# Rudra Sarkar

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Github: https://github.com/rds8rds Leetcode: https://leetcode.com/rds8rds

### ACADEMIC CREDENTIALS

### Rajshahi University of Engineering and Technology

Rajshahi, Bangladesh

Bachelor of Science - Computer Science and Engineering; GPA: 3.13/4.0

Jan 2017 - Dec 2023

Key courses: Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases

## Research Interests

Deep Learning, Machine Learning, Genetic Algorithms, Image Processing, Theory of Computation, Distributed Systems, Game Development, Software Engineering:

#### Professional Experience

#### **Neural Semiconductor Limited**

Dhaka

Software Enginneer (Full-time)

August 2024 - Present

- Testsprint360.com: Testsprint360 is a industry leading software automation tools, I contributed to its website's subscription managing project as well as its intermediate back-end processor. Implemented various types of algorithms, database designing, CI/CD pipelines. Tech: Springboot, Postgres, RabbitMQ
- HRM-ERP Backend: Developing & managing industry-standard HRM-ERP Backend with micro services for functionalities like payroll, attendance, and food management also building APIs for front-end applications backed by relational database like PostgreSQL. Tech: Springboot, Postgres, RabbitMQ

**Techjays** Remote InternFebruary 2024 - May 2024

- o Drupal Module Development: Learned to create custom modules that extend and enhance the functionality of a Drupal website like adding new content types, APIs, new custom forms etc.
- o Build Web Applications with Ruby on Rails: Developed Content Management System following client requirements with Ruby on Rails.

#### SKILLS SUMMARY

• Languages: JAVA, Python, C++, JavaScript, SQL, Bash Frameworks: TensorFlow, Keras, Spring Boot, Django, NodeJS

• Tools: GIT, PostgreSQL, MySQL, SQLite

• Platforms: Linux, Web, Windows, Raspberry, AWS, GCP

• Soft Skills: Leadership, Event Management, Writing, Public Speaking, Time Management

## Selected Projects

- CRUD Back-end API: Developed a back end CRUD API with JavaScript, Node, implemented user authentication, data validation, optimized database interactions using PostgreSQL
- Graphical Projects with p5 Library: I implemented thought-provoking simulations using p5 Library like game of life, sand simulation, simulating mathematical equations
- My Portfolio: My portfolio to present my works, my current interests & objectives

#### Research Experience

• Undergraduate Thesis: Plant Species Detection with Convolutional Neural Network: Convolutional Neural Networks (CNN), are increasingly used for plant species identification due to their efficiency in feature detection from images. My proposed CNN model achieved 96% accuracy on the UCI ML Repository leaf image dataset, demonstrating its potential to assist botanists and support biodiversity conservation.

#### Honors and Awards

- Reaching top twenty percent of coders, at Leetcode.com
- Passed the Level-2: Fundamental Information Technology Engineer Examination (FE)
- Poster Presentation Champion, at "KUET Technival 2018"
- Participant at regional Math Olympiad, Rajshahi
- Participant, at Power & Energy Hackathon 2018 [worked on solar barges to produce clean electricity]

#### Volunteer Experience

#### Senior Executive Member

RUET

Arranged carrier-related workshops and sessions impacting over 4000 students.

May 2017 - Dec 2018

Lead Graphic Designer at HULT Prize at RUET

RUET

Designing graphics, poster, workshop material for HULT Prize at RUET

Jan 2018 - Dec 2018