Shubham Saluja Kumar Agarwal

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EDUCATION

Purdue University West Lafayette, IN **May 2026**
Bachelor of Science in Computer Engineering, Minors in Math and Business Economics Current GPA: 4.0/4.0
Certificate in Entrepreneurship
Purdue Engineering Student Council Gold Industrial Roundtable Scholarship

SKILLS

- Software: Microsoft Office, Python, C, Autodesk Fusion 360, MATLAB, Onshape, HTML, CSS, Arduino, KiCad, LTSpice, Autodesk Eagle, JavaScript, Machine Learning, Embedded C, System Verilog, SQL, Tableau, Kotlin, Android Studio
- Languages: English (native), Spanish (native), Hindi (conversational), French (basic)

WORK EXPERIENCE

Micron Technology **May 2024 – August 2024**
DRAM Quality Data Engineering Intern – Boise, ID

- Made four Python and SQL based dashboards to categorize and visualize data from distinct sources rapidly and effectively.
- Created Python based LLM interfaces to complete tasks such as proprietary command generation and summarization.
- Categorized and sorted data to verify data completeness using Tableau, Python and SQL.

Purdue Vertically Integrated Projects Computer Vision for Embedded Systems **August 2023 – May 2024**
Low Power Computer Vision Challenge Team Lead — Purdue University, West Lafayette, IN *September 2023 – December 2023*

- Modifying, maintaining, and fixing the existing webpages, lpcv.ai and purdueseris.org, based on Django and Bootstrap.
- Leading a team of four members to develop, run and coordinate the 2024 Low Power Computer Vision Challenge.
- Creating a 3D Reconstruction evaluation method to be used in the 2024 competition.

Wireless Sensing Circuits and Systems Laboratory **April 2023 - Present**
Research Assistant — Purdue University, West Lafayette, IN

- Conducting research on non-invasive, wireless charge and health analysis of rechargeable batteries.
- Created an STM32 microcontroller-based frequency counter to measure frequencies of up to 30MHz with a ±3Hz error.
- Collecting, sorting, and analyzing data from over 1000 files on battery parameters, verifying device and sensor functionality, as well as soldering circuits with over 50 SMD components each.
- Created four distinct programs to automate data collection from oscillators, multimeters, and frequency counters using Python and MATLAB.

Bechtel Innovation and Design Center **November 2022 - Present**
Peer Mentor — Purdue University, West Lafayette, IN

- Guiding BIDC members to complete over 100 electronics projects from design to manufacturing stage.
- Designing, milling, and electroplating PCBs using an Accurate 636 PCB mill, and electroplating solution made from scratch.
- Developing, prototyping and debugging circuits, and conducting surface mount and through-hole soldering.
- Organizing and executing three workshops to expose over 200 students to fundamentals of electronics.

Universidad Autónoma del Estado de Morelos (UAEM) **July 2021 - September 2021**
Research Intern — Nanomaterials Lab, UAEM, Morelos, MX

- Designed, troubleshot, and built a high voltage power source with a variable output voltage between 15kV and 30kV from recycled parts and adapted to an electrospinning device, also manufactured from spare parts, saving over 3000 dollars.
- Verified applicability of results with a Scanning Electron Microscope, and image analysis software such as ImageJ.

PUBLICATIONS AND PRESENTATIONS

- **Kumar Agarwal, S. S.**, Mendoza Enríquez, B. U., & Hernández Rivera, D. (2022). Device fabrication from recycled electronic spare parts: Dip coating device and high voltage power supply adapted for electrospinning device.
- Best presenter at 2022 11TH International Conference on Information and Electronics Engineering.

CAMPUS INVOLVEMENT AND LEADERSHIP

Institute of Electrical and Electronics Engineers (IEEE) Club **October 2022 - Present**
Vice-Infrastructure Lead — Purdue University, West Lafayette, IN *December 2022 – September 2023*
Sponsorship Lead for Computer Society – Purdue University, West Lafayette, IN *May 2022 - Present*

- Acquiring corporate sponsorship and applying for grants for club projects, events, and workshops.