

# Eric Crisp

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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	Knowledgeable R, Java, SQL, HTML, CSS	Learning 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 Blue Origin, Seattle, WA		Apr 2022 – Nov 2024
	<ul style="list-style-type: none"><li>• Lead a small, multi-disciplined team responsible for all RTM (real-time model, an internal software tool) activities across Blue Origin.</li><li>• Created RTMs for use in HIL, test support, control law development, and validation of system requirements.</li><li>• Served as TPM from RTM program conception by managing scope, delegation, TRL, and technical roadmap.</li><li>• Generated value by using RTM testing to discover software bugs on flight HIL (software and hardware).</li><li>• Leveraged RTM to reduce required manpower for testing by up to 40%, significantly lowering barrier to rapid development.</li><li>• Effectively communicated technical outcomes to both technical and non-technical leadership on RTM development, scope, impact, and value.</li><li>• 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++).</li></ul>		
	Propulsion Development Engineer, Combustion Devices Firefly Aerospace, Austin, TX		May 2021 – Apr 2022
	<ul style="list-style-type: none"><li>• Developed an automated thermal-structural design process that reduced production costs 12% (MATLAB).</li><li>• Led engine program from design to production, exceeding performance requirements in test by 4%.</li><li>• Conducted root cause investigations of failures and implemented systematic and engineering solutions.</li><li>• Enhanced engine test visibility with automated visualizations showing the state of the engine and test.</li></ul>		
PERSONAL PROJECTS	Machine Learning and Nueral Networks From Scratch		Mar 2014 – Present
	<ul style="list-style-type: none"><li>• Created PCA, SVM, K-means, linear and logistic regression with gradient descent, ridge regression from scratch with Tensorflow used for testing and validation.</li></ul>		
	Home Projects: Software Development, Data Science		Jan 2014 – Present
	<ul style="list-style-type: none"><li>• Implemented a document classification system and legal research assistant using open source LLM for commercial use at Crisp and Associates LLC.</li><li>• Developed a smalls scale direction system using .</li></ul>		
RELEVANT COURSES	Statistics, Analysis of Algorithms, Linear Algebra and Optimization Machine Learning, Computer Systems, Big Data Analytics, Databases Artificial Intelligence, Software Analysis, Deep Learning		Spring 2025 Summer 2025 Fall 2025 (TBD)
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