ZHAOYUN MA

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Objective

Highly motivated individual with exceptional research skills and ability to communicate complex concepts across business units. Seeking the job of a Data Scientist to utilize my data science, machine learning skills and research background.

Skills

Applications: Pandas, Numpy, Matplotlib, Scipy, Pytorch, TensorFlow, Keras

Programming Languages: Python, SQL, MATLAB, JavaScript, C++

Skills: Data Mining and Visualization, Data and Quantitative Analysis, Predictive Modeling, Model Deployment, Convolution Neural Network, Recurrent Neural Network, Natural Language Processing; Computer Vision, Recommendation Engines, Web Development

Education

Machine Learning Engineer Nanodegree (Udacity) Jan 2021

Data Scientist Nanodegree (Udacity) Dec 2020

Ph.D., **Mechanical Engineering** Dec 2020

University of South Carolina, SC, GPA: 4.0

Master of Science, Civil Engineering Dec 2016

University of Pittsburgh, PA, GPA: 3.9

Related Courses: Statistics: SQL for Data Analysis; Experimental Design; Software Engineering Fundamentals; Intro to Data Engineering; Intro to Machine Learning; Machine Learning in Production; Deep Learning (CNN, RNN); Introduction to NLP

Projects

Sentiment Analysis Web App Deployment

- Extracted features through text preprocessing and Bag of Words
- Trained and deployed an LSTM RNN model with test accuracy 0.87 to a Web App though Amazon SageMaker

Dog Breed Classifier

- Implemented a human face detector using OpenCV and a dog face detector using VGG16
- Trained and deployed a dog breed classifier using transfer learning on VGG16 (CNN) though Amazon EC2, resulting in test accuracy 0.87

Plagiarism Detector

- Extracted and engineered features including containment and LCS
- Trained and deployed a PyTorch neural network model with test accuracy 1

Experiences

Research Associate, University of South Carolina, SC Jan 2021 - Present

- Leader of Nuclear Energy University Program at UoSC by DOE, focusing on model development and signal/image processing for damage detection purpose

Research Assistant, University of South Carolina, SC Jan 2017 - Dec 2020

- Leader of NASA advanced composite project at UofSC, focusing on experiment design, model development and image processing to ensure structural safety

Extra-Curricular Activities

Mentors for Summer Program for Research Interns at UofSC Jul 2017 & 2019

Research reviewer for Discover UofSC Apr 2018 & 2019