

ZACK STRATHE

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Project Portfolio: zstrathe.github.io

Objective

Seeking full-time employment as a Data Scientist or Artificial Intelligence/Machine Learning Engineer

Education

Kansas State University, Manhattan, KS

M.S. Data Analytics / Data Science track / In-Progress (August 2022 expected completion)

- GPA: 4.0
- Relevant coursework:

Programming Techniques for Data Science and Analytics (CIS 731)

Evaluated methods of feature selection and compared performance of image classification algorithms with a data set of 500,000 labeled satellite images, entirely using the Apache PySpark distributed computing framework

Principles of Artificial Intelligence (CIS 730)

Trained a reinforcement learning agent to play the game Mario Bros, using OpenAI's 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.

Machine Learning and Pattern Recognition (CIS 732)

Developed and evaluated text generation language models trained with a corpus of song lyrics, utilizing recurrent neural networks (RNNs) and generative adversarial networks (GANs) in Python with the PyTorch deep learning framework

Business Capstone (GENBA 890)

As team coordinator, led student team in consulting with a client company to provide research findings into data visualization methods, and developed visualization dashboard implementations that provide greater insight into the status of their nationwide supply chain, utilizing both the Plotly package in Python and PowerBI to visualize selected data

B.S. Finance / Financial Management track / December 2012

Skills

Programming languages:

- Python, R, SQL

Pandas (data analysis Python package)

NLTK (Natural Language Processing (NLP) Python package)

Scikit-learn (machine learning (ML) Python package)

Apache PySpark (distributed computing framework for Python)

Data Visualization Tools:

- Tableau, Matplotlib (Python package), ggplot2 (R package)

Certifications



Experience

Crestwood Midstream Partners LP, Kansas City, MO

Settlements Analyst II / April 2018 – January 2021

- Developed GUI script in Python to automate process of entering expenses into cloud-based ERP system
- Produced monthly financial reconciliations for producer agency marketing agreements totaling approximately \$200M annually

Settlements Analyst / August 2015 – March 2018

- Managed daily contract allocations and billing, and monitored accounting transactions for purchases and sales of LPGs for various marketing groups, and monitored marketing P&L statements to identify, analyze, and correct accounting valuation errors

HNTB Corporation, Kansas City, MO

Billing Associate / October 2013 – August 2015

- Managed monthly billing process for approximately 75 architecture and civil engineering projects