NANCY TRINH

nantrinh338@gmail.com   Fremont, CA   nantrinh.github.io

EXPERIENCE

Software Engineer, Venice   *Jan. 2020 - Present*

- Created back-end pipeline for stream processing, consisting of: Apache Kafka brokers, Zookeeper, Confluent Schema Registry, Kafka Connect, ksqlDB, PostgreSQL server, and Kafdrop.
- Implemented event producers using Confluent's Python API.
- Built Docker images to distribute custom producers and consumers.
- Used bash scripts to automate tasks upon startup in containers, and to address race conditions between components in the pipeline.
- Interpolated environment variables to make code easier to maintain.
- Co-authored in-depth case study: https://venice-framework.github.io/case-study.html

Data Scientist, Freewheel (acquired by Comcast)   *July 2016 - April 2018*

- Conducted week-ahead impression forecasts and used statistical analysis to inform pricing decisions.
- Automated business processes and reporting using Python.

Advanced Analytics Consultant, ColdLight (acquired by PTC)   *June 2015 - Jul 2016*

- Worked on a variety of prediction problems, including video-on-demand rentals and purchases, diagnoses of chronic kidney disease, and hospital readmission risk.

EDUCATION

Georgia Institute of Technology - College of Computing   *Aug. 2016 - Dec. 2019*
M.S. in Computer Science with Concentration in Machine Learning, GPA: 3.88

University of Pennsylvania - The Wharton School   *Aug. 2011 - May 2015*
B.S. in Economics with Concentration in Statistics, GPA: 3.35
Awarded full-tuition scholarship (Questbridge National College Match)

Graduate Coursework: Algorithms; Machine Learning; Artificial Intelligence; Reinforcement Learning; Computer Vision; Operating Systems; Human-Computer Interaction; Machine Learning for Trading

Undergraduate Coursework: Probability; Regression; Data Analysis with Python; A/B Testing; Data Mining for Business Intelligence; Criminal Justice Data Analytics; Operations and Information Management

PROJECTS

Image recognition of road signs and traffic lights
A machine learning model that detects road signs and traffic lights from the German Traffic Sign Detection Benchmark. Achieved performance comparable with state-of-the-art classification techniques.
Technologies Used: Python, OpenCV, gradient-boosted trees

Simulated spaceship landings using reinforcement learning
A reinforcement agent that learns to safely land a simulated spaceship (OpenAI LunarLander-v2) using an approach adapted from Mnih et. al. *Human-level control through deep reinforcement learning, Nature 518, 2015.*
Technologies Used: Python, OpenAI, neural networks

SKILLS

Languages and Technologies: Python, Ruby, JavaScript, React, SQL, Docker, Linux, Bash
Machine Learning Techniques: Random Forests, Gradient-Boosted Trees, Neural Networks
Python Libraries: Numpy, Pandas, SQLAlchemy, Matplotlib, Scikit-Learn, Keras (Tensorflow), OpenCV