

MUDIT GARG

(+353) 892050748 | gargmu@tcd.ie | <https://muditgarg48.github.io>

PROFILE

As an upcoming **Software Engineer**, I am passionate about building efficient and scalable solutions that measurably improve business outcomes, while also adopting a growth mindset and willingness to learn new technologies. I have a proven track record of producing such improvements, both as an individual contributor and as a team collaborator. My expertise lies in many core concepts, and I consistently strive towards perfection.

EDUCATION

Masters in Engineering (M.A.I.). Major in Computer Engineering

Trinity College Dublin, Ireland

Sept 2023 – Jun 2024

Bachelors in Engineering (B.A.I.). Major in Computer Engineering

Involved in a 2+2 international credit transfer program based on merit.

Trinity College Dublin, Ireland

Sept 2021 – Aug 2023

Cumulative Grade: II.1 (Second Class Honors)

Thapar Institute of Engineering and Technology, Patiala, India

Aug 2019 – Aug 2021

Cumulative Grade: I.1 (First Class Honors)

EXPERIENCE

General Motors

Dublin, Ireland

Software Developer Intern

Jan 2023 – Aug 2023

- Streamlined the performance of a key project feature, refactoring the end-to-end services to about **96.4% improvement**, reducing the project compilation time from **10min to 30sec** speeding up the responsiveness.
- Collaborating with a senior developer to turn **7-8 SQL data sources** into valuable insightful insight report using Microsoft's **Power BI** to increase the readability of data for **5-6 internal teams**.
- Proven track record of collaborating with skilled teams to deliver critical project features and developing API endpoints, adhering to various **Agile** ceremonies.
- Contributed to the full-stack development, utilizing various cutting-edge technologies such as **Java, Spring Boot, Maven, Angular, Postgres, and Docker** for the development of optimized software solutions.

CORE SKILLS

Programming Languages:

Python, Dart, Java, C++, JavaScript, Structured Query Language (SQL)

Core Concepts:

OOP, DSA, Gen AI, Agile and Scrum, Refactoring and Debugging

Libraries:

ScikitLearn, Numpy, Tensorflow, OpenCV

Frameworks:

Spring Boot with Maven, Flutter with Dart, React with Node.js

Tools:

Jupyter Notebooks, Git and Azure DevOps, Power BI, TinkerCAD

Platforms:

GitHub, Firebase, Heroku, Oracle Cloud Infrastructure

PROJECTS

Gesture recognition-based device control

Jan 2024

Python, Jupyter, Tensorflow, OpenCV, Numpy, ScikitLearn, Mediapipe

https://github.com/muditgarg48/gesture_based_device_control

- Utilized a **LSTM neural network** to develop a gesture recognition model that trains using 30 videos of 30 frames each, for each gesture and then use that gesture to control IoT devices.
- Utilized **Python** for automation and development, **Mediapipe and OpenCV** library for key points extraction, **Jupyter, TensorFlow, Numpy and ScikitLearn** for model preparation and training.

Candle in Dark

Mar 2024

Flutter, Dart, Firebase, Google Cloud, XML, GitHub Pages

https://muditgarg48.github.io/candle_in_dark_web/

- Ideated and developed a **cross platform application** using **Flutter** and **Firebase** that serves as a platform guide for the newly arrived students of Trinity College to know everything about Trinity and Ireland.
- Includes various interwoven intricate systems including **user authentication and authorization, feedback collection system, theming system, etc.**