Xuanpei Ouyang (Esther)

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EDUCATION

University of California, Berkeley | Berkeley, CA
Bachelor of Arts in Computer Science | Expected May 2018
Bachelor of Arts in Statistics | Cum. GPA: 3.94
Major GPA: 4.0

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 | Berkeley, CA
Student Researcher | 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 | La Jolla, CA
Research Assistant | 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 | La Jolla, CA
Internal Affairs Director | 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 | La Jolla, CA
Undergraduate Student Instructor | 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*

CoupleTone | July 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.

Research Paper on analyzing Machine Learning Algorithms | Mar 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

2048 Game+ | Feb 2016
- Redesigned the popular 2048 game with Java/JavaFX with new features rotate and undo.

COURSEWORK

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