

Andrew J. Peng

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Education

B.S. Mechanical Engineering, 2028

University of Maryland, College Park

Coursework: Statics, Material Mechanics, Dynamics, Thermodynamics

GPA: 4.0

Skills

Technical: Java / Python / Luau / C# / Arduino / Autodesk Fusion / SolidWorks

Languages: English / Chinese

Experiences

Freelance Game Developer

Belmont, CA

Game Developer

Dec. 2024 - Present

- Designed and delivered full-stack game systems for 25+ client commissions, building scalable core mechanics and UI in Luau and C# for an audience of 1,000+ players.
- Lead developer of a 5-person development team, securing \$1,000+ in monthly funding to support studio initiatives.

Terps Racing Formula Electric Vehicle

College Park, MD

Vehicle Dynamics Engineer

Aug. 2025 - Present

- Utilized SolidWorks for the 3D design and FEA of the vehicle dynamics sensor integration subsystem for tire and suspension performance monitoring.
- Worked on front brake sensors, push rod strain gauges, and manufacturing.

Terps Racing Formula Internal Combustion

College Park, MD

Ergonomics Engineer

Aug. 2024 - May. 2025

- Utilized SolidWorks for 3D design and FEA of a steel motor-integrated clutch lever, achieving a safety factor of approximately 3.0 for 100N operation.
- Secured critical clutch and fastener components, ensuring quality and compliance with FSAE IC 2024 constraints for the vehicle's integration.

Projects

Arc Igniter

Belmont, CA

Electronics Engineer

May. 2025 - Jul. 2025

- Engineered an arc lighter from repurposed components, integrating a flyback transformer and USB-mini charging circuit with a 3.7V Li-ion battery.
- Achieved a sustained 0.8kV arc across a 3-5mm gap, delivering 8W of power.

Over-Terrain Vehicle

College Park, MD

Navigation and Propulsion Engineer

Aug. 2024 - Dec. 2024

- Designed the OTV navigation algorithm in Arduino, utilizing HC-SR04 sensors for obstacle avoidance and Wi-Fi server-side processing for 3-degree turning tolerance.