# **Andy Pavlosky**

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# **EDUCATION**

# University of Maryland, College Park | College Park, MD

Expected May 2026

BS, Computer Engineering

- GPA: 4.00/4
- Relevant Coursework: Discrete Structures; Honors Multivariable Calculus, Linear Algebra & Differential Equations; Introduction to Computer Systems; Introduction to Engineering Design
- 1 of approx. 500 freshmen in the University Honors program

# River Hill High School | Clarksville, MD

Graduated May 2022

- GPA: 4.00/4
- Relevant Coursework: Advanced Data Structures; Advanced Object-Oriented Design; Differential Equations;
  Linear Algebra; Statistics AP

### **SKILLS**

- **Programming Languages**: Java, Python, C/C++, MATLAB, R, SQL
- Tools & Frameworks: Git, Visual Studio, VSCode, Eclipse, ROS, Scikit-learn, Microsoft Office, Google Suite
- Hardware: Arduino, Soldering, 3D Printing

## **EXPERIENCE**

**Robotics** @ Maryland

Sept. 2022 - Present

Software Engineer

• Develop algorithms for underwater localization using Python and ROS for the team competition robot

#### **Howard Community College**

Feb. 2022 - May 2022

Teaching Assistant for Chinese 102

- Delivered lectures, prepared materials, and led review sessions for 20+ students meeting 3 times a week
- Met with professor weekly and reported student feedback to improve pedagogical strategies, such as fostering growth mindset

# **FIRST Robotics Competition Team 5945**

Sept. 2019 - April 2021

Control Systems Engineer

- Worked with team of 3 other engineers to wire robot control system and write autonomous and teleoperated robot code using WPILib robotics library for Java, which led the team to reach semifinals in its first competition
- Built COVID supplies for local hospitals, including face shields, isolation booths, and hand-sanitizer dispensers

# **PROJECTS**

# Data Extraction Over-Terrain Vehicle | https://github.com/andrue-pabloske/Data-Extraction-F22

- Worked with team of 7 other students to create autonomous vehicle to complete mission objectives including reading duty cycle of PWM signal, detecting magnetism of a material, and navigating through an obstacle course
- Implemented code to interface with vehicle sensor suite and navigation algorithms in Arduino
- Designed and assembled electronics system to drive vehicle propulsion and objective completion

# Machine Learning Course by Andrew Ng | https://github.com/andrue-pabloske/Coursera-Machine-Learning

- Wrote machine learning algorithms using MATLAB such as linear and logistic regression using gradient descent
- Gained an introductory understanding of the aforementioned algorithms and concepts such as regularization, bias vs. variance, cross validation, and dimensionality reduction

#### Nand2tetris Suite of Projects | https://github.com/andrue-pabloske/nand2tetris

- Created a computer hardware platform using a simple HDL and an assembler, VM translator, and compiler using Python as specified at <a href="mailto:nand2tetris.org">nand2tetris.org</a>
- Gained an introductory understanding of computer architecture, compilers, and assembly programming