



# THAREEJAN PAKKIYARAJAH

IT Undergraduate, University of Moratuwa

+94 75 72 834 80

thareejan@gmail.com

261, Boundary Road, Batticaloa, Sri Lanka, 30000

<https://www.linkedin.com/in/thareejan/>

<https://github.com/r33j4n>

## About

Passionate about the intersection of Information Technology, Artificial Intelligence, and Software Development. Leveraging expertise in analyzing complex datasets, implementing algorithms, and optimizing performance. Seeking an opportunity to contribute to cutting-edge projects and drive innovation in the field of Artificial Intelligence.

## Education

### University of Moratuwa

B.Sc. (Hons) in Information Technology  
(Undergraduate)

2021-Present

- Current GPA: - 3.60

### St. Michael's College National School, Batticaloa, Sri Lanka

G.C.E A/L, 2019

- A, B, B  
Information Communication Technology - A  
Combined Mathematics - B  
Physics - B

G.C.E O/L, 2016

- 9A

## Working Experiences

### Casual Staff – Batticaloa Election Commission Office

2020 June - 2020 September

Successfully implemented computerized technologies to streamline operations and minimize reliance on traditional manpower. I maximized the utilization of computerized tools. This initiative resulted in significant time savings and improved accuracy in tasks such as data management, documentation, and report generation.

## Projects

### Hand Gestured Controlled Goods Gripper

Year 1-Microcontroller-Based Group Project

Designed a hand gesture-controlled goods gripper utilizing robotic arm technology. Assessed market needs and designed a solution for safe and efficient retrieval of high-end products from higher shelves. Implemented sensors and motors for accurate object handling and reduced dependence on manual labor.

- Role: - Group Leader, Responsible for MPU6050 Module and Servo Motors, Developed and Implemented the final Integrated code.
- Programming Language: - Embedded C
- Technologies: - Proteus, KiCad, Atmel Studio, GitHub, Blender

### Face Mask Detection Application

Developed a Face Mask Detection application using No-Code AI tools during the COVID pandemic. Leveraged machine learning pipelines to accurately detect face masks, gaining hands-on experience in implementing end-to-end machine learning workflows.

- Programming Language: - Python
- Technologies: - OpenCV, NumPy, TensorFlow, Keras, Teachable Machine

### Food Bank

Year 2-Industry Group Project

Developed "Food Bank" web and mobile app to address urgent food crisis in Sri Lanka. Streamlined donation process, reduced manual effort, and increased efficiency. Empowered users to donate food and money while capturing vital recipient information.

## Volunteering Experiences

### Editor & Webpage Master – Education Incentive Association Batticaloa.

2020 January - 2021 June

As Editor and Webmaster, I enhanced communication by writing letters, designing flyers, banners, posters, and revamping the webpage.

### Member- Tamil Literary Association.

2021 June – Present

## Technical Skills

### Programming Languages

- Python
- Java
- C
- JavaScript

### Frameworks

- Spring Boot
- Flask
- Tesorflow
- Bootstrap
- Langchain

### Libraries

- ReactJS
- Scikit-learn.
- Pandas
- NumPy

### Databases

- MySQL
- MS SQL

### Others

- Git
- GitHub
- JIRA
- Photoshop

## Interests

- Cloud Technologies
- Virtual and Augmented Reality
- Blockchain
- Prompt Engineering
- IoT
- Sports Analytics

## Certifications

**Introduction to Artificial Intelligence-** VirtualUniversity of Pakistan -[View](#)

**No-Code Artificial Intelligence-** DreamSpace Academy -[View](#)

- Role: - Developed Login and Sign-Up module, CRUD operations.
- Programming Languages: - JavaScript, Java.
- Technologies: - ReactJS, Flutter, Bootstrap, SpringBoot, MySQL, GitHub, JIRA.

### Shop Basket (Year 3 -EAD Group Project)

Spearheaded the development of **Shop Basket**, a cutting-edge supermarket management system, utilizing Spring Boot framework and microservices architecture to seamlessly integrate customer interactions, inventory management, order processing, and delivery logistics.

- Role: - Developed Product-Inventory Service
- Programming Language: - Java
- Technologies: - Spring Boot, Netflix Eureka, Docker

### D3cod3

Leveraged Google Generative AI API to create a web-based code assistant. This application assists in code explanation, refactoring code between languages (e.g., Python to Java), and generating using code best practices. Designed to enhance software development efficiency.

- Programming Language: - Python, JavaScript
- Technologies: - Flask, ReactJS, Palm2, SQLite.

### Hire App – (Ongoing Project)

Developing "**Hire**," an innovative job matching platform focused on IT jobs, designed to streamline the process of connecting skilled employees with suitable job opportunities. Leveraged Meta llama3 LLM and AWS Bedrock Services along with Retrieval-Augmented Generation (RAG) techniques Built using React for a dynamic front-end and Firebase for robust backend support.

- Programming Language: - Python, JavaScript
- Technologies: - Flask, LangChain, ReactJS, Firebase, AWS Bedrock, Llama3, ChromaDB.

## Achievements and Participations

- **Huawei ICT Competition 2022- Cloud Track**  
National Rank – 10<sup>th</sup> Place
- **Idealize 2022 – App development Competition -**  
Organized By AIESEC  
Semifinalist
- **HackMoral 5.0 – Inter Faculty Hackathon**  
Merit Award 5<sup>th</sup> Place. (2023)
- **SLRC-2019- Sri Lanka Robotics Competition**  
Final round participant
- **NSSC 2018- National School Software Competition**  
Under 19 - Finalist
- **NSSC 2016- National School Software Competition**  
Under 17 - Finalist