Eric Crisp

CONTACT INFORMATION
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EDUCATION

University of Pennsylvania, Philadelphia, PA — Jan 2015 - Dec 2025
M.Sc., Data Science

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

LANGUAGES, FRAMEWORKS

Proficient	Knowledgeable	Learning
`Python, C++, MATLAB`	`C, Java, SQL, HTML, CSS`	`Tensorflow, MongoDB, AWS`
`Git, Numpy`	`CI, DevOps, Pandas, Docker`	`NoSQL, ApacheSpark, Sk-Learn`

SUMMARY

I aim to successfully transition into a data science role, or related field, after several rewarding years in the aerospace field. With 4yr of industry experience ranging from entry level to Lead Engineer, I gained significant engineering, analysis, leadership, and communication skills and experience that I hope to blend with the skills and knowledge developing during my time at the University of Pennsylvania where I am completing a M.Sc., in Data Science with equal emphasis on AI/ML, data science, and software development.

EXPERIENCE

Lead Aerospace Engineer, Real-Time Modeling — Apr 2022 – Nov 2024
Blue Origin, Seattle, WA
- Lead a small, multi-disciplined team responsible for all RTM (real-time model, an internal software tool) activities across Blue Origin.
- Created RTMs for use in HIL, test support, control law development, and validation of system requirements.
- Served as TPM from RTM program conception by managing scope, deligation, TRL, and technical roadmap.
- Generated value by using RTM testing to discover software bugs on flight HIL (software and hardware).
- Leveraged RTM to reduce required manpower for testing by up to 40%, significantly lowering barrier to rapid development.
- Effectively communicated technical outcomes to both technical and non-technical leadership on RTM development, scope, impact, and value.
- Architect of RTM development, framework, developed source code (C++), wrote supporting tools and algorithms (Python, MATLAB, C++), and devised an optimization scheme for real-time applications (C++).

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

PERSONAL PROJECTS

Home Projects: Software Development, Data Science, Machine Learning — Jan 2014 – Present
- Created PCA, SVM, K-means, linear and logistic regression with gradient descent, lasso, ridge, and net elesatic regression from scratch with Tensorflow used for testing and validation.
- Implementing a legal document classification and search system for commercial use at small lawfirms.

RELEVANT COURSES

Statistics, Analysis of Algorithms, Linear Algebra and Optimization — Spring 2025
Artificial Intelligence, Computer Systems, Big Data Analytics, Databases — Summer 2025
Machine Learning, Internet and Web Systems, Deep Learning — *Fall 2025*

OTHER ACTIVITIES AND AWARDS

Blue Origin Engines Challenge Award — July 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.