YI MANG "TERRY" YANG

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EDUCATION

University of California, Davis

Sep 2015 – Jun 2019

- Candidate for B.S. in Computer Science
- Overall GPA: 3.92; Dean's Honor List; 95th 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

Worked with Dr. Yong Jae Lee and Zhongzheng Ren on the amodal instance segmentation problem for **Computer Vision**, primarily using **Python** and **Keras** framework

- Augmented Mask R-CNN architecture to predict hidden regions of occluded objects
- Utilized 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, 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 across 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 in C# and .NET framework

- Leveraged Interactive Brokers API to implement functionality like retrieving live feed and placing orders
- Set up bot to run on an Amazon EC2 cloud instance

ComAldian

30+ person machine learning project to create a web app for recommending jokes

- Managed 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