

Susan Chen

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EDUCATION

GPA: 3.47

University of California, Berkeley

2017-2021 (Expected)

- Electrical Engineering and Computer Science major, Industrial Engineering and Operations Research minor
- Relevant Coursework:
 - Structure and Interpretation of Computer Programs
 - Data Structures
 - Discrete Mathematics and Probability Theory
 - Probability and Risk Analysis for Engineers
 - Linear Algebra and Differential Equations
 - Multivariable Calculus
- Current Courses:
 - Efficient Algorithms and Intractable Problems
 - Great Ideas of Computer Architecture (Machine Structures)
 - Engineering Statistics, Quality Control, and Forecasting

SKILLS

Programming: Java, Python, C, Swift, SQL, Assembly Language (RISC-V), Scheme, HTML, CSS, LaTeX
Microsoft Word, Excel, PowerPoint; Adobe Photoshop, Illustrator, Lightroom
Proficient in English, Mandarin, French

PROJECTS

Sudoku – Swift

May 2018

- Developed an app for iOS using Xcode that allows users to play Sudoku on a 9x9 board.
- Our algorithm was able to generate a random game of Sudoku and its solution for various levels of difficulty including beginner, medium, and expert. Allows the user to check their answers as they progress or solve the game entirely.

Bear Maps – Java

May 2018

- Created maps by rastering downloaded image tiles and map data, with support for scrolling, zooming, and route finding
- Applied Dijkstra's and A* algorithms for pathing, used Tries to implement autocompletion of search terms

World Building – Java

Apr 2018

- Developed an algorithm that randomly generated connected rooms and hallways based on a user provided input.
- Implemented user interactivity by supporting WASD player movement, input strings that included movement, game objective, saving and loading games, multiplayer mode, and player customization. Used StdDraw API to render the UI.

Scheme Interpreter – Python, Scheme

Nov 2017

- Built a scheme interpreter in python and implemented some programs in scheme.
- Developed a deep understanding of the REPL component of interpreters.

LEADERSHIP EXPERIENCE

Academic Intern

2018-Present

- Help students in CS 61A, CS 61B, and CS 70 during labs, office hours, and homework parties by assessing the students' understanding of material with weekly lab check-offs and guiding students through any problems they may have.
- Assist the TA during labs and prepare material and lessons to build students' knowledge of the curriculum.

AFX Dance

2018-Present

Reach Historian

- Host dance workshops at local high schools, document all activities through pictures and videos

Director Intern

- Assist directors with managing group of 50 people, lead warmups and stretches, create choreography and formations

Marching Band

2013-2017

Section Leader

2015-2017

- Managed the clarinet section of 40 people (made sure people were quiet during rehearsals, knew what they should be doing at all times)
- Taught new and returning members music and marching skills, ran sectionals and social bonding events
- Played clarinet for 7 years, committed over 15 hours per week for 18 weeks each fall

Red Cross Club

2015-2017

Secretary/Treasurer

- Organized events such as distributing necessities to homeless in SF, and managed fundraisers
- Ran club meetings, documented and managed meeting minutes, taught a first aid workshop