Joanne Chang

jchang6@scu.edu ✦ (650) 996 - 9318
Joanne-Chang.github.io ✦ linkedin.com/in/Joanne-Chang

EDUCATION

Computer Science & Engineering, Master of Science *Expected Graduation: June 2023*
Santa Clara University

- *Relevant Coursework*: Algorithm Design, Operating Systems, Artificial Intelligence, Computational Creativity

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

- *Relevant Coursework*: Data Structures, Algorithm Design, Probability & Statistical Modeling, Operating Systems, Computer Architecture, Computer Networks, Embedded Systems, Software Engineering, Web Programming

SKILLS

Programming Languages: ✦ Python, Java, C, C++, C#, Swift
Tools: ✦ Git, Visual Studio Code, Jupyter Notebook, Unity

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

Tweet Generator, *Computational Creativity* *January 2022*

- Programmed a Twitter bot that appears to exhibit creativity by generating text that a fictional character could say based on all previous dialogue said by that character before (*Python*)
- Text generator was created from a Markov chain trained on previous dialogue processed by spaCy's NLP algorithm
- Bot available here: https://tinyurl.com/MyTwitterBot

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

Password Manager, *Computer Security* *May 2020 - June 2020*

- Created an iOS mobile app that manages passwords to other app accounts on a mobile device (*Swift*)
- Primarily worked on the "Create New Account" screen, which includes connecting the app to Firebase to both utilize the Firebase Authentication API for user creation and to store new user information
- Project available here: https://github.com/ECS153/final-project-j2ve

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

ACTIVITIES

- Member, Davis Computer Science Club (*DCSC*) *September 2016 - June 2020*
- Member, Society of Women Engineers at UC Davis (*SWE*) *September 2016 - June 2020*
- Member, Association of Graduate Engineering Students (*AGES*) *September 2021 - Present*