ANMOL AGARWAL

LINKEDIN: linkedin/in/anmolag10 **GITHUB:** github.com/anmolag10
E-MAIL: agarwalanmol3010@gmail.com **PHONE:** +918800726449

EDUCATION

Manipal Institute of Technology *Manipal*
Bachelor's in technology *2019 - Present*
Computer and Communication Engineering *CGPA: 8.78/10*
Delhi Public School Rajnagar *Ghaziabad*
Grade 12th *2019*
PCM + Computer Science *93.75%*

EXPERIENCE

FOO Solutions *July 2021 - Present*
Java Backend Intern

- Working on the server-side of TAMAM, a micro-lending platform, aimed at increasing financial inclusion in Saudi Arabia.
- Involved in creating various REST APIs and their integration with various third parties using Spring Boot.

Mars Rover Manipal *Oct 2019 – May 2021*
Artificial Intelligence Member

- Developed an autonomous traversal and search algorithm for a Mars Rover for searching AR tags and reaching them.
- Developed an application using network sockets and OpenCV to retrieve real-time video feed from the rover.
- Implemented visual odometery using various cameras like RealSense and Zed Cam.
- Implemented a Real Time Kinematics GPS module for precision localization

PROJECTS

Self Submitting Form *2021*

Developed a web app that triggers the deadline timer as soon as logged-in and submits automatically in database when timer elapses without using asynchronous programming. Used NodeJs, ExpressJs, CSS, HTML and MongoDB.

Pick and Drop Drone *2020*

Simulated an autonomous drone on ROS Gazebo, that delivers packages to desired locations and implemented an algorithm for delivery and returns scheduling, in the most efficient manner. Also, implemented a Harr Cascade classifier for detection of the landing pad.

Tennis Ball Detection *2019*

Developed a robust custom algorithm to detect tennis balls in harsh lighting conditions. Used various classical techniques in OpenCV to achieve the expected detection.

ACHIEVEMENTS

- Secured **2nd place** in SMVITM IEEE hackathon by creating a web app called **DigitalDukaanDaar**.
- Contributed to the team that stood **2nd in Asia and 7th in worldwide** in the University Rover Challenge 2020 held in the Utah, USA.
- Secured the **3rd position** worldwide in International Mars Hackathon 2020.
- **Top 10** among 400 teams across India in E-Yantra Competition 2020 conducted by IIT Bombay.

POSITION OF RESPONSIBILITY

- Project Lead, European Rover Challenge 2021, managed 30 undergraduate students and secured **7th position worldwide** for Preliminary Design Report.
- Mentored more than 80 undergraduate students for Mars Rover Manipal AI Team 2021.

TECHNICAL SKILLS

Programming	C++, Java, Python, SQL, CSS, HTML, C, BASH
Libraries & Tools	Node, ExpressJS, MongoDB, Git/GitHub, Spring, ROS, NumPy, Scikit
Hardware	3D Lidar, Stereo cameras, GPS, IMUs, Arduino, RPi
Experienced in	Web Development, Robotics, Linux