# ERIC XU

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## EDUCATION

**School:** University of Maryland, College Park
**Major:** Bachelor of Science in Computer Science (Machine Learning Specialization)
**Expected Graduation:** September 2026 or May 2027
**GPA:** 3.97/4.0 GPA (CS Honor/Dean's List 2023/2024)

## SKILLS

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|---|---|
| **Programming Languages:** | Python, C++, Java |
| **Artificial Intelligence:** | PyTorch, Scikit-learn, TensorFlow, SQL, Pandas |
| **Tools:** | Git, Jupyter Notebook, Docker, Google Colab, Ubuntu Linux, Windows |

## WORK EXPERIENCE

**Research Assistant** 2022-2024
*Department of Mechanical Engineering at the University of Maryland*

- Trained an LSTM model to predict wind speed from multi-dimensional data with an error of ±0.07 mph.
- Co-authored and presented the research paper, "Implementing a Hybrid Wind-Solar Power System for Electric Vehicle Charging Systems," at the 2024 ASME Conference with a team of 5.

**Teaching Assistant** August-December 2024
*University of Maryland, College Park*

- Taught and coordinated CPSS240: Science, Technology, and Society, a Service-Learning practicum.
- Guided 20+ students in developing and delivering robotics lessons for K-12 classrooms.
- Managed logistics for weekly off-campus teaching sessions and graded assignments.

**Summer Research Intern** May-August 2024
*NSF Research Experiences for Undergraduates (Florida International University)*

- Designed prompts to predict user profiles (location, interests) from web browsing history using OpenAI/Gemini APIs, achieving 80% prediction accuracy.
- Presented findings at the 2024 ACM International Conference on Information and Knowledge Management (CIKM) to an audience of 30+ researchers and industry professionals.

## PROJECTS

**Autonomous Submarine Developer** 2023-Present
*Robotics at Maryland*

- Fine-tuned vision model (OpenCV) for real-time obstacle detection, improving accuracy 15%.
- Organized autonomous ROS2 programming with behavior trees in C++.

**Live Data Visualization** 2023-Present
*Baja Terps Racing*

- Developed a React website with real-time data visualization system for the Baja racing team, integrating sensor data from Arduino with a PostgreSQL database and Flask backend.
- Collaborated with a team of 5 in a sprint/scrum environment with other cross disciplinary teams.
- Placed 2nd in cost efficiency at Baja SAE Williamsport Competition 2024 (Top 16% of 100+ teams).