

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 autonomous systems development. Currently serving as Chief Engineer for Project Phoenix (Intelligent Systems Club), leading the electrical architecture and integration of an autonomous go-kart. Skilled in system-level design, Python, CAD, and troubleshooting. Passionate about robotics, embedded systems, and practical engineering solutions.

EDUCATION

University of Michigan — *Electrical Engineering, BS* | May 2024 – Expected May 2028
Wayne County Community College — *Science, AS* | Sept 2021 - May 2024

EXPERIENCE

FIRST Robotics Competition — Mentor | *Team 6190*

September 2021 - Present

- 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*

July 2024 - September 2024

- Diagnosed, repaired, and optimized laptops, gaming consoles, and other electronics.
- 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.

Chief Engineer — Project Phoenix | *Intelligent Systems Club*

August 2024 - Present

- Promoted to Chief Engineer at the Intelligent Systems Club for the Autonomous Karting Series (AKS).
- Supervised subsystem teams and ensured seamless collaboration between mechanical, software, and electrical units.
- Maintained documentation, enforced timelines, and validated system functionality under test conditions.
- Acted as primary liaison for technical communications and project reviews.

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

Programming: Python (Learning), HTML, CSS, JavaScript

Software/Tools: Fusion 360 (CAD), MakerBot, Linux, MySQL, MS Office Suite

Technical Skills: Wire Harnessing, Electrical Systems Integration, Autonomous Navigation (Basic), Technical Documentation

Soft Skills: Leadership, Cross-functional Collaboration, Public Speaking, Mentorship

AWARDS & CERTIFICATIONS

- 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