

Joanne Chang

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EDUCATION

Computer Science & Engineering, Bachelor of Science

University of California, Davis

GPA: 3.375

Expected Graduation: June 2020

Relevant Coursework

- ♦ Data Structures
- ♦ Algorithm Design
- ♦ Software Engineering
- ♦ Probability & Statistical Modeling
- ♦ Computer Architecture
- ♦ Machine Dependent Programming
- ♦ Operating Systems
- ♦ Embedded Systems
- ♦ Computer Networks (*ongoing*)

SKILLS

Software:

- ♦ Java, Python, C, C++, C#
- ♦ LaTeX, Chisel, R, MATLAB

EXPERIENCE

Software Engineering Intern, KLA, Milpitas, CA

June 2019 - September 2019

- ♦ Developed data analysis software in Python to calculate summary statistics, with an emphasis on process capability index Cpk, of collected server data and a test program in Python to validate results
- ♦ Prepped, trained, and tested different linear models using machine learning algorithms in Python to predict hardware part failure dates based on hardware parameter data
- ♦ Attended daily standup meetings, worked with KTTS Engineering department team, discussed feature requests with project stakeholders, prepared for and gave presentations showcasing projects

PROJECTS

IFTTT to Twitter, Embedded Systems

May 2019

- ♦ Modified a CC3200 LaunchPad with circuits and C code to decode IR signals from an IR remote to alphanumeric symbols that can be outputted to an on-board OLED display screen
- ♦ 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

File System, Operating Systems

May 2019

- ♦ Programmed a FAT-based file system software stack using C code that mounts and unmounts formatted partitions, reads and writes files, and creates and removes files
- ♦ Constructed testers in C to track the progress of the file system code at each stage of code development

Airbnb Price Predictor, Probability & Statistical Modeling

March 2019

- ♦ Devised a linear model with R code that predicts Airbnb rental prices in the San Francisco area
- ♦ Optimized linear model through data analysis using mean absolute percentage error (MAPE)
- ♦ Reduced initial MAPE of about 60 to 45 after four model changes

Davis In-Order CPU, Computer Architecture

January 2019 - March 2019

- ♦ Implemented a simple in-order CPU design over a series of 4 labs in Chisel code
- ♦ Integrated pipelining and branch predictors to speedup performance of CPU for various workloads
- ♦ Reported on simulated benchmark results of single-cycle versus pipelined CPUs using different types of branch predictors

ACTIVITIES

- ♦ Member, Davis Computer Science Club (DCSC)
- ♦ Member, Society of Women Engineers at UC Davis (SWE)

September 2016 - Present

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