Eric Crisp

CONTACT INFORMATION
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EDUCATION

University of Pennsylvania, Philadelphia, PA — Jan 2025 - Dec 2025
M.Sc., Data Science

Pennsylvania State University, State College, PA — Aug 2015 - May 2021
M.Sc., Mechanical Engineering
B.Sc., Aerospace Engineering

TECHNICAL SKILLS

Programming	**Data, AI/ML**	**Tools & DevOps**
`Python, C++, MATLAB`	`TensorFlow, PyTorch, Scikit-learn`	`Docker, AWS, CI`
`JavaScript`	`SQL, Spark, Pandas, Numpy`	`Git, React, Node.js`

SUMMARY

I aim to successfully transition into a role related to ethical AI development, after several rewarding years in the aerospace field. With years of industry experience culminating as a Lead Engineer, I gained significant engineering, analysis, leadership, and communication skills and experience that will blend with the skills and knowledge in AI/ML, software development and data science developed at the University of Pennsylvania.

EXPERIENCE

Lead Aerospace Engineer, Real-Time Modeling — Apr 2022 – Nov 2024
Blue Origin, Seattle, WA
- Led a small, multi-disciplined team responsible for all RTM (real-time model) activities across Blue Origin.
- Developed RTMs for use in HIL, test support, controller development, and requirements validation.
- Served as RTM project manager from project conception by managing scope, deliverables, and deligation.
- Identified critical software bugs on flight HIL systems via RTM integration, increasing reliability and value.
- Reduced testing manpower requirements by up to 35% with RTM, accelerating development timelines.
- Effectively communicated the value and impact of technical outcomes from RTM to both technical and non-technical steakholders.
- Architected the RTM framework and developed source code, tooling, supporting algorithms and solvers.

Propulsion Development Engineer, Combustion Devices — May 2021 – Apr 2022
Firefly Aerospace, Austin, TX
- Developed an automated thermal-structural design process that reduced engine production costs by 12%.
- Contributed to clean sheet engine design through production, exceeding performance requirements by 4%.
- Conducted root cause investigations of failures and implementated systematic and engineering solutions.
- Enhanced engine test visibility with automated visualizations of the engine state relative to test sequence.

PERSONAL PROJECTS

Home Projects: Software Development, Data Science, Machine Learning — Jan 2025 – Present
- *need to beef this section up big, haven't really had the skills/background and or time to put much time into useful home projects until this semester.*
- Built a full-stack application using AWS-hosted databases, React, and Node.js, applying NLP to help users identify restaurants in their city, discover similar options, and receive personalized meal and restaurant suggestions.
- Developed a full-stack web application integrating a Spotify dataset hosted on an RDS instance, leveraging the React API abd and Node.js for backend functionality.
- Implemented PCA, SVM, K-means, linear and logistic regression with gradient descent, lasso, ridge, and net elesatic regression from scratch.

OTHER ACTIVITIES AND AWARDS

Blue Origin Engines Challenge Award — Jul 2022
Awarded for technical successes in developing the real-time modeling capabilities at Blue Origin.

Blue Origin Liftoff Award — Jan 2023
Nominated by peers and team members for leadership, technical excellence, and having a bias for action.