Ashwin Kuppahally

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Available for internship from January 2026-August 2026

EDUCATION

The University of Texas at Austin   Austin, TX
Bachelors of Science, Electrical & Computer Engineering and Biomedical Engineering   *May 2027*
- Relevant Coursework: Computer Architecture, Circuit Theory, Mechatronics, Advanced Computation, Systems Design, Network Analysis, Biomedical Design
- GPA: 3.9/4.0

EXPERIENCE

Electrical Engineering Intern   May 2025 – Present
10x Genomics   *Pleasanton, CA*
- Decreased field failures by 95% by diagnosing design issue on motor driver board
- Cut prototyping time by 50% by designing a full system test bench and conducting high potential tests of PCBs
- Improved production process by creating automated optics testing PCB
- Analyzed over 20 returned instruments from the field and diagnosed issues which drove updated designs

Electrical Engineer   Mar 2025 – Present
Feather Robotics   *Palo Alto, CA*
- Decreased harnessing by 30% by creating power management PCB
- Reduced time-to-market by half by designing IEEE+UL compliant electrical and safety system
- Improved user experience by designing customisable fusebox and robotic control PCB
- Sourced components and setup turnkey manufacturing of circuit boards, cutting costs by 50%

Electronics Design Engineer   Aug 2024 – Present
Longhorn Racing Electric   *Austin, TX*
- Created and manufactured PCB for charging 600V car battery
- Designed custom power electronics and shutdown circuit
- Wrote embedded software enabling car power systems and CAN and SPI communication
- Modeled car charger box assembly in Solidworks, cutting weight by 40%

Robotics Engineering Researcher   Dec 2024 – June 2025
Advanced Robotic Technologies for Surgery Laboratory - Texas Robotics   *Austin, TX*
- Developed camera module PCB for robotic surgery use
- Improved thermal efficiency of power electronics by 15% by improving PCB layout
- Validated and tested circuit boards using electrical lab equipment

PROJECTS

Electric Vehicle Charger | *KiCad, Solidworks*   Aug 2024 – May 2025
- Designed a ground up car charger capable of charging a racecar battery at 6kWh
- Implemented the J1772 charging standard and used digital logic to determine vehicle state
- Created custom high-efficiency boost/buck converters for vehicle power delivery
- Simplified charging process by detecting vehicle state and charge status over CAN

Blood Assay Analysis Device | *KiCad, Solidworks, Ansys*   March 2024 – January 2025
- Designed ground up blood analysis device to test assays of at-home hemodialysis patients
- Created high current PCBs to perform light analysis of blood samples
- Modeled microfluidic components in Solidworks for blood movement and performed fluid analysis

TECHNICAL SKILLS

Skills: PCB design, embedded systems software, CAD (Solidworks), Spice, wireless chip communication/telemetry, circuit analysis, metal CNC, 3D printing, electronics manufacturing, structural design, composite materials, Python, MATLAB, C++