Talha Khan

Electrical Engineering student | Intelligent Systems Club Executive Member +1 (734) 740-1486 | EE.TalhaKhan@gmail.com

SUMMARY

Electrical Engineering student with hands-on experience in electronics diagnostics, repair, and system integration. Skilled in Python, CAD design, and technical troubleshooting. Interested in robotics, embedded systems, and electrical optimization. Seeking to apply problem-solving, teamwork, and engineering skills in a practical, innovation-driven environment.

EDUCATION

University of Michigan - Electrical Engineering, BS | May 2024 - May 2028

Wayne County Community College - Science, AS| Sept 2021 - May 2024

EXPERIENCE

FIRST Robotics Competition — Mentor | Team 6190

- Directed and guided a team in designing and assembling a competition-grade robot to tackle intricate engineering challenges.
- Facilitated hands-on workshops focused on mechanical design, electrical integration, and fabrication techniques to strengthen team expertise.
- Organized and led instructional sessions, mentoring high school students in mechanical systems, critical thinking, and teamwork.

Paymore Electronics — Tester | VOLT RETAIL LLC

- Diagnosed, repaired, and optimized laptops, gaming consoles, and other electronics for resale.
- Conducted hardware/software repairs and quality assurance to maximize performance and value.
- Managed inventory, analyzed market trends, and implemented pricing strategies to drive sales.
- Met daily quotas in a fast-paced environment while maintaining high-quality standards.

PROJECTS

Project Phoenix — Autonomous Go Kart | Intelligent Systems Club

- Contributed to the development of the Go Kart for an autonomous karting competition.
- Constructed and assembled the wire harness for Project Phoenix, ensuring proper routing and secure connections.
- Collaborated with team members to integrate electrical components, maintaining system reliability and performance.
- Followed technical schematics to organize and install wiring efficiently, optimizing functionality.

FIRST Robotics Competition — Team Captain

- Led a team in designing and constructing a competition-ready robot to complete complex challenges.
- Developed hands-on experience with mechanical design, electrical systems, and fabrication techniques.
- Collaborated with teammates to strategize, troubleshoot, and optimize robot performance.
- · Gained practical exposure to STEM concepts, problem-solving, and project management in a fast-paced environment

Engineering 100 — Project Lead

- Led project planning and managed team timeline to ensure on-time completion of deliverables.
- Designed key components of the project while coordinating team efforts across multiple engineering disciplines.
- Served as primary presenter for both Preliminary Design Review (PDR) and Critical Design Review (CDR), effectively communicating technical concepts and project progress.
- Maintained detailed documentation and ensured all design decisions aligned with project goals and constraints.

SKILLS

- Languages: HTML (Intermediate), CSS (Intermediate), Python (Learning), JavaScript
- Tools: CAD/ Fusion 360, MakerBot Splicing, Linux development (Intermediate), MySQL, MS Office; PowerPoint, Word Excel.
- Other: Teamwork, Robotics, Engineering Projects, Problem Scoping/Solving and Leadership.

AWARDS & CIRTIFICATIONS

- Dean's List
- High School Honor Roll Diversity
- Mentor Collective Certification: Equality, and Inclusion (DEI)

STUDENT ASSOCIATIONS & CLUBS

- Intelligent Systems Club
- IEEE
- Muslim Student Association
- Phi Theta Kappa
- The National Society of Leadership and Success

July 2024- September 2024

September 2021 - Present