

ALEXANDER J. FLYNN

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EDUCATION

Master of Science in Engineering Data Analytics and Statistics

Washington University in Saint Louis

Graduated May 2023

Saint Louis, MO

GPA 3.64

Capstone Project:

<https://github.com/aflynn0213/MovieRecommenderForDummies>

Relevant Courses:

- **AI/Machine Learning:** Introduction to Machine Learning and Pattern Classification, Artificial Intelligence, Graduate Machine Learning
- **Applied Mathematics and Statistics:** Random Processes and Kalman Filtering, Probability and Stochastic Processes, Linear Dynamic Systems, Detection/Estimation Theory, Optimization

Bachelor of Science in Electrical Engineering

University of Missouri - Columbia

Graduated May 2019

Columbia, MO

ECE GPA: 3.84

Minors:

- Mathematics
- Computer Science

RELEVANT EXPERIENCE

Real Time Software Engineer, The Boeing Company, St. Louis, Missouri

July 2020-
Present

- Electronic Warfare Software Subject Matter Expert for a USAF Training Simulator, responsible for end-to-end EW processing and physics modeling.
- Developed C++ software for the USAF Trainer's Digital Communication, Navigation, Sensor Fusion, and Digital Signal Processing models within a simulation environment under Open Mission Systems RTOS constraints.
- Created and integrated a Mission Management Software solution for the MQ-25 Trainer, reducing boot-up time from 15 minutes to less than a minute, saving the program hundreds of hours monthly.
- Developed Vehicle Management System software for the MQ-25, including navigation and embedded control algorithms.
- Enhanced the testing infrastructure and developed unit regression tests in C# for the USAF Trainer and MQ-25 System Software.

Electronic System Design and Analysis Engineer, The Boeing Company, St. Louis, Missouri

June 2019-
July 2020

- Architected system software to enhance the Digital Signal Processing, Digital Communication, and Sensor Fusion capabilities for an Air Force Warfighter adhering to an Open Mission Systems standard.
- Successfully created the Program's published Interface Control Document for the Digital Communication Capability for a USAF Warfighter, establishing a contractual obligation with the customer.

Skills:

Python, Machine Learning, Artificial Intelligence, T-SQL, MySQL, Postgres, Tensorflow, Keras, Pandas, NumPy, PyMC, PyTorch, Jupyter Notebook, Matplotlib, AWS, C, C++, C#, Java, Reinforcement Learning, Deep Learning, Neural Networks, Monte Carlo Methods, Bayesian Networks, Digital Communications, Digital Signal Processing, Sensor Fusion, 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, Apache Spark, Tableau, Docker, Kubernetes, Airflow

GitHub: <https://github.com/aflynn0213>