvine Technologies — *Software Engineering Intern*

May 2015; May 2016; May 2017

- Developed and debugged a commercial hospital management application in Java.
 - Redesigned UI in Javascript enterprise web applications.
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COMPETITION/PROJECTS

SD Hackathon 2018 - *iOS programmer's calculator (Bitslinger)*

<https://devpost.com/software/bitslinger>

- Developed a mobile app for bit operations with Swift in Xcode.
- Collaborated with designers to implement compatibility with different iOS devices.

HackXX 2018 - *Level Up!*

<https://mycscourses-438b9.web.app/>

- Led the development of a Javascript web app that uses the API of online bookstores to allow users to compare the prices of Computer Science textbooks and create personalized study plans based on their budget.
- Utilized Google's Firebase to host the webpages and provide email authentication.