

# Jo Chuang

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## EDUCATION

Cornell University, Ithaca

2016 – 2019

- Bachelor of Science in Computer Science, College of Engineering
- Relevant Coursework: Algorithms, Machine Learning and Intelligent Systems, Computer System Organization and Planning, Discrete Structures, OOP and Data Structures
- Current Coursework: Functional Programming, Probability and Statistics, Machine Learning for Data Sciences, Advanced Topics in Machine Learning, Advanced Machine Learning Systems

GPA: 4.12/4.3

## EXPERIENCE

Algorithms (CS 4820) Teaching Assistant

Aug 2017 – Current

Kaggle Competition Team Lead

Aug 2017 – Current

Cornell Data Science Project Team (CDS)

- Will be leading a team in Kaggle competitions, exploring text and image based datasets and applying state of the art packages such as XGboost and Tensorflow/Keras to develop competitive models

Researcher (Under Contract)

Jul 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, then wrote 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

## PROJECTS

Machine Learning Playground

Jun – Aug 2017

[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

Jan – Dec 2016

- Designed and built a flexible goal-tracking web app for personal use, tracking progress on personal projects
- Sketched and planned out user stories and UI flow involving categorical 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

Digit Classification Challenge

May 2017

4780 Machine Learning Final Class 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 accuracy of 99%
- Achieved final accuracy of 99% for hidden evaluation dataset

Showerfy

Sep 2016

Big Red Hacks, Cornell

- Led 5 person team in 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
- Presented as one of 10 finalists out of all 30 participating groups

## SKILLS

Web Development: Javascript, Node.js, React/Redux, Firebase, Express, MongoDB, Sockets.io

Data Science: Python, Pandas, Numpy, Scikit-Learn, XGBoost

Software Development: Java, C++