

# Jo Chuang

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## Education

CORNELL UNIVERSITY, ITHACA

2016 – 2019

- Bachelor of Science in Computer Science, College of Engineering
- Relevant Coursework: CS 2110 (OOP and Data Structures), CS 2800 (Discrete Structures), CS 3410 (Computer System Organization and Planning), CS 4820 (Algorithms), CS 4780 (Machine Learning)
- GPA: 4.1/4.0

## Projects

MACHINE LEARNING PLAYGROUND

JUN 2017 – CURRENT

[www.ml-playground.com](http://www.ml-playground.com)

- Created a user-friendly educational website for introducing machine learning concepts with an array of customizable models
- Designed a testing playground that took user input from an HTML canvas managed by a complex class structure using React and Promises, then pipelined user-designed datasets to the models for training and classification
- Implemented multiple machine learning algorithms from the ground up (KNN, decision trees, neural networks and more) with Javascript and math.js

TRAILBLAZER

2016

- Designed and built a flexible goal-tracking front end web app, tackling the shortcomings of personal project managers currently available which lack hierarchal objectives and long term project planning
- Sketched and planned out user stories and UI flow involving categorial and top-down organization of projects and ideas, then implemented designs using React and Less.css
- Deployed application using Firebase as backend and Github pages, then published on the Chrome web store as web app

DIGIT CLASSIFICATION CHALLENGE

MAY 2017

@ CS 4780 (Machine Learning) final project

- Evaluated different methods for an OCR assignment that involved classifying an MNIST-like digit dataset, such as Deep Net, Logistic Regression, and KNN, using both Python scripts and notebooks
- Performed Median filtering, dataset expansion and KNN for final model, with training and testing accuracy of 99%
- Achieved 99% for hidden evaluation dataset

SHOWERFY

SEP 2016

@ Big Red Hacks, Cornell

- Led development of Android app that gamified showers to reduce water usage in response to a local drought, using a timer that played music through the Spotify Android SDK
- Learned, implemented and taught Android development with Java to lead 5 person team
- Presented as one of 10 finalists out of all 30 participating groups

## Experience

RESEARCHER (UNDER CONTRACT)

JULY 2017 – CURRENT

@ Team Ursa

- Conducted research for an audio alignment task, determining the relative time difference between audio recordings of interviews from different sources
- Used FFMPEG, Numpy and Scikit to downsample, preprocess, calculate correlation and determine a final result by consensus
- Built a modular system as well as writing accompanying documentation in preparation for integration with core product, an interview recording app

JUNIOR SOFTWARE ENGINEERING INSTRUCTOR

MAY – AUG 2017

@ Horizons School of Technology, San Francisco

- Designed and revised curriculum covering full MERN stack (MongoDB, Express, React/Redux, Node), was responsible for building an introductory React tutorial
- Tutored cohort of 100+ undergraduates in small group seminar settings, dynamically responding to student queries and resolving technical roadblocks
- Mentored students developing project and startup ideas, providing technical advice on code architecture and project iteration as well as business related strategies

## Skills

Javascript, Node.js, React/Redux, Firebase, Express, MongoDB, Sockets.io  
Python, Pandas, Numpy, Scikit-Learn, XGBoost  
Java, C++