Joanne Chang

joachang@ucdavis.edu ✦ Milpitas, CA ✦ (650) 996 - 9318
joanne-chang.github.io ✦ linkedin.com/in/Joanne-Chang

EDUCATION

Computer Science & Engineering, Bachelor of Science   *Graduation: June 2020*
University of California, Davis
GPA: 3.45

Relevant Coursework

- ✦ Data Structures
- ✦ Algorithm Design
- ✦ Software Engineering
- ✦ Web Programming
- ✦ Probability & Statistical Modeling
- ✦ Computer Architecture
- ✦ Gameplay Programming
- ✦ Computer Security
- ✦ Operating Systems
- ✦ Embedded Systems
- ✦ Computer Networks

SKILLS

Software: ✦ Python, Java, C, C++, C#, Swift
                ✦ LaTeX, Chisel, R, MATLAB

EXPERIENCE

Software Engineering Intern, *KLA*, Milpitas, CA   *June 2019 - September 2019*
- ✦ Created data analysis software to calculate summary statistics, with an emphasis on process capability index Cpk, of collected server data & wrote a test program to validate results (*both in Python*)
- ✦ Prepped, trained, and tested different linear models using machine learning algorithms to predict hardware part failure dates based on hardware parameter data (*Python*)
- ✦ Attended daily standup meetings, worked with KTTS Engineering department team, discussed feature requests with project stakeholders, prepared for and gave presentations showcasing projects

PROJECTS

Aggie Dish App, *Senior Design Project*   *January 2020 - June 2020*
- ✦ Developed the frontend of an iOS mobile app both programmatically and through storyboard in Xcode (*Swift*)
- ✦ Implemented protocol buffers for app's server API, primarily building various gRPC methods to get specific eatery and meal menu data from Firebase to the frontend (*Java*)
- ✦ Demonstrated ability to work within tight engineering constraints put on the project, including adhering to strict design requirements and going through extensive code review processes

Delivering Consequences, *Gameplay Programming*   *November 2019 - December 2019*
- ✦ Worked on the animation and visuals of a top-down 2D role-playing game using the Unity game engine, with focus on creating the animation scripts for player and non-player character movements (*C#*)
- ✦ Project available here: https://github.com/thenintendodude/Delivering-Consequences-Game

IFTTT to Twitter, *Embedded Systems*   *May 2019*
- ✦ Modified a CC3200 LaunchPad with circuits and uploaded code to decode IR signals from an IR remote to alphanumeric symbols that can be outputted to an on-board OLED display screen (*C*)
- ✦ Utilized the REST API to connect the LaunchPad as an IoT device to Twitter using web hooks to send generated messages over the Internet as a form of text messaging

Airbnb Price Predictor, *Probability & Statistical Modeling*   *March 2019*
- ✦ Devised a linear model that predicts Airbnb rental prices in the San Francisco area (*R*)
- ✦ Optimized linear model through data analysis using mean absolute percentage error (MAPE)
- ✦ Reduced initial MAPE of about 60 to 45 after four model changes

ACTIVITIES

- ✦ Member, Davis Computer Science Club (*DCSC*)   *September 2016 - June 2020*
- ✦ Member, Society of Women Engineers at UC Davis (*SWE*)   *September 2016 - June 2020*