

# Rudraneel Dutta

+91-8617705295 | its.rudraneel@gmail.com | linkedin.com/in/its-rudraneel | github.com/rudyoactiv

## TECHNICAL SKILLS

**Languages:** Java, C/C++, JavaScript, HTML/CSS, Python, SQL

**Technologies:** React, NodeJS, MongoDB, ThreeJS, Arduino, SciKit-learn, Detectron2, PyTorch, OpenCV

**Domains:** Web Development, Cybersecurity, IoT, Machine Learning, 3D Printing

## EXPERIENCE

### Cybersecurity & Digital Forensics Intern

May 2023 – June 2023

Ministry of Electronics and Information Technology, Government of India

- Internship as Cybersecurity & Digital Forensics Analyst with a hands-on experience in managing eminent cases of *cybercrime* and *data retrieval*.
- Took on the role of Investigating Officer (IO) for a high-profile ICPO–INTERPOL assignment, uncovered and organized digital evidence material pertaining to the case.

### Team Lead

June 2023 - Present

IoT Lab, KIIT

- Development and Implementation of multiple IoT-based solutions following best practices and industry standards using tools such as Arduino to drive scalability and interoperability.
- Set up the 3D Printing Domain as Founding Member, conducted workshops and seminars on Rapid Prototyping.

## PROJECTS

### E-Commerce Website | Next.js, Tailwind CSS, React, MongoDB, Firebase

Mar. 2024

- Built a modern and responsive UI, featuring product listings, user profiles and a shopping cart system.
- Developed user authentication and integrated a secure payment gateway for a seamless checkout process.

### Autonomous Driving System | SciKit, TensorFlow/PyTorch, NumPy, pandas

Feb. 2024

- Built a real-time light-weight lane and car detection system using Deep Learning by fine-tuning a CNN via TensorFlow for autonomous driving cars.

### PeerSphere: The Student Platform | JavaScript, HTML/CSS, React, Firebase

Dec. 2023

- Deployed a robust platform to connect college students interested in swapping classes with ease and successfully handled 5000+ concurrent users during peak usage.
- Implemented a responsive user interface for managing and displaying student profiles, including dynamic filtering, search, and dynamic profile updates.

### Question Paper Analyser | Python, SciKit, PyTesseract, Gensim, CUDA

Oct. 2023

- Document Layout Segmentation and Object Detection using the Detectron2 framework.
- Implemented Topic Modelling using Latent Dirichlet Allocation (LDA) via Gensim and PyLDAvis for visualization.

## RESEARCH

Dutta, R., Mohanty, S. (2024). A topic modelling approach to optimise study planning [Manuscript pending publication]. *International Journal of Educational Technology in Higher Education*.

## EDUCATION

Kalinga Institute of Industrial Technology  
La Martiniere for Boys, Calcutta

B. Tech, CSE (2021 – 2025)  
ICSE, ISC (2006 – 2021)