ANSON (YUAN-CHENG) TSAI

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EDUCATION

University of California Berkeley - *Expected Graduation May 2020* GPA 3.728

- Major: B.S. in EECS (Electrical Engineering & Computer Science), Regents' and Chancellor's Scholar
- Current courses: Efficient Algorithms and Intractable Problems (CS170), Linear Algebra (Math 110), Physics for Scientists and Engineers (Physics 7B), Social Implications of Computer Technology (CS 195)
- Completed: Structure and Interpretation of Computer Programs (CS61A), Data Structures (CS61B), Machine Structures (CS61C), Discrete Mathematics and Probability Theory (CS70), Information Devices and Systems I (EE16A), Information Devices and Systems II (EE16B), Multivariable Calculus (Math 53)

EXPERIENCE

Research Assistant @ Netsys, UC Berkeley Summer 2017 - Present

- Develop code for ThrottleBot, an application designed to find hidden bottlenecks in distributed systems
- Experience with Quilt (Container Orchestrator), Docker, AWS, Nginx
- Co-authored research paper regarding the theory, efficacy, and applications of ThrottleBot

Computer Science Academic Intern, UC Berkeley Spring 2017 - Present

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

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

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

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

SKILLS

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

Other Linux (UNIX), MacOS, Windows**,** AWS, Nginx, Quilt, AutoCAD, SolidWorks, Autodesk Maya

PROJECTS

GitHub: https://github.com/TsaiAnson

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.

Graph Package + Make and Trip Clients - Course

The package includes facilities to manipulate graphs. It is capable of breadth-first and depth-first traversals, and search via either Dijkstra's algorithm or A search. The Make client rebuilds projects by checking file dependencies and file age. The Trip client calculates the shortest path between two or more points on a map. Written in Java.*

Digital Schedule - Personal

The Digital Schedule keeps track of all entries and properly notifies the User when the set time requirements are met. The program also allows the User to create contacts with names and phone numbers. For User interaction, the program includes a basic GUI interface. Written in Java.

*Note: To access projects that are not public on GitHub, please contact me directly.

HONORS AND AWARDS

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

Palos Verdes Peninsula High School Valedictorian 2016

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