Fnu Yashwanth Gowda

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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

- **Robotics:** ROS / ROS2, PID, SLAM, IMU, OpenCV, Rviz, Gazebo, Control Systems, Autonomous Vehicles
- **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
- **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**
- Conducted audits under **ISO 27001**, aligned information security protocols, reducing enterprise threat exposure by **50%**.
- Supported **risk assessment**, collaborating cross-functionally to strengthen organizational resilience by **20%.**

Mechanical Design Intern – *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 – *IC Solutions, Bengaluru, India* **Aug 2020 – Aug 2020**
- Developed and deployed **data-driven social analytics tools** (Instagram and YouTube Growth Calculators) using Java.
- 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

PAPI Controller: Solar Irrigation System **Aug 2025 – Dec 2025**
- Designed a 2-DOF controller for solar pumps, achieved a 60% faster rise time compared to standard PID loops.

Prophet LSTM-GAN: Rocket Engine Health Monitoring **Aug 2025 – Dec 2025**
- Developed an unsupervised anomaly detection framework for liquid rocket engine telemetry using hybrid LSTM-GAN.

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.

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.

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