

Dyllon A. Dunton | Pittsfield, Maine | (207) 313-9017 | duntondyllon@gmail.com

Portfolio: <https://dyllondunton1.github.io>

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Professional Summary

Master's student in Computer Engineering with dual B.S. degrees in Electrical and Computer Engineering. Research-focused in robotics, embedded systems, and AI-powered simulation. Experienced in ROS2, Python, C++, PyTorch, and computer vision. Passionate about space robotics and autonomy systems with hands-on experience in AI-enhanced physical modeling, robotic perception, and sensor fusion.

Education

University of Maine – Orono, ME

- M.S. in Computer Engineering, Robotics & AI Focus (Expected May 2026).
- B.S. in Computer Engineering & B.S. in Electrical Engineering, GPA: 3.748 (May 2024).
- Robotics Team Officer (Software/Hardware Co-lead, Treasurer).
- Francis Crowe Society | Certified in French | Secondary Focus in French & Japanese.

Technical Skills

- **Programming:** Python, C++, C, Java, SQL, Assembly, Verilog, VBA/VBS
- **AI/ML:** PyTorch, TensorFlow, OpenCV, GPT-4o API
- **Simulation:** SINDy, MATLAB, NGSpice, Micro-Cap, Altium Designer
- **Robotics/Embedded:** ROS2, Docker, Poetry, Arduino, Raspberry Pi, motor control
- **Web/Deployment:** HTML, JavaScript, TypeScript, React, Node.js, Webpack, Vite
- **Core:** Robotic autonomy, sensor fusion, SLAM, 3D perception, control systems, AI-enhanced simulation, OCR, database integration

Experience

Graduate Research Assistant – UMaine ECE Dept. | Jul 2024 – Present

- Adapting Latent Diffusion Models for real-time simulation of offshore wind turbine dynamics
- Built AI pipelines to predict blade alignment using physics-informed ML
- Automated scholarship matching using GPT-4o API and Python for the enrollment office

Engineering Intern – General Electric Gas Power | Mar 2021 – May 2024

- Built OCR/image-processing tools for industrial inspection automation
- Developed SQL-integrated dashboards and Excel VBA automation tools
- Programmed embedded control systems using Arduino and Raspberry Pi
- Rewired and reconfigured coordinate measuring equipment for lean optimization

Research Assistant – Advanced Structures & Composites Center | Aug 2022 – Dec 2023

- Developed ROS2 infrastructure for sensor integration in robotic 3D printing
- Containerized robotics stack using Docker and Poetry for reproducible deployment
- Used FLIR Boson infrared cameras for 3D reconstruction of large printed parts