Swayam R

(404) 910-6857 | swayamrathod2006@gmail.com | LinkedIn: swayam-rathod| GitHub EDUCATION

Georgia State University (Atlanta) Expected graduation December 2028
Associate of Science — GPA: 3.62/4.0

TECHNICAL SKILLS

Tools & Software: SolidWorks, Fusion 360, AutoCAD, Gazebo, ROS2, Nvidia Isaac Sim, RPI & Arduino operations, EasyEda, URDF Modeling.
Programming Languages: Python, Java, C++
Data Analysis: MS Office (Advanced Excel)

ACADEMIC PROJECTS

Humanoid Robot for Dynamic Motion & AI Control April 2025 – Dec 2025

- Developing a 4'5 ft humanoid robot capable of balanced bipedal walking using torque-controlled servos and IMU-based feedback for pitch and roll correction.
- Engineered a ROS 2 architecture integrating real-time motion control, local LLM interpretation, and sensor-driven adaptation, achieving consistent gait stability over 95 % of test cycles.

Robotic Arm Mounted on a Four-Wheeled Mobile Platform Dec 2025 – May 2025

- Assisted with team coordination, system assembly, and testing to ensure the robot operated as intended.
- Led CAD modeling and contributed to electrical system layout, ensuring proper motor driver integration, power distribution, and mechanical alignment.

LEADERSHIP EXPERIENCE

Co-Founder & President of The Engineering Club | Gwinnett Technical College Jan 2026 – May 2026

- Leading the development of a student robotics initiative, managing and working with Mechanical, Electrical and Programming departments.
- Lead weekly sessions where members go from zero experience to designing and testing their own robot prototypes.

Founder & Product Designer | Craftora 3D Design Studio May 2025 - Present

- Built a startup specializing in custom 3D-printed products and creative mechanical designs, managing modeling, printing, and client delivery.
- Delivered 20+ original designs and surpassed 100 sales, managing the full process independently while balancing a full course load.

ENGINEERING DESIGNS & 3D FILES – GitHub Repo: @sway-r

Includes designs files from personal and academic projects, including humanoid robot components, rover structures, and custom mechanical parts.

WORK EXPERIENCE

Barista & Customer Service at Dunkin' February 2023 – Present