

Eric Crisp

CONTACT INFORMATION	ecrisp@upenn.edu (302) 528-2477		ericmcrisp.github.io/pages linkedin.com/in/ecrisp
EDUCATION	University of Pennsylvania , Philadelphia, PA M.Sc., Data Science		Jan 2015 - Dec 2025
	Pennsylvania State University , State College, PA M.Sc., Mechanical Engineering B.Sc., Aerospace Engineering		Aug 2015 - May 2021
LANGUAGES, FRAMEWORKS	Proficient Python, C++, MATLAB Git, Numpy	Knowledgeable C, Java, SQL, HTML, CSS CI, DevOps, Pandas, Docker	Learning Tensorflow, MongoDB, AWS 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 Blue Origin, Seattle, WA <ul style="list-style-type: none">• 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, delegation, 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++).		Apr 2022 – Nov 2024
	Propulsion Development Engineer, Combustion Devices Firefly Aerospace, Austin, TX <ul style="list-style-type: none">• 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 implemented systematic and engineering solutions.• Enhanced engine test visibility with automated visualizations showing the state of the engine and test.		May 2021 – Apr 2022
PERSONAL PROJECTS	Home Projects: Software Development, Data Science, Machine Learning <ul style="list-style-type: none">• Created PCA, SVM, K-means, linear and logistic regression with gradient descent, lasso, ridge, and net elastic regression from scratch with Tensorflow used for testing and validation.• Implementing a legal document classification and search system for commercial use at small lawfirms.		Jan 2014 – Present
RELEVANT COURSES	Statistics, Analysis of Algorithms, Linear Algebra and Optimization Artificial Intelligence, Computer Systems, Big Data Analytics, Databases Machine Learning, Internet and Web Systems, Deep Learning		Spring 2025 Summer 2025 Fall 2025
OTHER ACTIVITIES AND AWARDS	Blue Origin Engines Challenge Award Awarded for technical successes in developing the real-time modeling capabilities at Blue Origin. Blue Origin Liftoff Award Nominated by peers and team members for leadership, technical excellence, and having a bias for action.		July 2022 Jan 2023