Matthew Bridge

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Education

University of Massachusetts Dartmouth — Dartmouth, MA
Bachelor of Science in Computer Science, Artificial Intelligence Concentration — *Sept. 2023 – Expected May 2027*

- **GPA:** 3.38 / 4.0 (**Major GPA:** 3.55 / 4.0) | Dean's List (4 Semesters)
- **Relevant Coursework:** Algorithms & Data Structures, Machine Learning, Artificial Intelligence, Operating Systems, Software Design
- **Campus Involvement:** Computer Science Lab Mentor, Big Data Club, Sustainability Club (Hardware Diagnostics & Repair)

Technical Skills

Languages: Python, C#, C++, C, Java, JavaScript, SQL, HTML/CSS
Machine Learning & Data: Scikit-Learn, PyTorch, OpenCV, NumPy, Pandas, Jupyter
Frameworks & Systems: ROS2, Unity Engine, Flutter, React Native, Linux/Unix, Windows Server
Developer Tools: Git, GitHub, Azure, Active Directory, UML, Agile/Scrum

Projects

Ocean Telemetry Ingestion Platform (Senior Capstone) | *C++, ROS2, Team Lead* — Sept. 2026 – Present

- Leading a 5-engineer capstone team building a pipeline to ingest and forward live ocean telemetry into an external simulation engine (under NDA).
- Creating system architecture specifications using UML and implementing a functional prototype to validate live data streaming.

GOAP Autonomous Agent Simulator | *C#, Unity Engine* — June 2026 – Aug. 2026

- Built a Goal-Oriented Action Planning system in C# using A* search to let autonomous NPCs dynamically select and sequence actions.
- Integrated Unity's NavMeshAgent system to handle 3D spatial pathfinding, dynamic obstacle avoidance, and target traversal for active plan steps.

Diabetes Prediction Model | *Python, Scikit-Learn, Pandas, Jupyter* — Jan. 2026 – May 2026

- Developed a binary classification model on clinical health data, implementing data preprocessing, feature normalization, and handling class imbalances.
- Compared multiple Scikit-Learn classifiers via cross-validation, analyzing confusion matrices and ROC-AUC curves to minimize false-negative rates.

Experience

Software Engineering Intern — Sept. 2026 – Present
New Bedford Research and Robotics — *New Bedford, MA*

- Architecting middleware to translate, clean, and route API requests between internal startup microservices and third-party partner APIs.
- Building data validation checks and error handling to bridge differences in incoming and outgoing JSON formats.

IT Support Specialist — June 2022 – Aug. 2023
Master Millwork — *Wareham, MA*

- Supported 90+ endpoints across Microsoft 365 and Windows Server, working alongside external MSP engineers to troubleshoot network and hardware problems.

Desktop Analyst — June 2019 – June 2022
SencorpWhite — *Barnstable, MA*

- Provided tier-1/2 tech support for 200+ employees, provisioned Windows systems, and wrote step-by-step internal repair documentation.