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`	`R, Java, SQL, HTML, CSS`	`Tensorflow, MongoDB, AWS`

SUMMARY

Pursuing a career transition into data science, or AI/ML, after several rewarding years in the aerospace field.

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

Machine Learning and Neural Networks From Scratch — Mar 2014 – Present
• Created PCA, SVM, K-means, linear and logistic regression with gradient descent, ridge regression from scratch with Tensorflow used for testing and validation.

Home Projects: Software Development, Data Science — Jan 2014 – Present
• Implemented a document classification system and legal research assistant using open source LLM for commercial use at Crisp and Associates LLC.
• Developed a smalls scale direction system using .

RELEVANT COURSES

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

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.