Norman, OK 405-227-0732 jychstar@gmail.com

Yuchao Jiang

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Objective: Self-motivated Ph.D. who wants to leverage the power of statistical machine learning and deep learning to help the client make a better data-driven decision and accelerate human innovation.

Skills & Knowledge

- Programming languages: Python, Matlab, C++, JavaScript, Haskell
- Experience with data technologies: SQL, NoSQL, Hadoop, Spark
- Familiar with data analytical/visualization software: R Studio, SAS, Tableau
- Expert in Python libraries: NumPy, Matplotlib, Seaborn, Scikit-learn, TensorFlow and OpenCV
- Working knowledge in deep learning for IR (image recognition) and NLP (natural language processing)
- Business Analysis: regression, classifier, A/B test, time series analysis, segmentation, text mining
- Familiar with AWS (S3, EC2, Redshift), JS libraries (D3, dimple, plotly), VM and Linux command

Project Experiences

Data Scientist, Exaptive, Oklahoma City, OK

02/2017 - 03/2017

- > Improved the company's web-based platform for better data visualization using JavaScript
- Engineered the data pipeline for a seamless user experience using Python
- > Communicated insights with the VP services that help improve productivity of full-stack developers

Data Analyst/Machine Learning Engineer, University of Oklahoma, Norman, OK

08/2016 - 04/2017

- > Prepared company report on products from a database using SQLite and Python
- > Provided insights on selecting a new store location by statistical analysis & parsing data from HTML/XML
- > Predicted loan default risk by decision tree classifier and interpreted results by feature weights
- > Segmented customers into distinct categories by principal component analysis and unsupervised learning
- ➤ Prototype self-driving car functionalities using computer vision to identify lane line and calculate curvature, and using deep learning to localize other vehicles on the roads. See this exciting <u>video</u>
- Example projects can be seen in https://github.com/jychstar/NanoDegreeProject

Research Assistant, University of Oklahoma, Norman, OK

08/2010 - 05/2016

- > Designed layer structures of lasers using Matlab and domain knowledge in optics & quantum physics
- > Convert core functions to C++ to generate executable file for better user experience
- Automated the data collection and improved the efficiency by 10 times using Labview
- ➤ Built data prediction models for semiconductor devices enabling Mars rover Curiosity to discover Methane
- Reviewer for 4 journals, authored 15 journal papers (citations >110), hold 2 patents on laser technologies, gave 2 oral presentations at CLEO (San Jose), 1 result reported as "research highlight" in Nature Magazine.

Education

Nanodegree, Self-Driving Car Engineer (term 1), Udacity	04/2017
Nanodegree, Data Analyst/Machine Learning Engineer, Udacity	01/2017
Ph.D., Electrical and Computer Engineering, University of Oklahoma, Norman, OK	05/2016