# YI MANG "TERRY" YANG

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## EDUCATION

**University of California, Davis**                                              Expected 2015 – 2019
- Candidate for B.S. in Computer Science
- Overall GPA: 3.9; Dean's Honor List; 95$^{th}$ percentile in computer science, math and physics classes

**Deep Learning Specialization by deeplearning.ai on Coursera**                              Sep 2017

## SKILLS

- Coding: Java, C/C++, Python, C#, HTML/CSS/JS
- Database: Redis, SQLite
- Version Control: Git, Perforce

- OS: Windows, Linux, Windows Server
- Cloud: Azure, AWS, Google Cloud
- Other: RabbitMQ, .NET, Jenkins, Docker, Django

## EXPERIENCE

**Undergraduate Researcher**                                              Oct 2017 – Present
**University of California, Davis**                                              Davis
Working with Dr. Yong Jae Lee and Zhongzheng Ren on Amodal Instance Segmentation for Computer Vision
- Modifying Mask R-CNN architecture to predict hidden regions of occluded objects
- Using synthetic imagery for training and testing data due to lack of annotated datasets for the task

**Software Engineering Intern**                                              Jun 2017 – Aug 2017
**Moody's Analytics**                                              San Francisco
Worked on Commercial Mortgage Metrics (CMM) software solution's High Performance feature which was developed in **C#** and **.NET** framework using a **microservices** architecture
- Improved performance by orders of magnitude by combining pipeline steps that were spread across different **microservices** to reduce the number of messages sent over the network
- Implemented file splitting into the pipeline to handle large files that could not be processed in their entireties
- Cleaned up code smells and legacy code; created general framework classes for specialized helper functions
- Debugged **Redis** cache memory leak and multithreading race condition problems

## PROJECTS

### Algorithmic Trading
Developed robust algorithmic trading strategies for futures contracts
- Devised trend-following trading strategies that exploit the skewness in the distribution of price runs in the market
- Used **evolutionary algorithms** for backtesting with training/test set to find optimal parameters for regression trendlines; conducted **Monte Carlo simulations** to manage risk scenarios
Created trading bot to execute trading strategies with **C#** and **.NET** framework
- Utilized **Interactive Brokers API** to implement functionality like retrieving live feed and placing orders
- Deployed to run in an **Amazon EC2** cloud instance

### ComAIdian
30+ person **machine learning** project to create a web app for recommending jokes: comaidian-green.azurewebsites.net
- Acted as a manager for the software engineering division: arranged meetings, assigned tasks, coordinated with other teams (machine learning, QA, projects managers, etc.), wrote reports and delivered class presentations
- Deployed Django web app on **Azure App Services**; set up continuous delivery through Docker Hub and GitHub