

Eric Crisp

CONTACT INFORMATION	ecrisp@upenn.edu (302) 528-2477		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	Frameworks PyTorch, Scikit-learn, Pandas, Numpy SQL, Spark, React, Node	Tools & DevOps Docker, AWS Git, CI\CD
EXPERIENCE	Aerospace Engineer III, Real-Time Modeling Blue Origin, Seattle, WA <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 including trade studies and performance optimization.• 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.		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 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.		May 2021 – Apr 2022
PROJECTS	Statistical Fact Verification System Web Application with RAG <ul style="list-style-type: none">• Developing full stack, end-to-end fact-checking system that integrates user queries with LLM outputs to estimate the likelihood that the output is true via comparison with trusted sources.• Implementing fine-tuned transformer-based models (BERT/roBERTa) for claim classification against standard benchmarks with confidence scoring and multi-evidence aggregation.• Creating an NLP pipeline (spaCy, NLTK, Transformers) for claim detection, named entity recognition, and evidence-based verification from multiple sources (FEVER, Wikipedia API, and RAG).• Built a containerized production web application using Python, FastAPI, and Streamlit hosted on AWS and version controlled with CI\CD via GitHub Actions.		Aug 2025 – Present
	Machine Learning Pipeline for Food Classification and Health Scoring <ul style="list-style-type: none">• Built an ML pipeline using scikit to classify food items and generate health scores using supervised learning algorithms with hyper-parameter tuning and model optimization achieving 91% accuracy on test data.• Implemented comprehensive data preprocessing using Pandas for large-scale dataset manipulation, NLTK for text processing and nutritional analysis, applied normalization, imputation, and encoding for PCA, and automated visualizations in postprocessing with Seaborn and Matplotlib.		Jun 2025 – Jul 2025
	Full Stack Restaurant Recommendation System <ul style="list-style-type: none">• Built a full-stack application using AWS RDS, React, Node.js, SQL, PostgreSQL, and NLTK to create a series of recommendation systems to help users identify restaurants in their location, discover similar options, and receive personalized meal and restaurant suggestions.• Processed and integrated large-scale datasets containing millions of records (text and images) into a PostgreSQL database on AWS RDS, implementing optimized SQL queries and RESTful APIs to serve real-time recommendations to users.		May 2025 – Jun 2025
AWARDS AND ACTIVITIES	Blue Origin Engines Challenge Award		Jul 2022

Awarded for technical successes in developing the real-time modeling (RTM) capabilities at Blue Origin.