

ASHLEY LIN

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EDUCATION

UC Berkeley - Bachelor of Science in Engineering Expected 2019

- Major: **Electrical Engineering and Computer Science**, GPA: 3.7
- Study Abroad: **Osaka University, Japan** (Summer 2016), **University of Toronto, Canada** (Summer 2017)

Relevant Coursework:

CS: Algorithms, AI, Computer Architecture/Machine Structures, Data Structures, Optimization/Pipelining

EE: Signal and Systems, Designing Information Devices and Systems, Feedback Control

Math: Linear Algebra, Multivariable Calculus, Probability, Discrete Math

SKILLS

Software: Python, PHP/Hack, Java, SQL, C, Scheme, LaTeX, Javascript, React

Hardware: MicroControllers, oscilloscopes, function generators, digital multimeters, power sources

Languages: Chinese Mandarin

EXPERIENCE

Facebook, Inc - Software Engineering Intern 5/18 - 8/18

- Build data auditing infrastructure for tracking 2M daily mutations and calculating Salesforce API consumption
- Drive ML efforts to obtain data and train a GBDT model in FBLearner (flow)
- Design and implement React UI hub to surface and aggregate low level data

Tesla, Inc - Software Engineering Intern 1/18 - 5/18

- Develop a Python algorithm that reduced false fails by 17% which decreased downstream cycle time
- Lead R&D efforts for automated test systems using thermography, computer vision, and VGG16 neural network
- Design ETL analytical script for post processing and reporting manufacturing/test data

UC Berkeley Dept of Electrical Engineering (EE16B) - Student Instructor 8/16 - Present

- Lead instructor for two 40 student labs - design, build, and debug circuits to build intuition for how systems respond
- Teaching students C and Python for running simulations via Jupyter Notebooks and microcontrollers
- Manage/train 7 lab assistants and oversee their growth as effective engineers and teachers

Electrefy - Engineering Intern 6/17 - 8/17

- Design and test battery configurations with laboratory electronics to optimize output
- Build company website after restructuring value proposition and performing market research

The Boeing Company - Engineering Intern 6/14 - 8/14

- Design, CAD, and build hardware fixtures as well as documenting instructional tickets
 - Coordinating events and managing email notifications to fellow interns as co-leader of an Integrated Product Team
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RELEVANT PROJECTS

Text Editor - design a data structure and implementing functionalities for scrolling, highlighting, deleting, saving

Map Pathing - maximize the tradeoff between resolution and memory and find the shortest path using A* & Dijkstra

CPU Simulation - build and simulate back end components (ALU, Regfile) of a computer via Logism that translates C code to machine code with pipelining optimizations

PacMan - optimize a pacman character to utilize Markov Models (MDP, HMM) and CSP to win against ghost agents

Project SITXT33N - architect a control feedback (PID) robotic car that processes vocal commands using SVD & PCA

ACTIVITIES

Society of Women Engineers (SWE) - *Outreach Committee* 8/15 - Present

- Coordinate and lead outreach and volunteering events to host tech seminars and DIY science projects

First Robotics Competition (FRC) - *Vice President* 8/12 - 5/15

- Wrote a business plan for sponsors and was approved a \$5000 NASA grant
- Manufacture the drive chain and chassis for the robot and built field elements for running simulations