Keaton Spiller

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Education

Portland State University   Sep. 2019 – Aug. 2022

Bachelor of Science in Data Science   *Portland, Oregon*

Cumulative GPA 3.74 with Latin Honors

Technical Skills

Languages: Python (Advanced), R (Intermediate), SQL (Intermediate), C++ (proficient), C (proficient), Java (proficient)
Developer Tools: VS Code, RStudio, Anaconda, Jupyter Notebook, Google Collab, Docker, Tableau, GitHub
Operating Systems: Windows, MacOS, Linux

Certifications

Coursera: Google Data Analytics: *Foundations: Data, Data, Everywhere* | *Ask Questions to Make Data-Driven Decisions*

HackerRank: *Problem Solving (Basic)* | *Python (Basic)* | *SQL (Basic)*

Work Experience

Sensoray   Oct. 2020 – Jun. 2022

Electronics Production Assistant   *Tigard, Oregon*
- Adapted analytic and quantitative ideas to reduce risk, and optimize available resources
- Utilized Sage, an inventory management software to transfer, assign inventory, enter, complete work requests, receive purchase orders from components or assembled boards, and ship products globally
- Prioritized available finished product and short electronic components to assemble, test, and complete customer orders
- Collaborated with technicians and engineers to problem solve, meet customer needs, and fulfill shipment deadlines

Projects

Data Science Consulting – Cyanobacteria | *R Code, R Markdown, Statistics, ML/AI*   **Jun. 2022**

- Curated data, performed exploratory analysis, and identified correlations between cyanobacteria producing toxins.
- Visualized time series significance from unsupervised K-Means clusters, and toxin concentrations predicted across Linear Regression, Random Forest, Lasso, and Multi-Layer Neural Networks.

Model Building – Modern Regression Analysis & Statistical Learning | *R Code, R Markdown, Statistics, ML/AI*   **Dec. 2021**

- Analyzed qualitative and quantitative variables with statistics and modeling techniques to explore, predict and classify data about unknown characteristics of glass and financial rating
- Applied statistical models including Linear, Logistic, K-Means Nearest Neighbors, Linear Discriminate Analysis, Quadratic Discriminate Analysis, Lasso, and Ridge Regression

Adversarial Minimax & RL Neural Network - Othello | *Python, Jupyter, Matplotlib, ML/AI, NumPy, scikit-learn*   **Jun. 2022**

- Engineered an adversarial board game of Othello using a modified minimax algorithm simulated to play 50 moves ahead for three heuristics, and tested against a RL Neural network trained for 10,000 epochs

Unsupervised Learning - K Means & Fuzzy C Means Clustering | *Python, Jupyter, ML/AI, NumPy, Matplotlib*   **Mar. 2022**

- Developed K-Means and Fuzzy C Means clustering from a set of 500 data points simulated from 3 Gaussians

Reinforcement Learning – Robby The Robot Q learning | *Python, Jupyter, ML/AI, NumPy, Matplotlib, scikit-learn*   **May. 2022**

- Designing a RL agent using Q Learning and Greedy action selection to correctly pick up cans in an 8x8 grid

Multi-Layer Neural Network - MNIST | *Python, Jupyter, ML/AI, NumPy, matplotlib, Pandas*   **Jan. 2022**

- Handwritten digit recognition classifier using back propagation, stochastic gradient descent, and sigmoid activation

Naïve Bayes Classifier - Email Spam Filter | *Python, Jupyter, ML/AI, NumPy, Matplotlib, Pandas*   **Feb. 2022**

- Classifying an email as spam or non-spam using Gaussian Naïve Bayes probability, given labeled emails