

Mike Hosian Maeda

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EDUCATION

Alfred University

Bachelor of Arts in Data Analytics & Computer Science - Double Major | GPA: 3.88/4.0

Alfred, NY

Expected May 2028

- **Relevant Coursework:** Data Structures & Algorithms, Database Systems, Statistics, Calculus I, Computer Networking, Analytics I, Introduction to Computer Science
- **Honors & Awards:** AHA! Startup Competition Winner (\$5,000), Presidential Scholarship, Honors Program, Dean's List, Omicron Delta Kappa Leadership Honor Society

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, TypeScript, SQL, C, C++, C#, HTML/CSS

Technologies: Flask, FastAPI, React, REST APIs, PostgreSQL, MySQL, SQLite, MongoDB, Git, Docker, Azure, PyTorch, TensorFlow, Scikit-learn, NumPy, Linux

EXPERIENCE

Undergraduate Research Intern

May 2026 – Present

Alfred University Inamori School of Engineering, (Python, Backend Engineering)

Alfred, NY

- Conducted research on **AI-driven electronic waste classification**, designing a **computer vision system** (TensorFlow, MobileNetV2) to identify components such as circuit boards and copper wiring for automated recycling workflows.
- Accelerated research processing efficiency by **50%** by engineering **Python-based backend data pipelines**, achieving **90% validation accuracy** through iterative testing and evaluation.

Robotics Software Developer

Aug 2023 – May 2025

FIRST Robotics Challenge, (Java, C++, Backend Systems)

Ramat HaSharon, Israel

- Improved autonomous system accuracy by **35%** by engineering **backend control software** in Java, applying object-oriented design and real-time performance debugging.
- Reduced operational errors by **30%** by developing **real-time data processing loops** integrating multi-sensor inputs within a fast-paced, cross-functional team.

ITS Student HelpDesk Consultant

Sep 2025 – Present

Alfred University

Alfred, NY

- Selected among **13 student consultants** supporting production technical systems for **2,000+ users**, troubleshooting identity access and authentication using Azure Entra ID.
- Performed root-cause troubleshooting and documented resolutions, independently resolving or escalating complex cases to maintain service continuity.

PROJECTS

Alfred RAG Assistant | Python, ChromaDB, Groq LLM, Gradio

- Built a **retrieval-augmented generation (RAG) system** in Python, engineering a full pipeline from document chunking and embedding to grounded LLM generation with a hallucination-prevention mechanism.
- Evaluated system performance against a hand-crafted test set, achieving **80% (4/5) response accuracy**, and diagnosed a retrieval-recall failure through root-cause analysis.

DistilBERT Sports Discourse Classifier | Python, PyTorch, HuggingFace Transformers

- Fine-tuned distilbert-base-uncased on a hand-built, **212-example** labeled dataset, achieving **87.5% accuracy** and **0.876 macro-F1** on a held-out test set.
- Designed a rigorous baseline comparison against zero-shot Llama-3.3-70B, conducting per-class error analysis using confusion matrices to diagnose model failure modes.

Expense Tracker | Python, Flask, JavaScript, SQLite, REST APIs, OAuth, Vercel

April 2026

- Engineered a full-stack web application with a **Python/Flask backend** and **JavaScript frontend**, delivering **8+ user-facing features** including OAuth, session management, and automated email notifications.
- Built **20+ REST API endpoints** backed by a normalized SQLite database, deployed live via Vercel.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Resident Assistant

May 2026 – Present

Alfred University Residence Life

Alfred, NY

- Drive community engagement for **30+ residents** through peer mentorship, conflict resolution, and cross-functional collaboration with university departments and student teams.