

Xuanpei Ouyang (Esther)

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EDUCATION

University of California, Berkeley

Bachelor of Arts in Computer Science
Bachelor of Arts in Statistics

Berkeley, CA

Expected May 2018

GPA: 3.94

University of California, San Diego

Bachelor of Science in Computer Science

La Jolla, CA

2014 - 2016

SKILLS

- Java, Python, C/C++, R, MATLAB, Scheme, Bash, HTML5, CSS3, Assembly
- Android Studio, Git, MySQL, Firebase, Spark, Jira, CircleCI

EXPERIENCE

International Computer Science Institute

Student Researcher

Berkeley, CA

Sep 2016 - Jan 2017

- Researched on natural language processing problems in large-scale social network settings
- Analyzed the performance of various NLP algorithm for information retrieval and tag recommendations
- Implemented and improved the Tag Aggregation and Promotion Algorithm System on Flickr Dataset

California Institute for Telecommunications and Information Technology

Research Assistant

La Jolla, CA

June 2016 - Sep 2016

- Led 3 people team working on data collection and algorithm development for a fall risk assessment study
- Used various computer vision algorithms in MATLAB to analyze SPPB tests
- Developed a automaton computer vision based algorithm candidate for function balance test

Data Science Student Society

Internal Affairs Director

La Jolla, CA

Aug 2015 - July 2016

- Wrote event proposals, collaborate with professors or guest speakers to give data science related speeches on campus
- Organized and assist in workshops to teach python and machine learning concepts & algorithm implementation

UC San Diego EECS Department

Undergraduate Student Instructor

La Jolla, CA

Sep 2015 - July 2016

- Communicated with students and professors to help build course infrastructure and teach Java programming
- Implemented automated testing and personalized feedback for students's assignments; hold office hour and led in-class discussion to help students's learning

PROJECTS | [github/estheroy](https://github.com/estheroy)

CoupleTone

Jun 2016

- Developed an Android mobile app with partners for getting notification about friends' locations
- Integrated Google Map & Cloud Messaging API, Firebase to tracking and sending notification.

2048 Game+

Jun 2016

- Redesigned the popular 2048 game with Java/JavaFX with new features rotate and undo.

Research Paper on analyzing Machine Learning Algorithms

Jun 2016

- Empirically compared five supervised machine learning algorithms - KNN, SVMs, DT, Bagged DT and Naive Bayes
- Analyzed their performance on various kinds of dataset with different tuning parameters

Self-Implemented Library of Machine Learning Algorithm

Feb 2016

- Reimplemented machine learning algorithm includes K-means clustering, PCA, KNN, Linear Regression in MATLAB and Python

COURSEWORK

- Software Engineering
- Databases
- Algorithms
- Data Structure
- Data Modeling & Analysis
- Computer Architecture
- Machine Learning
- Artificial Intelligence
- Statistics & Probability