

# Xiaoyu (Justin) Liu

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310-755-5026

## EDUCATION

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University of California, San Diego

B.S. Computer Engineering

B.S. Applied Mathematics

Expected Graduation Date: Dec, 2015

Major GPA: 3.5

## RELEVANT COURSES

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Object-Oriented Programming, Algorithm, Advanced Data Structure, Advanced Software Engineering, Operating System, Computer Architecture, Artificial Intelligence, Machine Learning, Neural Network, Entrepreneurship  
Game Theory, Combinatorics, Applied Linear Algebra, Numerical Analysis, Data Analysis, Optimization

## WORKING EXPERIENCES

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### Machine Learning Analyst

Mtell

Summer, 2015 - Present

- Conduct machine learning experiments on sensor data to detect anomaly and classify machine failure
- Develop REST infrastructure and visualization tools

### CSE Tutor

UCSD - Computer Science and Engineering Department

2014-2015

- Tutor students in “Advanced Data Structures in C++” and “Artificial Intelligence”
- Assist students with programming issues and AI theory

### Software Engineering Intern

Teradata - Parallel Database Extension

Summer, 2013

- Kernel Tools Team: Re-designed and implemented debugging tools to support panic dump analysis
- Modified crash, a UNIX-like kernel crash dump facility, to read kernel statistics and structures in O(1)

## SOFTWARE PROJECTS

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UCSD E-Connect - A kickstarter-styled website for UCSD entrepreneurs

- Implement back-end functionality using PHP and MySQL

CSE Class Project: BlueJay - A check-in system

- Help to create and maintain a build pipeline utilizing Git, Travis CI and Heroku

UCSD-AUVSI: Association for Unmanned Vehicle Systems International

- Framework design and application development utilizing OpenCV and .NET

Research Intern - UCSD Protein Data Bank

- Build Java/Scala application to process and analyze protein structures
- Use Apache Spark on Gordon(supercomputer) for distributed in-memory processing

Facebook Open Academy: SWI-Prolog - Open-source contributor

## SKILLS

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Languages: Java, Python, Scala, R, C/C++

OS: Linux, Mac, Windows

Tools: AWS, SQL Server, NoSQL (MongoDB), Apache Spark, Git

## HONOR/ LEADERSHIP

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- College Ambassador - events planning and execution

Fall, 2012

- UCSD Provost's Honors

2012 - 2014

- Top 1% in the AMC 12 high school mathematics contest

2010