

# Rudraneel Dutta

Phone: +918617705295 | 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, Node.js, Express.js, Three.js, MongoDB, OpenCV, Flask, PyTorch

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

## EDUCATION

**Kalinga Institute of Industrial Technology** 2021 – 2025  
*Bachelor of Technology in Computer Science and Engineering* 82.2%

**La Martiniere for Boys** 2021  
*Indian School Certificate* 88.5%

## EXPERIENCE

**Intern** June 2024 – September 2024  
**Tata Elxsi, Bengaluru**

- Developed an automated system to label training data for self-driving cars.
- Used generative AI to identify vulnerabilities in automobiles with Llama 3.1 for automatic preliminary test case generation and penetration testing.

**Intern** May 2023 – June 2023  
**National Institute of Electronics & Information Technology, Kohima**

- Examined multiple cases of cybercrime and analysed large datasets using Cellebrite UFED.
- Implemented parallel processing in the automated data retrieval process for a prominent overseas assignment to improve extraction speed by 20%.

## PROJECTS

**Kraft3D: Online 3D Printing Store** | MongoDB, Express.js, React, Node.js June 2024

- Launched India's most affordable e-commerce platform for 3D printed products.
- 250+ orders delivered successfully within the first 4 months.
- Used React and Node.js, with MongoDB for database operations, Firebase for authentication and Stripe to ensure secure user transactions. ([rudraneeldutta.com/Kraft3D](https://rudraneeldutta.com/Kraft3D))

**Autonomous Driving System** | SciKit, TensorFlow, PyTorch, OpenCV, Flask Mar. 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.
- Created a dataset of Indian automobiles for training the model on Indian traffic conditions.

**PeerSphere: The Student Platform** | JavaScript, HTML, CSS, React, Firebase Dec. 2023

- Deployed a robust website to help college students swap classes easily, with a responsive UI for managing user profiles, and dynamic search and filtering.
- Used Firebase for user authentication and database operations. ([rudraneeldutta.com/PeerSphere](https://rudraneeldutta.com/PeerSphere))

## CERTIFICATIONS

IBM Full Stack Software Developer Professional Certificate Coursera, Issued May 2024  
AWS Academy: Introduction to Cloud AWS Academy, Issued Mar. 2024  
Google Cybersecurity Professional Certificate Coursera, Issued Feb. 2024

## PUBLICATIONS

Dutta, R., Mohanty, S. (2024). Enhancing exam preparation through topic modelling and key topic identification. *Journal on Artificial Intelligence*, 6(1), 177-192. <https://doi.org/10.32604/jai.2024.050706>