

# Esther Xuanpei Ouyang

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## EDUCATION

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**University of California, San Diego**  
**Jacobs School of Engineering**

*Bachelor of Science in Computer Science & Applied Mathematics (double major)*

La Jolla, CA  
Anticipated graduation on 2018

- Overall GPA 3.97 (Major GPA 4.0)
- Provost Honor of Fall 2014, Winter 2015, Spring 2015, Fall 2016, Winter 2016
- Coursework include: Computer Science, Mathematics, Matlab Programming, Data Modeling and Analysis, Supervised and Unsupervised Machine Learning, Numerical Analysis, Linear Optimization, Software Engineering, Linear Algebra, Statistic and Probability, Data Structure, Algorithm Analysis, Object-Oriented Programming, Combinatorial Game Theory, Teaching Science Seminar, Japanese Languages.

## QUALIFICATION

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- Proficient in Matlab, C/C++, Java, Python programming, Unix/Linux, Git, Jira, Android Studio, Agile programming and Data Analysis.
- Familiar with LATEX, HTML5, Data Mining, Assembly programming, Microsoft Excel, Microsoft Word, Adobe Software (including Premiere, InDesign, Illustrator).
- Strong interpersonal and communication skills.
- Work efficiently both independently and in cooperation with others.
- Motivated problem solver and quick learner, eager to further my data analysis and image process experience.
- Fluent in English, Mandarin, Cantonese, Conversational Japanese.

## RELEVANT EXPERIENCE

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**Computer Science and Engineering Department at UC, San Diego**  
*Tutor*

September 2015 - Present

- Communicate effectively with students and faculty members to help teach Java programming.
- Grade the assignments of about 15 students every week and exam papers, give students homework feedback.
- Assist in lab and hold tutor hours to help students learn class materials and complete assignments.
- Work as a in-class tutor to help students learn better during lectures by leading students' in-class discussions.

**Data Science Student Society at UC, San Diego, La Jolla, CA**  
*Technical Officer*

September 2015 - Present

- Write event proposal and arranged events with group members in the University of California, San Diego and contacted and cooperated with some student organizations to hold workshop.
- Also serves as one of principal members. Responsibility included: help to organize workshops, during workshop, teach attendees to program in python, explain data science concepts, methods and implementations to help attendees learn better.
- Attend weekly meeting and discuss and arrange Data Science workshops with other team members.

**Engineering for a Sustainable World, La Jolla, CA**  
*Project member*

October 2014 - October 2015

- Create an off-grid house that is both energy-efficient and sustainable with all of its energy from renewable sources and build a model of the off-grid energy house.
- Worked in collaboration with project members to design for the project and helped to arrange the tasks of each member of the project group and weekly meetings.

## PROJECTS

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- MATLAB Implementation of supervised and unsupervised Machine Learning Algorithms
- MATLAB Implementation of Numerical Analysis Algorithms
- iMed - A personal medical assistant with natural language processing ability (Made with IBM Watson API)
- 2048Game - A Java/JavaFX clone of the popular 2048 game with new features rotate and undo
- Final Project Paper - An Empirical Comparison of Five Supervised Learning Algorithms