

Alex Picard

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EDUCATION

Boston University | MS in Software Development | 2025-2027

University of Maine | BS in Computer Engineering, Minor: Computer Science | 2021 - 2025

Selected Courses: Software Engineering, Cloud Computing, Machine Learning, Project Management

TECHNICAL SKILLS

Languages: Python, TypeScript, C/C++, Java, JavaScript

Frameworks/Libraries: React, Flask, Node.js, PyTorch, Tensorflow

Cloud/Tools: AWS, Docker, GitHub Actions, Jetstream2, REST APIs

Databases: NoSQL, Redis, SQLite

WORK EXPERIENCE

ML Data Associate II | Amazon

July 2025 - Present

- Collaborate with cross-functional AI and ML teams to prepare, label, and refine multimodal datasets (text, speech, audio, image, and video) for training and evaluating large language models (LLMs) and generative AI systems.
- Apply prompt engineering techniques to evaluate and improve model responses, ensuring alignment with task requirements, quality benchmarks, and responsible AI standards.
- Transform raw data into clean, structured datasets by identifying, filtering, and removing irrelevant or low-quality samples to enhance model performance and reliability.

ML Research Assistant | Advanced Structures and Composite Center

May 2023 - September 2024

- Refactored 3,000+ lines of MATLAB code into modular Python components, improving maintainability and performance of scientific simulation workflows.
- Designed and implemented a physics-informed neural network (PINN) framework to model composite materials using machine learning techniques.
- Coordinated a 10-member interdisciplinary team using Agile methodologies to deliver iterative releases and ensure milestone completion.

PROJECTS

Financial Planner Web Application | <https://farhan-financial-planner.web.app/> **January 2025 - May 2025**

- Built a full-stack financial management platform using React, TypeScript, and Firestore with real-time expense tracking and automated payment notifications.
- Implemented API integrations and a NoSQL database for scalable user data management.

ASL Interpreter | Software and AI Development

September 2024 - December 2024

- Engineered a deep learning solution for American Sign Language translation using transfer learning on MobileNetV2, successfully recognizing ASL letters.
- Deployed edge computing implementation on Raspberry Pi 5 for optimized real-time inference.

To-Do Webpage (Cloud) | Front/Back End Development

April 2025 - May 2025

- Containerized and deployed a multi-service web application with persistent state management using Docker and Redis.
- Implemented scalable cloud architecture on Jetstream2 for high-availability deployment.