

Sector-06, HSR Layout
Bengaluru – 560102

github.com/mohammad-imran01

MOHAMMAD IMRAN

linkedin.com/in/mohdimran01

+91-9693085174

+91-9931318235

imranmbhd2412@gmail.com

Languages and Technologies

- C++ (Advanced), Python (Intermediate), JavaScript (Basic); Qt QML; SQL; Networking; OpenCV; OOP; HTML, CSS;
- Qt Creator, Visual Studio, Qt Design Studio, VS Code, Jupyter Notebook;

Employment

AerX Labs | 1+ YEARS

Software Engineer

Bengaluru, India

Jan 2024 | Present

- Completed the development of **G1000 Primary Flight Display** for flight simulators based on Garmin documentations, reducing each simulator's cost by ₹60,000. Replaced TCP/IP protocols with high-frequency UDP inter-process communication protocols to receive simulation data, reducing latency by 20%.
- Developed complete Flight Plan, DirectTo Navigation and other Procedures making the applications deployable in Aircraft simulators, implemented backend with SQLite databases for aviation data, user data, and settings, enhancing performance and reducing reliance on online data sources by 60%.
- Integrated weather APIs utilizing NOAA datasets for real-time weather data retrieval, enhancing navigation capabilities with Qt Networking libraries.

Software Development Intern

Sep 2023 | Jan 2024

- Created NAVCOM frequencies indicators, attached DI board to set frequencies and used buttons and knobs making the applications completely free of Mouse and keyboard.
- Developed UIs for PFD & MFD displays including different scales like Altimeter, Indicated Airspeed, VSI, HSI.

Education

8.76 CGPA (BTech)
Information Technology

Bengal College of Engineering and
Technology

2019-23
Durgapur, West Bengal

HSC (12th) 71.03%

Mirza Ghalib College

Gaya, Bihar | 2019

Projects

- **MiniPixLab** (github.com/Mohammad-Imran01/mini-pixlab)
A Qt C++ desktop application for image analysis and editing, utilizing OpenCV and C++ ImageMagick library algorithms. Supports 80+ functional options for image manipulation.
- **NetWeather** (github.com/Mohammad-Imran01/NetWeather)
Developed a desktop application to provide detailed real-time and forecast weather information. Used Qt WebEngine framework to render maps and included forecast data extending back to 40 years.
- **Personal portfolio website** (imran-01.netlify.app)
A personal website hosted on Netlify, with GitHub integration for easy updates. Featured skills, projects, professional links and other sections showcasing keen interest in software development.
- **Movies recommender system** (github.com/mohammad-imran01/recommender-system)
A machine learning based movie recommender system. Using cosine similarity, delivers top 5 movie recommendations based on user input, ensuring 72% accuracy score.

Additional Experiences

- Recognized as a certified 5-star C++ and SQL programmer at [HackerRank](https://www.hackerrank.com);
- Successfully solved over 500+ [LeetCode](https://leetcode.com) problems and numerous questions on various platforms.