

FNU YASHWANTH GOWDA

yashgangatkar@gmail.com | 623-533-9340 | [LinkedIn](#) | [Portfolio](#)

Master's student in **Robotics & Autonomous Systems** (Arizona State University) with a strong foundation in **Mechanical Engineering**. Skilled in **autonomous navigation, control systems, ROS2, SLAM, and multi-sensor fusion**, with proven experience in **CAD/FEA, cybersecurity frameworks, and cross-disciplinary projects**. Adept at applying **theory to practical robotics systems**, with strong coding skills in **Python, MATLAB, C, and Java**. Seeking internships and full-time roles in robotics, design, and autonomous systems engineering.

EDUCATION

Master of Science, Robotics and Autonomous Systems (Mechanical & Aerospace Engineering) May 2026
Arizona State University (ASU), Tempe, AZ

Bachelor of Engineering, Mechanical Engineering Sep 2023
Bangalore Institute of Technology, Bengaluru, India

TECHNICAL SKILLS

- **Programming:** Python, C/C++, Java (OOPs), MATLAB, Simulink, Linux, Arduino, Git/GitHub, PyTorch
- **Mechanical Simulation:** SolidWorks, CATIA V5, Solid Edge, CNC Train, ANSYS, CAD/CAM
- **Robotics:** ROS / ROS2, PID, SLAM, IMU, OpenCV, Rviz, Gazebo, Control Systems, Autonomous Vehicles
- **Cybersecurity:** Risk Assessment & Management, Compliance Auditing (ISO 27001, NIST CSF, GDPR), Microsoft Defender 365, SAFEScore.ai, KDMARC, Infosec IQ and **Tools:** Microsoft Office, Adobe Acrobat, Airtable, LaTeX

PROFESSIONAL EXPERIENCE

- Cybersecurity GRC Intern – CyRAACS, Bengaluru, India** Mar 2022 – Jan 2023
- Implemented ISO 27001-aligned information security protocols, reducing enterprise threat exposure by **50%**.
 - Conducted audits under **ISO 27001, NIST CSF** and **GDPR** standards, enhancing system compliance and governance.
 - Supported **risk assessment**, collaborating cross-functionally to strengthen organizational resilience by **20%**.
- Mechanical Design Intern (CATIA) – GTTC, Bengaluru, India** Sep 2021 – Sep 2021
- Designed and optimized 3D mechanical components in **CATIA V5**, improving design turnaround time by **30%**.
 - Performed **FEA simulations** in ANSYS to validate design integrity, reducing potential structural failures.
- Software Intern (Java with OOPs) – IC Solutions, Bengaluru, India** Aug 2020 – Aug 2020
- Developed and deployed **data-driven social analytics tools** (Instagram and YouTube Growth Calculators).
 - Improved code execution time by **15%**, boosting application performance and responsiveness.
- Office Assistant (Part-Time) – Sapthagiri Group, Bengaluru, India** Jan 2019 – Jul 2024
- Streamlined documentation, vendor coordination, and meeting schedules and improving office efficiency.

ACADEMIC PROJECTS

- Autonomous Warehouse Patrolling Robot** Jan 2025 – May 2025
- Developed an **autonomous robot** for structured warehouse surveillance using **ROS 2, LiDAR and IMU**.
- Debris Detection using Swarm Robots** Aug 2024 – Dec 2024
- Designed and simulated a **multi-agent swarm system** in **MATLAB** for decentralized debris detection and area mapping, by implementing **SLAM algorithms**.
- Microcontroller-Based Line Follower Automated Guided Vehicle (AGV)** Aug 2021 – Aug 2022
- Built an **Arduino-based AGV** equipped with IR sensors for automated material transport in industrial settings.
- Effect of Inclination on Natural Convection in Porous Enclosures** Feb 2021 – Aug 2021
- Conducted **thermal and fluid flow simulations** in **ANSYS** to analyze convection effects within porous enclosures.

COMMUNITY ENGAGEMENT

- Volunteer, **Southwest Robotics Symposium (SWRS 2024)** – ASU, Ira A. Fulton Schools of Engineering
- Volunteer, **International Students & Scholars Center (ISSC), ASU** – Cultural & student engagement
- Volunteer, **Cognition (COVID-19 initiatives)** – Food drives, awareness campaigns, Bengaluru
- Volunteer, **Samskruthi Club, BIT Bengaluru** – Cultural & student engagement