


# PAIGE MCKENZIE

## Data Scientist

 [p-mckenzie.github.io](https://github.com/p-mckenzie)

 [p-mckenzie](#)

 [paige.a.mckenzie@gmail.com](mailto:paige.a.mckenzie@gmail.com)

## 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

 Remote

- 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
- Orchestrated direct-to-field sales campaigns, including programmatically customized emails with targeted information, to improve model adoption rates
- Leveraged knowledge in predictive modeling, time series analysis, Python, SQL, APIs, git, JIRA, C#.NET

### Data Analyst

#### Cisco Systems

 July 2018 - April 2019

 Raleigh, NC

- Automated data extraction from >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
- Leveraged knowledge in natural language processing (NLP), predictive modeling, Python, git, JIRA

## PROJECTS

### Targeting At-Risk Restaurants for Better Sanitation

[link](#) 

- 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
- Utilized: predictive modeling, Python, pandas, matplotlib, numpy, scikit-learn

### Recommending TV Shows via Collaborative Filtering

[link](#) 

- 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%
- Utilized: Natural Language Processing (NLP), Python, NLTK, pandas

### AI Learns to Play 2048

[link](#) 

- Programmed 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
- Utilized: reinforcement learning, pytorch, numpy, user interface, HTML/CSS, CLI

### Text Generation with Markov Chains

[link](#) 

- Designed program to create believable computer-generated sentences in different styles
- Implemented text processing to train Markov Chains of variable size with unprocessed & unstructured input text
- Utilized: Natural Language Processing (NLP), Python, NLTK, pandas