

Esther Ouyang

Apt 605 Hilgard Ave, Berkeley, CA 94709 | estheroy.github.io

T: +1 (858) 699 3093 E: estherxo@berkeley.edu

EDUCATION

Expected May 2019

University of California, Berkeley

B.A. in Computer Science, B.A. in Statistics | Overall GPA: 3.96/4.0

Coursework: Deep Learning, Machine Learning, Computer Architecture, Algorithms, Software Engineering, Statistics & Probability, Optimization, Natural Language Processing*, Operating System*, Computer Network*

SKILLS

Software Development: Python, Java, C/C++, JavaScript, HTML5, CSS3/Sass, MATLAB, R, SQL, Spark, AWS (EC2, S3), Docker, Git, Jira, Unix

Machine Learning: TensorFlow, Keras, Numpy, Scikit-learn, Jupyter Notebook

EXPERIENCE

May 2017 - Aug 2017
San Diego, CA

AI-Master

Software Engineer Intern

- Built a RESTful Web API for e-learning textbook with interactive elements including quiz box, and embedded code box as well as API for keeping track of user's progress and statistics.
- Designed and implemented an internal editor tool for course material team to accelerate material upload.
- Integrated front-end elements with server-side logic and PostgreSQL database as well as re-implemented UI/UX features for web pages with Vue.js for better and faster performance.

Sep 2016 - Feb 2017
Berkeley, CA

International Computer Science Institute, Multimedia Big Data Team

Student Researcher

- Researched on different approaches to automatically analyze the visual and audio content of videos in large-scale social network settings.
- Analyzed the performance of various NLP algorithms for information retrieval and tag recommendation strategies including POS, RNN, and LSTM.
- Implemented and improved the Tag Aggregation and Promotion Algorithm System on Flickr Dataset. (*TensorFlow, Python, Jupyter Notebook, Amazon EC2*)

Aug 2016 - present
Berkeley, CA

UC Berkeley EECS Department

Reader, Tutor, Undergraduate Academic Employee

- Help professors develop course material and teach Java/Python programming.
- Implemented automated testing and gave personalized feedback for assignments.
- Hold office hour and led the in-class discussion to help 500+ students' learning.

May 2016 - Aug 2016
San Diego, CA

California Institute for Telecommunications and Information Technology (Calit2)

Research Assistant

- Led a team working on data collection and algorithm development for a systematic study of human motion and fall risk assessment study.
- Researched various computer vision algorithms to analyze SPPB tests result.
- Developed an automaton computer vision based algorithm candidate for function balance test to detect possible disability and monitor health in elderly people.

ACTIVITIES

- Organization: Web Development Committee at **Upsilon Pi Epsilon** Computer Science Honor Society,
- Internal Affairs Director at **Data Science Society**
- Volunteer at **Berkeley Project**