VAMSI KRISHNA CHINNAMUTTHAVI

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EDUCATION

New York University, New York, US — 2022-2024
Masters of Sciences in Mechatronics and Robotics Engineering. (Specialized in Mobile Robotics) (Networked Robotics Systems, Cooperative Control and Swarming) (GPA 3.445/4)

The National Institute of Engineering, Mysuru, Karnataka, INDIA — July 2022
Bachelors of Engineering in Mechanical Engineering. (GPA 8.80/10)

TECHNICAL COMPETENCY AND SKILLS

Computer aided software - CATIA V5, Solid works, Siemens NX12.0, Solid edge.
Analysis software - XFLR, ANSYS (Structural and Fluent), MATLAB software (MATLAB, Simulink and Simscape), Abaqus, Hypermesh, Mastercam.
Programming languages - MATLAB, Python Programming, C, C++, Pbasic, Html.
Other Software and tools - Schneider electric IGSSv15, ROS, Arduino,linux, Raspberry Pi .
Other skills - Knowledge in industrial manufacturing and quality control, Knowledge in industrial engineering management, Business communication, Adobe photoshop, Project management.

INTERNSHIPS

The New York University Engagement Center (NYU Phonathon). (Role: Engagement Ambassador (On-Campus)) — Mar 2023-Current
- Conduct meaningful digital and traditional interactions with alumni, parents, and friends as Engagement Ambassadors.
- Engage donors to donate, verify their information, and share institutional updates

Bramastra Aerospace System, Chennai. (Role: Intern) — Aug 2021-Sept 2021
- Modelled and simulated the project titled "Missile Guidance System for Brahmos Missile" in MATLAB Simulink.

Balaji Autotech PVT Ltd, Mysuru. (Role: Intern) — Mar 2020-May 2020
- Analyzed, designed and modelled CNC drilling machine bed and worktable from the ground up as project intern in the research and development team.
- Improved and advanced CAD models in SolidWorks of retrofit CNC drilling machine and other OEM products based on their cost and weight requirements.

Pranavam Aerospace PVT Ltd, Bangalore. (Role: Intern) — Jun 2019 -Aug 2019
- As a summer Intern in the Engineering department, generated G-code and process plan for RB211 industrial compressor stage blades.
- Developed robust quality inspections plans for the department based on AS9100 and SAE standards.

LEADERSHIP

Led the Team Aerotantrix student club in undergrad who are interested in aerospace and aeromodelling.
- Led the design, research and fabrication of UAVs (Unmanned Aerial Vehicles) as part of the club.
- Put in place concrete processes and transformed the team to be research oriented from a primarily competitive background.
- Brainstormed various prototypes of recovery system for Quadcopter, including extensive calculations and modelling of airbag systems.

PROJECTS

Smart fire protection system (Grad school: Sem 1) — Team size 4
- An automated smart fire alarm is modelled, simulated and prototyped.
- Worked on coding the microcontroller BS2 in Pbasic language to perform the necessary objective
- Assisted on circuit design and 3D printing.

CNN based Leaf Disease Detection using an AGV with a Modular Robotic Arm (Undergrad school: Sem 8) — Team size 4
- An automated ground vehicle with a modular 3 degree of freedom robotic arm was developed for capturing images of plant leaves and doing other functionalities.
- Captured Plant leaf images provides a non-destructive method for analyzing the health of the plant using Convolutional neural network model.
- Created 3D lidar from a single point Lidar and servos for detecting objects and path planning.
- Worked on generating CNN model to detect leaf diseases.

Image processing-based leaf disease detection using Quadcopter (Undergrad school: Sem 6) — Team size 2
- A micro-size agricultural quadcopter is modelled and simulated in MATLAB Simulink for capturing images of plant leaves.
- Image-processing was carried out on the captured images to determine if a leaf has been infected.

Communication between SCADA and Arduino microcontroller. (Undergrad school: Sem 4) — Individual project
- Objective was to create a system which monitors water level in a tank, real time.

ACHIEVEMENTS

- Led a team in Boeing IIT National Aeromodelling competition 2019 conducted by IITM.
- Secured 3rd place in technical presentation for a micro class category in SAEADC 2019 and overall 12th place in micro class category among 100+ clubs
- Led a team in SAE ADC 2020 competition plane. And secured 7th place among 100+ clubs
- Led a team in Hero Campus challenge Season 6 by hero MotoCorp ltd