RUJULA MATHIALAGAN [rujulaofficial@](mailto:rujulaofficial@)gmail.com | +1 447-902-7699 | [LinkedIn](https://www.linkedin.com/in/rujula-mathialagan-874881284)

# EDUCATION

**University of Illinois Urbana-Champaign, Gies College of Business August 2024 - August 2025**

Master of Science in Technology Management **Illinois, USA**

**Relevant Coursework:** Operations Management, Marketing Management, Accountancy, Data Analytics, GPA: 3.8/4.0

Accountancy, UI/UX design, Consumer Behavior.

**Adhiyamaan College of Engineering, Hosur July 2017 - May 2021**

Bachelor’s in technology – Information Technology **Hosur, India**

**Relevant Coursework:** Engineering Mathematics, Data Structures, Database Management GPA: 7.98/10

# WORK EXPERIENCE

**Software Developer | R&D Intern, International Flavors and Fragrances** *June 2025- August 2025*

* Built a modular Python-based **AI facial recognition kiosk** integrating *New Jersey, USA*

face detection (OpenCV/dlib), voice interaction (FasterWhisper, ElevenLabs), and LLM responses via Gemini/Qwen

* Developed an extended version with real-time **emotion recognition**, training and evaluating models for multiple emotion

classes using a custom CNN, DeepFace, and CAN-based approaches.

* Designed a clean, reusable module structure (recognizer.py, speech\_to\_text.py, etc.) and integrated it into a Tkinter GUI with SQLite for kiosk flow and user management.
* Led the development of a **recipe-generation Angular app** with Firebase Auth, Firestore, YouTube API integration, and mobile-responsive UI using Angular standalone components.
* Researched and experimented with **Neo4j graph databases** to model ingredient-function relationships and extract insights using Cypher queries for internal R&D use cases.

**Design Engineer, Ironmen Technologies, India** *September 2021- Present*

* Researched the product to get an optimized design for an efficient working machine utilizing *Chennai, India*

Arduino, IOT, and electrical works

* Managed to design appropriate parts for efficient functionalities.
* Designed the folding table to make precise folding of various types of clothes and a picture-capturing mechanism to monitor the internal operations of the machine from the outside.

**Vendor Relations Manager and Content Reviewer/Refurbishing, Amber Sports India** *March 2024 – June 2024*

* Researched on vendor management for Ecommerce platforms and presented a viable demo showcasing *Chennai, India*

pro’s and con’s.

* Managed to review every content posted on the amazon messages as a reply to come up with remarks of the customer care team.
* Designed and generated appropriate reply content according to the client base.

**Software Engineer | Senior Analyst, Capgemini, India** *July 2021 - April 2023*

* Worked on McDonald's point of sale (POS) transformation project in the front, developing optimized *Bengaluru, Chennai, India*

and analyzed and improved transaction processing time from 15s to 4s by optimizing backend communication. Partnered with cross-functional teams to improve KPI tracking and provide insights for POS performance improvements

Designed the Point of Sale (POS) page for the MC café menu and manager menus and incorporated various data that were being sent from the front end to the backend.

* Created proofs of concept for innovative new solutions and updated old code bases to modern development standards, improving functionality.

# PROJECTS

**Deduplication, Adhiyamaan College of Engineering, Tamil Nadu India** *January 2021 - May 2021*

* Led a three-person team in a class project to implement a deduplication among pictures. *GPA:9*
* Provided privacy to pictures when downloaded and increased local storage with encryption-decryption methods using a 16-bit key
* Avoided multiple copies of a single picture using sha-5 algorithms, which convert and store the data as hash values, making it a more secure way of encrypting data.
* Managed the internal storage and gave a special feature of removing unwanted images by the project admin.

**Virtual Ration Queues, Adhiyamaan College of Engineering, Tamil Nadu, India** *January 2020-May 2020*

* Led a three-person and created an optimized web-based application for a queue booking system for local ration shops.
* Reduced waiting time of common people by 80% and allowed them to use the time for more significant things.

# EXTRACURRICULARS ACTIVITIES

**Member, IETE, Hosur** *December 2017 -- May 2021*

* Organized various events and workshops related to the necessities of an IT Professional.

**Project Lead, College Expo Best Project Winner** *November 2019- January 2020*

* Led afour-member team to secure the Best Project award at a college expo, demonstrating effective teamwork and project management skills.

**Hospitality Coordinator, IETE Event Management Team** *September 2019*

* Orchestrateda two-day IoT workshop for three departments, overseeing hospitality arrangements **for 200+** participants and guest lecturers from Salem.

**Event Manager, Women's Day Celebration Committee** *February 2019 – March 2019*

* Managed registration fee collection for over 500 participants with a team of 3 members, ensuring smooth financial operations for the event.

# SKILLS

**Technical Skills:**  
Python, C#, JavaScript, HTML, CSS, ReactJS, Angular, MySQL, SQLite, .NET MVC, API Integration, Agile, Tableau, Figma, Neo4j

**Tools & Platforms:**  
Git, Firebase, google vertex AI, Postman,

**Soft Skills:**  
Project Management, UX Design, Marketing Strategy, Communication, Negotiation

**Languages:**  
English (Fluent), Tamil (Proficient), Hindi (Fluent), Telugu (Fluent), Kannada (Beginner)

**Certification**s: Basics of c c++ java (Apollo Institute,2017), Web development with SQL basics (Apollo Institute,2018), Internet of Things (Adhiyamaan College of Engineering,2020), Angular (Pluralsight 2021), Agile project management (Coursera, 2021)