



# Krishiv Aggarwal

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## Objective

Fast-learning and passionate junior **Computer Engineering** student seeking a **Summer 2026 internship** in **power electronics, RF systems, or embedded systems**. Passionate about applying hands-on project and research experience in power conversion and wireless communication to deliver innovative engineering solutions. Eager to contribute strong technical skills in PCB design, programming, and lab instrumentation to a dynamic engineering team.

## Education

**Georgia Institute of Technology, Atlanta, GA (Aug 2023 – Present)**

*Bachelor of Science in Computer Engineering, GPA: 3.50 (Expected Graduation: Dec 2026)*

- *Relevant Coursework:* Circuit Analysis, Digital Design, FPGA/VHDL, Signals & Systems, Embedded Systems, MATLAB, Multivariable Calculus, Differential Equations

## Skills

- **Programming:** Python, C, MATLAB, VHDL
- **Hardware:** PCB design, Soldering, Lab Instrumentation (Oscilloscope, Multimeter)
- **Tools:** Git, CAD

## Experience

**Hyve Solutions | Hardware Engineering Intern — Fremont, CA (May – Aug 2025)**

- **Conducted** rigorous failure testing on server hardware, identifying critical failure modes and enabling design improvements that enhanced system reliability.
- **Developed** an automated debug pipeline using Python scripts, Excel macros, and a Neo4j graph database to expedite fault analysis, reducing diagnostic time by ~30%.
- **Optimized** the testing workflow by integrating automation into the QA pipeline, cutting overall validation cycle time by 25% and improving cross-team feedback loops.

## Research

**Vertically Integrated Projects (VIP) – Power Electronics | Undergraduate Researcher — Atlanta, GA (Aug 2024 – Present)**

- **Designed** and tested a DC-DC boost converter (10→20V, 200mA) on a custom PCB, implementing gate drivers and PWM control (10–90% duty) to deliver a stable 20V output.

### **ECE Undergraduate Research – RF Beamforming | Researcher — Atlanta, GA (Jan 2025 – May 2025)**

- **Synthesized** a Rotman lens with three focal points and optimized non-focal phase error via S-parameter simulations; **leveraged** MATLAB to improve beamforming accuracy for target directions.

## **Projects**

### **Stanford Student Space Initiative (CubeSat Team) | Electronics Lead — Stanford, CA (Sep 2023 – May 2024)**

- **Designed** and assembled a CubeSat avionics board, overseeing PCB layout and pick-and-place assembly. Ensured flight readiness leading to a successful “Falcon 11” rocket launch and presented project results at the Cal Poly Space Conference.

## **Leadership & Awards**

- **Founded** *STEM Made Fun* and authored a children's physics book to inspire STEM learning among young students.
- **Achieved** Eagle Scout rank (Boy Scouts of America) by leading a team community service project; completed National Youth Leadership Training to cultivate advanced leadership skills.
- **Earned** recognition for academic excellence (National AP Scholar; ACT score 36) and community service (Gold President's Volunteer Service Award for 250+ hours).

*(The final resume is provided in both PDF and DOCX formats as requested.)*

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