PAIGE MCKENZIE

Data Scientist

p-mckenzie.github.io

p-mckenzie

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in paige-mckenzie

EDUCATION

MS, Business Analytics University of Texas at Austin

May 2018

3.71/4.00

BSA, Mathematics

University of Texas at Austin

May 2017

3.96/4.00

TECHNICAL SKILLS

Programming

General:

Python, SQL, Git, Jupyter Notebooks

Data Visualization:

Tableau, Bokeh, D3.js

Python Packages:

Pandas, Sklearn, Matplotlib, NumPy, NLTK, PyTorch

Big Data:

Apache Spark (PySpark), Apache Hadoop (Hive)

Machine Learning

Supervised:

Generalized Linear Models, Tree Based Models, Nearest Neighbors, Support Vector Machines, Simple Neural Networks

Unsupervised:

Clustering, Principal Component Analysis

EXPERIENCE

Data Scientist

NetApp

April 2019 – present

Raleigh, NC

- Designed process to repeatedly forecast utilization for over 250K systems, replacing legacy process and improving prediction accuracy by >35%
- Leveraged Pytorch on GPU to predict customer purchase behavior, achieving a 72% reduction in model training time compared to existing process
- Engineered time-based models to predict customer purchase behavior, achieving a 5x lift in accuracy over a random forecast

Data Analyst

Cisco Systems

Raleigh, NC

- Automated data extraction and cleaning of raw text in 4 years of support case descriptions, providing visibility to previously untracked metrics and demonstrating errors in the established manual process of data collection
- Parsed 4 years of unstandardized customer-submitted files, extracting useful text and implementing topic modeling to discover trends in customer inquiries
- Leveraged unstructured page text to classify websites based on content type, enabling targeted manual review of newly-posted websites

PROJECTS

Targeting At-Risk Restaurants for Better Sanitation

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- Analyzed restaurant inspection history from Wake County Open Data to identify restaurants at risk of performing poorly on their next inspection
- Simulated marketing campaign that targeted at-risk restaurants 4x more accurately than a random sample, using tree-based ensemble model and engineered features

Recommending TV Shows via Collaborative Filtering

Accommending 1 v 3nows via Conaborative Filtering

- Built a recommendation engine using users' TV show ratings to predict their rating of new shows
- Achieved 15%-32% improvement in prediction accuracy across 3 different shows, while reducing required data size by 85%

Al Learns to Play 2048

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- Programmed game logic for the sliding puzzle game 2048, including data logging and user interface
- Implemented Monte Carlo Tree Search & reinforcement learning algorithm to learn optimal strategies for playing 2048

Tracking Live Audience Reactions on Twitter

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- Analyzed tweets acquired via Twitter API to track audience reactions to plot developments in the season finale of a popular reality television series
- Performed sentiment analysis & word association to identify characters whose reputations were positively or negatively impacted over the course of the show