Aarav Garg

765-543-8630 | garg211@purdue.edu | linkedin.com/in/aaravgarg | github.com/aaravgarg

Education

Purdue University West Lafayette, IN

Bachelor of Science in Robotics Engineering, Certificate in Entrepreneurship & Innovation *Expected 2027*

- GPA: 3.91; Dean's List Student

Experience

Founding President March 2024 – Present

Humanoid Robot Club Purdue

- First group of students building a walking humanoid robot capable of space exploration.
- Raised $11,200+ in club funds in 2 months of launch. 185+ club members within 2 months of launch.
- Met with and applauded by Dean of Engineering, Dean of Science, Dean of Polytech and the Heads of AAE, IE and ME at Purdue. Forged partnerships with IBM, Unitree Robotics etc.

Project Manager September 2023 – Present

Sphero Swarm

- Spearheading new research project under Purdue professor with 30+ team members across 5 sub-teams.
- Teams for OpenCV, Arduino, ESP32 and Fusion360. Using robot balls to depict polymerization.
- Got leadership position in first semester as freshman at Purdue. Made substantial progress with passionate team.

Founder & CEO 2021 – Present

Tech Nuttiez

- Ed-tech startup–robotics education. Led team of 30+ people. Built complex app in Flutter + Firebase.
- 1.2 Million+ students impacted and 10,000+ active users from 180+ countries.
- 12+ corporate partners and multiple educational institutional partners.

Published Researcher May 2021 – Present

Multiple Projects

- 10 published articles on multiple projects of mine spread across 4 leading international electronics publications.

Projects

Robotic Arm That Learns | *Arduino Mega 2560, C++, Eagle PCB, Fusion360, TinkerCAD, VSCode*

- Robotic arm that can be trained on tasks without technical knowledge. Used Arduino Mega and custom PCB.
- Project completely sponsored by 3 different brands. Designed 3D model for arm and control panel in Fusion360.

Pocket Weather Station | *Arduino Nano, C++, Eagle PCB, Fusion360, TinkerCAD, VSCode*

- Pocket-sized weather station to measure real-time weather conditions. Used DHT11 module and Arduino Nano.
- Upgraded to the better DHT22 sensor later for precise weather readings.

Pencil Graphite-Based Flex Sensor | *Schematics, Electronics, Chemistry*

- Created a flex sensor by recycling pencil graphite. Dropped the cost from $20 to less than $1.
- Used the variable conductivity of pencil graphite to read electronic signals at varying analog values.

Handy Theodolite | *LIDAR, Electronics, Physics*

- Low-cost theodolite for farmers, reduced cost to $20 where $800 industrial average.
- State Winner, National Qualifier at National Science Exhibition India.

Technical Skills

Languages: Java, Python, C++, JavaScript, HTML/CSS, R, Dart, Kotlin
Frameworks: Flutter, Firebase, NoSQL, WordPress, Wix, Android, Arduino, DOS
Developer Tools: Git, Google Cloud Platform, VS Code, Android Studio, IntelliJ, Jupyter Notebook, Firebase Console, Google Analytics, Google Play Console, Apple Developer Console, Fusion 360
Technologies: PCB Designing, Soldering, Wiring, Schematics, CAD, Coding