ANSON (YUAN-CHENG) TSAI

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EDUCATION

University of California Berkeley - *Expected Graduation May 2020* Total GPA 3.736 ***Major: 3.833***

- Major: B.S. in EECS (Electrical Engineering & Computer Science), Regents' and Chancellor's Scholar
- Current: Operating Systems & Systems Programming (CS162), Probability & Random Processes (EECS126)
- Completed: Structure and Interpretation of Computer Programs (CS61A), Data Structures (CS61B), Machine Structures (CS61C), Discrete Mathematics and Probability Theory (CS70), Efficient Algorithms and Intractable Problems (CS170), Internet: Architecture and Protocols (CS168), Information Devices and Systems I (EE16A), Information Devices and Systems II (EE16B)

EXPERIENCE

Research Assistant @ Netsys, UC Berkeley Spring 2017 - Present

- Develop code for ThrottleBot, which performs black box autoconfiguration of microservice applications
- Experience with Kelda and Kubernetes (Container Orchestrators), Docker, AWS, Nginx
- Co-authored research paper regarding the theory, efficacy, and applications of ThrottleBot

Associate Mentor/Course Tutor, Computer Science Mentors, UC Berkeley Spring 2017 - Present

- Lead and teach small group tutoring sessions and office hours for students
- Prepare course materials and design problems to further aid student understanding

Computer Science Academic Intern, UC Berkeley Spring 2017 - Fall 2017

- Assist instructors and students during CS61C lab hours
- Resolve student inquiries regarding course material during office hours

Tech Officer, RCSA Professional Committee, UC Berkeley 2016 - 2017

- Plan and host seminars and workshops that help students with building their professional profiles
- Manage committee website and blog

PROJECTS

GitHub: github.com/TsaiAnson

ThrottleBot - Research

ThrottleBot is an application that is designed to find latent bottlenecks within clusters of microservices on distributed systems using black box autoconfiguration. I worked on developing ThrottleBot's ability of managing microservice resources, task scheduling, and the identification of important microservice resources with various pruning methods. Experience with Kelda, Kubernetes, Docker, and AWS.

Food Finder - Personal

Food Finder is a Tinder-like app that is designed to help people find restaurants near them by learning their preferences over time. I developed the backend which uses Redis and ETCD services to store user sessions, progress, and preferences. I also implemented the Yelp API, which is responsible for querying restaurant data. Work currently under progress.

eLecture - Personal

eLecture is a platform that is designed to enhance and bridge interactions between instructors and students during lectures. It features a chatroom where students may post questions that teachers can view and filter by popularity. It is planned to integrate interactive tools similar to iClickers within the interface. Developed using the MERN stack. Work currently under progress.

SKILLS

Languages Java, Python, C, HTML, CSS, Go, Django, React JS, Express, Mongoose, Node JS, Bash, SQL

Other Linux (UNIX), MacOS, Windows, AWS, Nginx, Kubernetes, Kelda, AutoCAD, SolidWorks

HONORS AND AWARDS

UC Berkeley Regents' and Chancellor's Scholarship 2016 - Present

2nd Place TSA Teams Best-In-Nation National Competition - Team Captain Summer of 2015