

Trayvonious Pendleton

trayvoniouspendleton@gmail.com • (319) -504-6404 • <https://trayp20.github.io>

TECHNICAL SKILLS

Languages: Python, SQL, Java

Libraries & Frameworks: Pandas, NumPy, Matplotlib, Seaborn, SciPy, Scikit-Learn, TensorFlow, Keras

Tools & Platforms: Jupyter Notebook, Tableau, Docker, Git, GitLab, Linux, Spring Framework, Coppeliasim

Databases: PostgreSQL, MySQL

Certifications: Linux Foundation, ITIL Foundation, WGU Data Analytics Professional, Data Operations, Data Science Professional

EDUCATION

Western Governors University, Salt Lake City, UT

- Bachelor of Science in Computer Science

Western Governors University, Salt Lake City, UT

- Master of Science in Data Analytics- Data Science

PROJECTS

Capstone Project (Computer Science)

Developed a data product incorporating predictive and descriptive analytics, interactive dashboards, and data visualizations to support decision-making. Documented requirements, performed ETL, and implemented machine learning algorithms, resulting in a functional tool for real-time insights and decision support.

Capstone Project (Data Science)

Designed and implemented a Reinforcement Learning trading agent for the SPY ETF using Python that ingests historical OHLCV data and indicators, back tests with a custom environment, and outperforms a buy-and-hold benchmark on cumulative return, Sharpe ratio, and max drawdown, accompanied by an interactive dashboard visualizing trades and portfolio growth.

PlantVision: Deep Learning for Seedling Species Classification

Designed and implemented a convolutional neural network (CNN) to classify 12 plant seedling species from RGB images, leveraging computer vision and data augmentation techniques to support precision agriculture through automated crop and weed identification

SentimentNet: Neural Text Classifier for Real-World Review Analysis

Developed SentimentNet, a neural network model using natural language processing (NLP) to classify positive and negative sentiment in real-world product, movie, and restaurant reviews: achieved high predictive accuracy by cleaning and tokenizing, optimizing the architecture with TensorFlow in a Jupyter Notebook environment.

Churn Revenue Forecasting

Developed and evaluated ARIMA-based time series models to forecast telecommunications revenue trends using daily data, revealing seasonality and informing churn-related retention strategies.

PROFESSIONAL EXPERIENCE

Lederman Bail Bond, Waterloo, IA

2016 to 2025

Data Analyst

- Collaborated with internal stakeholders to ensure regulatory compliance and streamline data collection processes for surety bond approvals.
- Built and maintained operational tracking tools in Excel, improving court scheduling efficiency and reducing administrative overhead.
- Created custom reports and dashboards to monitor KPIs such as competitors performance and regional performance, enabling data driven decision making.