

# DIPTAYAN JASH

📞 9474182596

🔗 <https://github.com/djdiptayan1>

@ [djdiptayan1@gmail.com](mailto:djdiptayan1@gmail.com)

☆ [www.djdiptayan.in](http://www.djdiptayan.in)

🌐 <https://www.linkedin.com/in/diptayan-jash-63496b214/>

## EXPERIENCE

### SSUP Project Intern

#### Sony Research India

📅 02/2024 - 10/2024 📍 SRMIST

- Collaborated on an embedded systems project to develop a pipeline inspection robot. Achieved real-time crack detection and data transmission with **less than 5 ms** latency via web sockets.
- Implemented the robot's movement and control logic, optimizing real-time performance and ensuring efficient communication with an AWS-based server for data logging and analysis.

### Samsung Prism R&D Intern

#### Samsung

📅 11/2023 - 06/2024 📍 Remote

- Engineered a machine learning solution with OpenAI's CLIP model and feature extraction, identifying and categorizing duplicate images. Leveraged multithreading and parallel processing to **reduce processing time by 50%**.
- Enhanced image deduplication accuracy by implementing DBSCAN clustering on a dataset of over 10,000 images, leading to a **30% improvement** in system efficiency.

### IIT Summer Intern

#### IIT Madras

📅 06/2023 - 07/2023 📍 Chennai, India

- Built an MQTT client for the TIVA microcontroller, **reducing data transmission latency by 10%** between IoT devices in industrial applications using the HiveMQ broker.
- Designed a real-time data visualization portal using ReactJS and Flask, enhancing monitoring and analysis of microcontroller **performance by 20%**.

## PROJECTS

### Chatter

🔗 [https://github.com/djdiptayan1/Chat\\_Application](https://github.com/djdiptayan1/Chat_Application)

Tech Stack: Java, Swing, Sockets

- Developed a real-time chat application, enabling secure and efficient client-server communication through socket programming. Implemented multi-client group chat functionality, supporting over **100 simultaneous connections** to ensure seamless and reliable communication between users.

### Agamotto

🔗 <https://github.com/djdiptayan1/Agamotto>

Tech Stack: Python, TensorFlow, Next.js, Aceternity UI, Tailwind CSS, Flask

- Spearheaded the development of a deepfake video detection system in an **Agile team environment** for SIH'24, achieving a **detection accuracy of 90%**.
- Deployed the application using Docker, **containerized** for scalability, and deployed on an **Ubuntu server**. **Reduced setup time by 50%** using docker compose for quick deployment and testing. Collaborated to integrate a TensorFlow-based model with Flask for real-time detection.

### Article Recommendation System

🔗 [https://github.com/djdiptayan1/Bajaj\\_hackathon\\_part1](https://github.com/djdiptayan1/Bajaj_hackathon_part1)

Tech Stack: Next JS, Tailwind CSS, Python, fastAPI

- Increased **user engagement by 25%** through developing AI/ML-powered site recommendations for Bajaj Finserv Datathon.

## VOLUNTEERING

### President

#### GitHub Community SRM

📅 2022 - Present

GCSRMS Promotes Open source development in SRMSIT.

## SKILLS

Java, C, C++, Python, HTML, CSS, Javascript, React JS, Next JS, NodeJS, Tailwind CSS, REST APIs, IOS, Swift, Flask, ExpressJS, MongoDB, Firebase, Git, Arduino, Raspberry pi, Embedded C, Docker, Containers, Xcode, Agile development

## EDUCATION

### Bachelor of Technology in Computer Science and Engineering

#### SRM Institute of Science and Technology

📅 06/2022 - Present 📍 Chennai, India

CGPA

**8.80** / 10

ISCE (94.4%), ISC (95%)

#### St. Paul's Academy

📅 2011 - 2022 📍 Burdwan, India

## ACHIEVEMENTS

**2nd in the Bajaj Finserv Datathon.**

**Secured 2nd Prize, 4th Prize, and 5th Prize in three categories at the International Roboroarz Robotics Hackathon, Singapore 2024.**

**All India Rank 11, DD Robocon 2023 involving 100+ national teams.**

**2nd in Smart India Hackathon college finalist for the national round.**

## PUBLICATIONS

Filter Duplicate Images using CLIP

**7th International Conference on Ambient Intelligence, Software Engineering and Health and mHealth 2024**

*D. Jash, T. Tripathi, K. Johari, A Rathod, Gayathri M, Suganiya M, A. Mishra, A. S MENON*

Leukemia Classification Using Transfer Learning Models

**Second IEEE International Conference on Advances in Information Technology, 2024**

*S. Kundu, D. Jash, R. Dutta, D. Kannan, K.C. Prabu Shankar, F. Yakub*

## COURSES AND CERTIFICATIONS

**Operating Systems, Database management System, DSA, DAA, Advanced Programming Practices, Object Oriented Programming, IOS App Prototype Design and Development**