Zack Strathe

zack.m.strathe@gmail.com
(724) 426 – 6503
Manhattan, KS

Portfolio: zstrathe.github.io
LinkedIn: linkedin.com/in/zack-strathe
Github: github.com/zstrathe

Experience

Accounting Analyst II / Crestwood Midstream Partners LP, Kansas City, MO / April 2018 – January 2021
- Cleaned, analyzed, and aggregated accounting transaction data to produce monthly preliminary forecasts and financial reconciliation statements
- Orchestrated settlements for complex multi-modal transactions by developing detailed tracking of data between multiple sources
- Developed Python script to automate expense entry into ERP system, utilizing OpenPyXL, PyAutoGUI, PyWinAuto, PyTesseract, and tkinter

Accounting Analyst I / Crestwood Midstream Partners LP, Kansas City, MO / August 2015 – April 2018
- Collaborated with traders and logistics coordinators to oversee daily contract allocations and billing for LPG purchases and sales, and analyzed accounting transaction data to detect and resolve discrepancies

Billing Associate / HNTB Corporation, Kansas City, MO / October 2013 – August 2015
- Managed monthly billing for approximately 75 architecture and civil engineering projects with varying fee structures

Skills

Programming Languages: Python, R, SQL

Tools: Apache PySpark, MLlib, Pandas, OpenCV, NLTK, Numpy, Scikit-learn, TensorFlow, PyTorch, Tableau, Alteryx, Power BI, Matplotlib, Plotly, ggplot2, Git, OpenPyXL, PyAutoGUI, PyTesseract

Professional: Project Management, Leadership, Communication

Education

Kansas State University / **M.S. Data Analytics** / Data Science Program Track / August 2022
- GPA: 4.0

Kansas State University / B.S. Finance / December 2012

Academic Projects

Image Feature Extraction & Classification with PySpark
- With the PySpark distributed framework in Python, evaluated methods of feature selection and compared performance of classification algorithms with a data set of 500,000 labeled satellite images, and implemented 10-fold cross validation with a paired t-test to validate evaluation results
- Deployed a Spark cluster on AWS EMR with a S3 bucket to test functionality
- Technologies used: Python, PySpark, MLlib, OpenCV, Numpy, GCP, AWS EMR

Game Playing Reinforcement Learning Model
- Trained a deep reinforcement learning model to play the game Mario Bros, using the OpenAI Gym framework in Python, and evaluated methods of improving the trained Proximal Policy Optimization (PPO) model with modifications to the state-space, the action-space, and the reward function
- Technologies used: Python, OpenAI Gym Retro, OpenAI Baselines, TensorFlow, GCP

Comparison of Deep Learning Text Generation Models
- Trained unconditional text generation natural language models from a text corpus of song lyrics, utilizing recurrent neural networks (RNNs) and generative adversarial networks (GANs) in Python with the PyTorch deep learning framework, and evaluated text output by utilizing a combination of human scoring and a computed score
- Technologies used: Python, PyTorch, TextBox module (GAN algorithms)

Statistical Analysis of Home Pricing
- Developed a linear model in R to conduct statistical analysis of home pricing and evaluated the linear model compared to a more-complex generalized additive model (GAM) for predictive performance
- Technologies used: R, ggplot2

Capstone Data Visualization Project
- Served as coordinator on a student team to work with a client company to research and present data visualization best-practices and develop visualization dashboard implementations that provided enhanced insight into their supply network
- Skills / Technologies used: Project Management, Leadership, Python, Plotly, PowerBI

Personal Projects

Agglomerative Clustering Module (in-progress)
- Implementation of a total-linkage agglomerative clustering in Python with options for Euclidean or Manhattan distance
- Technologies used: Python, Numpy, Git

Certifications

CompTIA Cloud Essentials+ (issued 12/2021)