ANSON (YUAN-CHENG) TSAI

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EDUCATION

University of California Berkeley - *Expected Graduation May 2019*

- Major: B.S. in EECS (Electrical Engineering & Computer Science), Regents' and Chancellor's Scholar
- Current Technicals: Machine Structures (CS61C), Information Devices and Systems II (EE16B), Unix (CS9E)
- Completed: Structure and Interpretation of Computer Programs (CS61A), Data Structures (CS61B), Information Devices and Systems I (EE16A), Multivariable Calculus (Math 53)

WORK EXPERIENCE

PVNet Management/Technology Internship — Summer of 2014

- Utilized quadcopters and GIS mapping technology to measure the changing land structure of the Portuguese Bend landslide area near residential housings
- Designed modifiable parts for the UAV with 3D modeling programs and 3D printers
- Led the Laser Signaling Device Subproject that allowed quadcopters to communicate quicker from long distances

CODING EXPERIENCE

LANGUAGES

Advanced: Java, Python, C Intermediate: CSS, HTML, JS, Scheme, UNIX Novice: SQL, Rails

PROJECTS

Graph Package + Make and Trip Clients

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.*

Scheme Interpreter

A program designed as an interpreter for Scheme, a dialect of lisp. The program operates by constantly reading, evaluating, and performing (REP) commands for each token of the given instructions. As any proper interpreter, the program also keeps track of different environments and variables. Written in Python.

Digital Schedule

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.

Library System

The Library System is designed to digitally manage a library. The program handles all check-outs and check-ins, keeps track of all overdue items, and adds any new items that the User specifies. All data is stored in text files to allow offline storage, and the User interacts with the program through a basic GUI interface. Written in Java.

*To view and access more projects, please contact me directly.

LEADERSHIP & HONORS AND AWARDS

Regents' and Chancellor's Scholarship — 2016 - Present

- Most prestigious scholarship awarded only to the top 2% of the admitted undergraduate class

Computer Science Mentors - Junior Mentor — 2017 - Present

- Junior Mentors lead and teach small group tutoring sessions - Focus: CS61B Data Structures

TSA Teams Competition Team Captain — 2013 - 2016

- Received 2nd place in Best-In-Nation National Competition — Summer of 2015

OTHER SKILLS

Computer: Linux (UNIX), MacOS, Windows, Microsoft Office, Photoshop, AutoCAD, SolidWorks, Autodesk Maya
Other Languages: Limited to professional working proficiency of Mandarin Chinese