# MUDIT GARG

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## PROFILE

As a **Software Developer**, I have a passion for crafting solutions with cutting-edge technologies, all while adopting a growth mindset. I am dedicated to fostering strong teamwork and collaboration, recognizing that unlocking the inner potential in others is integral to achieving success. My expertise lies in many core concepts, and I consistently strive to create programs that are characterized by cleanliness, readability, and modularity.

## 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 2021 – Sept 2021**
Cumulative Grade: I.1 (First Class Honors)

## EXPERIENCE

**General Motors**                                                     **Dublin, Ireland**
Advanced Software Developer Intern                                      Jan 2023 – Aug 2023

- 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.
- Streamlined the performance of a key project feature, consolidating the end-to-end services, restructuring the program flow to about **96.4% improvement**, reducing the project compilation time from **10min to 30sec**.
- Collaborating with one senior developer to turn **7 - 8 SQL data sources** into valuable insightful insight report using Microsoft's business analytics tool **Power BI** and increase the readability of data by many folds**.**

## SKILLS

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| **Programming Languages:** | Python, Dart, Java, C++ and JavaScript |
| **Core Concepts:** | OOP, DSA, Gen AI, Agile and Scrum, Refactoring and Debugging |
| **Libraries:** | ScikitLearn, Numpy, Tensorflow, OpenCV |
| **Frameworks:** | Spring Boot with Java, Flutter with Dart, React with JS and MUI |
| **Tools:** | Jupyter Notebooks, Git and Azure DevOps, Power BI, TinkerCAD |
| **Platforms and Databases:** | GitHub, Firebase, Heroku, SQL, OCI Generative AI |

## 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 scripting, automation and development, **Mediapipe and OpenCV** library for keypoints 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, light/dark theming system, etc.** to name a few.