ALEX FLYNN
Prospective Data Scientist

EXPERIENCE

**Jul 2020
Present**

REAL TIME SOFTWARE ENGINEER
The Boeing Company

- Occupied the role of Electronic Warfare Subject Matter Expert, developing software Present for the Digital Communication and Navigation capabilities in a simulation environment under RTOS constraints.
- Architected and developed Sensor Fusion and Digital Signal Processing simulation models.
- Integrated a Mid-Mission initialization capability, reducing boot-up time from 15 minutes to less than a minute, saving the program hundreds of hours of wasted time monthly.
- Developed Vehicle Management System software including navigation and embedded control algorithms.

**Jun 2019
Jul 2020**

ELECTRONIC SYSTEM DESIGN AND ANALYSIS ENGINEER
The Boeing Company

- Architected system software to enhance the Digital Signal Processing, Digital Communication, and Sensor Fusion capabilities for an Air Force Warfighter.
- Created use-case scenarios, interface documents, and sequential logic diagrams for the Sensor Fusion and Digital Radio computers.
- Successfully created the Program's published Interface Control Document for the Digital Communication Capability on the Warfighter, establishing a contractual obligation with the customer.

EDUCATION

**Jan 2020
May 2023**

MASTER OF SCIENCE IN ENGINEERING DATA ANALYTICS AND STATISTICS
Washington University in Saint Louis

Master's Data Science Capstone Project:
https://github.com/aflynn0213/MovieRecommenderForDummies

- This repository includes all the source code for a collaborative-filtering based movie recommendation engine. It employs multiple algorithms such as Singular Value Decomposition (SVD) and Nearest-Neighbors methods, with a webpage interface running on a Flask server.

**Aug 2015
May 2019**

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
University of Missouri

Minors:

1. Mathematics
2. Computer Science

PROJECTS

Used Car Price and Trim Multi-Model Prediction:

- https://github.com/aflynn0213/vehicle_predictions

MLB Pitcher K% and BB% Prediction:

- https://github.com/aflynn0213/K_BB_Evaluation

Pac-Man AI Game:

- https://github.com/aflynn0213/cse412A_sp22_flynn

Fantasy Baseball Multi-Project Repository:

- https://github.com/aflynn0213/FantasyPlayerEvaluation

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OBJECTIVE

As a data-driven professional with a Master of Science in Engineering Data Analytics and Statistics, I possess strong expertise in machine learning, AI, and applied statistics, complemented by a solid professional foundation in software engineering. With extensive experience developing simulation models, sensor fusion algorithms, and digital signal processing systems at Boeing, I am eager to transition this unique skillset and perspective into the data science industry. By leveraging my skills in Python, SQL, AI/machine learning, cloud computing, and database technologies, along with hands-on experience building predictive models and recommendation systems, I aim to deliver data-driven solutions that solve complex business challenges, optimize operations, and generate actionable insights to drive meaningful business impact.

SKILLS

- Python, Machine Learning, Artificial Intelligence, SQL, Tensorflow, Keras, Pandas, NumPy, PyMC, PyTorch, Jupyter Notebook, Matplotlib, AWS, C, C++, C#, Reinforcement Learning, Deep Learning, Neural Networks, Monte Carlo Methods, Bayesian Networks, Stochastic Processes, Estimation Theory, Ada, PHP, HTML, JavaScript, MATLAB, ARM assembly, R, Linux Development, Windows Development, Visual Studio, Robotics Operating System (ROS), Git, Jenkins, VersionOne, AGILE, Snowflake, Power BI, Tableau, Docker