

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 2025 - Dec 2025	
	Pennsylvania State University, State College, PA M.Sc., Mechanical Engineering B.Sc., Aerospace Engineering		Aug 2015 - May 2021	
TECHNICAL SKILLS	Programming Python, C++, MATLAB JavaScript	Data, AI/ML TensorFlow, PyTorch, Scikit-learn SQL, Spark, Pandas, Numpy	Tools & DevOps Docker, AWS, CI 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 Blue Origin, Seattle, WA		Apr 2022 – Nov 2024	
	<ul style="list-style-type: none">• 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 delegation.• 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 stakeholders.• Architected the RTM framework and developed source code, tooling, supporting algorithms and solvers.			
	Propulsion Development Engineer, Combustion Devices Firefly Aerospace, Austin, TX		May 2021 – Apr 2022	
	<ul style="list-style-type: none">• 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 implemented 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	
	<ul style="list-style-type: none">• 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.			