Andrew Mims

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Education

Bachelor of Computer Engineering, University of Arkansas, GPA 3.8, Expected May 2027

Experience

NCREPT at Uark | Research Assistant |Jan 2025 - Present

- Currant lab project is working on a team to make a demo for digital forensics.
- Assist in research, testing, and assembly of power electronics projects for grid applications at the National Center for Reliable Electric Power Transmission.
- Conduct experimental testing, analyze data, and maintain lab equipment.
- Support technical documentation, reporting, and collaboration with the research team.

1lb Battle Bot R&D March 2025 - Present

- Design and develop unique 1lb battle bots, including drafting and creating CAD models.
- Manufacture and test prototypes using 3D printing and iterative design improvements.
- Produce instructional videos detailing the CAD modeling process and assembly for educational kits aimed at high school students.

Philmont Scout Ranch | Outfitting Services QuarterMaster | May - August 2022

- The Outfitting Services Staff is responsible for assisting with the distribution, upkeep, inventory, and return of trek equipment, trail food, rental backpacks, and fuel distribution.

TJX HomeGoods | Retail Associate |September 2021 - May 2023

- Maintains and upholds merchandising philosophy and follows established merchandising procedures and standards.
- Accurately processes and prepares merchandise for the sales floor following company procedures and standards.
- Maintains all organizational, cleanliness, and recovery standards for the sales floor and participates in the maintenance/cleanliness of the entire store.

Projects

Battle Bot Development – RIOT Club Member

- Design, build, and test a 1 pound battle bot.
- Focused on mechanical design, hardware integration, and performance optimization.

- Participated in hands-on fabrication and real-time testing to refine the bot's functionality and durability for competitive use.

Mandalorian-Inspired Helmet with Sonar and Lighting System

- Designed and fabricated a custom helmet with integrated mini sonar and lighting system.
- Wrote software (C++) using Arduino to control lights and display real-time distance measurements on an LCD screen based on sonar detection.
- Programmed the system to identify objects in range and display distance on the screen.
- Test and debug sensor input to output the expected data

Eagle Scout Project

- Organizing volunteers from my scout troop, funds donated to my project, and supplies donations from Home Depot. Build and install custom storage shelves for my local food pantry.

High School Senior Project

- Recycling plastic bottles and 3d printer scraps into usable 3d filament. For this project, I researched what hardware would be needed and did a cost-benefit analysis to see if custom-building the needed hardware or buying a prebuilt kit was better for my school.

Skills

Java & C++

- Solid working knowledge of Java syntax and coding

Linux System

- A basic understanding of Linux system

CAD Design

- Using AutoDesk Inventor and Fusion 360 to create renderings for 3d printing projects and designs for lathe work

Arduino

- Integrating microcontrollers, sensors, LCD screen, and other inputs into an arduino on various projects

Google Apps for Work

- Google Docs, Google Sheets, Google Slides, Google Drive

Microsoft Apps for Work

- Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Outlook

Honors

Dean's List 2023-2024
Eagle Scout, Nov 2021
Member of the National Technical Honor Society