Mayank Sharma

Education

Vellore Institute of Technology, Vellore

Aug 2020 - July 2024

B. Tech in Computer Science and Engineering

8.35, CGPA

Experience

Dyte (Intern + SDE)

May 2022 - Present

- Developed a Core and UI-Kit library that improves customisability and usage of SDKs
- Wrote blogs on technical topics
- Effectively communicated with Clients and resolved their issues
- Improved and maintained performance of the react native SDKs

Aerospace Engineers Private Limited (Robotics Intern)

Nov 2021 - Dec 2021

- Developed software to control the robot's actuators
- Developed modular code to navigate the bot based on Computer Vision and Sensor Information
- Troubleshooted and debugged ROS programs
- Developed cross-platform compatible GUI in PyQt5.

Projects

Easy Firebase

- Flutter package to quickly setup and use many firebase functionalities with wrapper functions including Authentication, Realtime Database, Firestore Database and Firebase Storage.
- Reduces firebase integration from hours to less than 10 mins
- Published to pub.dev, ready to integrate as a dependency in any flutter project

RobotX USV Navigator

- ROS project to simulate and control the trajectory of RobotX USV Robot
- 3 variants of options available to specify the path: Linear, Circular, Lawn-Mover
- Implemented PID Control System in Python
- PyQT5 based GUI to fine tune the parameters for the bot
- Cross Platform control Support

CrashFinder

- Android native library to catch unhandled exceptions
- Implemented JNI to interop Kotlin with NDK support in C++ and extract process details from SE-Linux in Android.
- Sent crash data to a Node server via POST request

MagicAutomation

- A C++ library that acts as a framework to build Arduino-based Home Automation systems
- Feature to add/remove a node
- AES based encryption to encrypt/decrypt data to preserve privacy
- Tree like architecture to support hierarchical nodes

Leadership / Extracurricular

Projects Lead, IEEE-VIT

Dec 2020 - Dec 2023

- Responsible for development of innovative projects while mentoring the team to solve real world problems and deliver it to help the community
- Developed software for events and projects used by 1500+ participants in 100+ countries.
- Speaker at "Techloop Alpha 2022", guiding 1000+ students in App Development.

Computer Vision Head, VAUV

 $\mathbf{Sep}\ \mathbf{2022} - \mathbf{Dec}\ \mathbf{2023}$

- Responsible for developing solutions of computer vision algorithms for Underwater Robot
- Worked with the Team to solve underwater navigation via Image Processing and Deep Learning

Skills and Interests

Programming Languages: Kotlin, Dart, Objective C, Go, JavaScript, TypeScript, NodeJS, Python3, Java, C, C++

Relevant Coursework: Data Structures and Algorithms, Database Management Systems, Objected Oriented Programming, Operating Systems, Computer Networks, Computer Architecture and Organization, Theory of Computation, Cryptography Fundamentals, Cyber Security, Network Security, Web Security

Miscellaneous: Android Studio, XCode, Robot Operating System, Linux, Git, GitHub, Jira, Postman, PostgreSQL, MongoDB, MySQL, Azure, AWS

Qualities: Confident, Multitasker, Quick-learner, Adaptive, Team player, Problem Solving