

DATTA LOHITH GANNAVARAPU

College Park, MD | +1 240 960 4450 | gdatta@umd.edu | <https://github.com/Datta-Lohith>

Education

Master of Engineering: Robotics

GPA: **4.0**

University of Maryland - College Park - College Park, MD

Expected in 12/2024

B.Tech: Electronics and Communication

Sreenidhi Institute of Science And Technology

08/2021

Technical Skills

Programming: Python, C, C++, Java, Ros 1, Ros 2, Arduino, Machine Learning, C#, Javascript, Kotlin

Operating Systems: Windows, Ubuntu

Tools: MATLAB, Gazebo, Rviz, Webots, Solidworks, Open CV, Arduino IDE, Visual Studio, VS Code, Github

Work History

BI Developer

06/2022 to 12/2022

Yellow Block Software Solutions

- Providing Marketing insights and building dashboards according to client requirement.

Workshop Trainer

03/2020

Indian Institute of Information Technology

- Conducted a workshop on Introduction to Robotics and Internet of Things
- Main speaker at the workshop conducted for three days

Academic Projects

Butler Robot

- Description: Built a robot with obstacle recognition and autonomous self-path planning algorithm (Double tree RRT*) to search for items irregularly placed on the floor in an household environment and move it accordingly.
- Built a custom dataset and trained custom yolov8 model for a 4-wheel 2 wheel drive robot to recognize daily objects on floor and move it accordingly in a household environment.

Skin Cancer detection system

- Description: Designed, built, and created a mobile application with the skin cancer dataset to detect whether a person has skin cancer or not, on a custom built model.

HAND – E Robot

- Description: Designed, built, and created a robot model which has a robot manipulator on a 4-wheel 2 wheel drive robot equipped with a toolkit to perform different tasks such as assembly or repairing in a manufacturing factory environment. (Ros 2)

Robotic Picasso

- Description: Designed, built, and created a robot is a drawing bot that takes input given by the user and draws the image with precision and accuracy on a scale set by the user on a wall or a drawing sheet.

2D Mapping Robot for soldiers in stealth combat

- Description: Designed, built, and created a robot with metal detection sensors to detect land mines in the way of the soldiers and maps the safest landmine-free path for the soldiers to travel.

Publications

- "Path Routing on a map and Simulation using A* Algorithm"

Publication: JAC : A Journal Of Composition Theory Volume:14 Issue:8 ISSN: 0731-6755

Link: www.ictjournal.com/gallery/40-aug2021.pdf

- “A Survey Of Typical Machine Learning Based Motion Planning Algorithms For Robotics ”

Publication: IJCRT: International Journal Of Creative Research Thoughts Volume I O I Issue 7 ISSN: 2320-2882

Link: <http://www.ijcrt.org/papers/IJCRT2207183>

Certifications

- Machine Learning with Python from IBM (May 2020)
- Object Oriented Programming in Java from UC San Diego (June 2020)
- Udemy Certified 'Introduction to Python Programming' and 'Complete Python Bootcamp' (May-June 2020)
- Getting Started with Application Development from Google cloud (May 2020)
- Introduction to the Internet of Things and Embedded Systems from UCI (May 2020)
- Corporate Ready Training certification by Cantilever lab systems
- Robotics: Aerial Robotics from University of Pennsylvania

Accomplishments

- Awarded 1st and 2nd prizes in two different robotic events conducted by Chaintanya Bharathi Institute of Technology
- Awarded 1st prize in all Terrain Events conducted in G.Narayanamma Institute of Technology and Science
- Participated in Many Robotic Events conducted by IIT-Madras, IIT-Kanpur, IIT-Hyderabad, NIT-Nagpur and few other colleges
- Participated in the World Robotic Olympiad(WRO)
- Awarded 1st prize for Robotic Picasso in project expo conducted by SNIST

Leadership

- President for The Robotics Club- SNIST for the tenure (2020-2021)
- Joint Secretary for Technical Affairs for The Robotics Club - SNIST for the tenure (2019-2020)
- Technical Supervisor for the National Level Symposium Roboveda(2019)
- Designing Deputy for the National Level Symposium Roboveda (2018)
- Pioneer in hosting an event NEP-2020, which brings out the importance of including new technologies in the curriculum of students in India.