

# KUSHAL DEBNATH

kushaldn25@outlook.com | +91 8798823265

 /kushal-debnath |  /kushaldn25

## OBJECTIVE

- Driven and skilled AI/ML engineer with a strong foundation in MLOps, deep learning, and system design, focused on building scalable, real-world solutions. Eager to apply technical expertise in industry to develop intelligent, reliable, and high-impact products..

## SKILLS

- ❖ Python, Java, JavaScript, Linux.
- ❖ MLOps, Docker, Podman, Grafana, Proxmox.
- ❖ MySQL, PostgreSQL, MongoDB, MinIO, DevOps
- ❖ Sci-Kit Learn, Tensor-flow, MLflow, Prometheus, Loki.
- ❖ Computer Vision, Object Detection, CNN.
- ❖ Leadership, Management, Teamwork.

## EDUCATION

- ❖ B.Tech in Computer Science & Engineering | SRI SRI UNIVERSITY CGPA: 9.23 |2022-2026
- ❖ XII (TBSE) |BIR BIKRAM INSTITUTION 89%| 2022

## FELLOWSHIP

- ❖ Summer Research Fellow | IASc-INSANA-SRI Summer Research Fellowship -2025 (May'2025-ongoing)  
Currently developing a real-time MLOps pipeline on 5G MEC servers for the **University of Hyderabad** using MLflow, Grafana and Prometheus, aiming to enable low-latency edge AI and in-house data storage to bypass cloud restrictions. Serving as a scalable testbed for expanding MEC capacity with full local control.

## EXPERIENCE

- ❖ Development Intern| Sequospace Pvt. Ltd (May'2024-July'2024)  
Worked on Web crawling based application using **Spring Boot (JAVA)** & achieve 10% efficiency on that.
- ❖ WebDev Intern| Rebelcorp India Pvt. Ltd (May'2024-July'2024)  
Create many E-commerce websites and get many valuable feedbacks & enhanced clients experienced more than 20%.
- ❖ Data Analyst Intern| IBM (CSRBOX) (June'2023-July'2023)  
Collaborated on a group project titled "Mental State Analysis using EEG Signals", achieving 89% accuracy. Focused on central tendency measures and data visualizations using Python (Matplotlib, Pandas, Seaborn).

## ACADEMIC PROJECTS

- ❖ Brain Tumor Detection Using Deep Learning  
Currently working on Brain MR Image to detect the Tumor region from the Image to make it Real-time helpful for the Surgeon to operate the patient. We are use YOLO v8, UNet for detecting this issue.
- ❖ Alzheimer's Detection using CNN  
Developed a ML Model, which detects a patient's level of disease with 93% Accuracy from MRI image using CNN & Hyper-Parameter Optimization.
- ❖ Predict - Pro: Optimizer for Industrial Operations  
Developed a Predictive Maintenance ML model with 98.2% accuracy & a projected ROI up to 2731% in Industrial equipment's maintenance Data.

## POSITION OF RESPONSIBILITY

- ❖ Creative Head| IEEE Student Branch, SRI SRI UNIVERSITY (Jan'2023- Present)
- ❖ PR Core Member| PR Club, SRI SRI UNIVERSITY (Sept'2023- Present)

## PUBLICATION

- ❖ Alzheimer's disease Classification Using CNN Random Hyper-Parameter Tuning, IEEE Xplore 2024.

## ACHIEVEMENTS / CO-CURRICULUM ACTIVITIES

- ❖ Winner in Technical Paper Presentation in IBM ICE DAY | 2024
- ❖ 1<sup>st</sup> Runner-up in District Level Swimming Competition | 2015
- ❖ Winner in Inter-State Singing Competition | 2016

## CERTIFICATIONS

- ❖ Google Cyber Security Professional Certification.(Ongoing)
- ❖ Data Visualization Using Python by IBM.
- ❖ AWS Academy Graduate - AWS Academy Cloud Foundation/ ML / Data Analytics Certification.

## LANGUAGE

- ❖ English (Professional)
- ❖ Bengali (Native)
- ❖ Hindi (Native)