# LITTLE JOHN SARONIYA

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#### Education

# Indian Institute of Technology, Kharagpur

2020 - 2025

Bachelor of Architecture

CGPA-8.0

# Experience

Software Engineer Intern - Prof. Sidharth Sharma

Indore, India

- Designed and deployed an Arabic OCR model with a 96% confidence score, extracting text from the scanned documents
- $\bullet \ \ \text{Leveraged ${\bf CNN}$ and ${\bf NLP}$ techniques to train and optimize the OCR model, achieving exceptional recognition accuracy and the optimization of the opt$
- Developed a responsive, user-friendly website with HTML, CSS, and Bootstrap to showcase the Arabic OCR model

IIM Kozhikode May 2023 – Jul 2023

Data Science Intern - Prof. Salamah Ansari

Kozhikode, India

- Employed Random forest and support vector machine algorithms to derive valuable insights from urban governance data
- Applied statistical modeling and data visualization methods to inform decision-making in solid waste management
- Contributed to impactful waste management, promoting sustainability and safeguarding public health through measures

# **Projects**

#### Natural Language to SQL Generator Bot

Jun 2025

- Built an LLM-based SQL generator bot using Google Gemini, integrating RAG and NER for accurate query formation
- $\bullet \ \ \text{Outlined effective } \mathbf{prompt} \ \mathbf{engineering} \ \text{and schema-aware filtering to convert user input into precise } \mathbf{SQL} \ \mathbf{commands}$
- Achieved 94% accuracy with input preprocessing techniques like auto-completion, correction, and fuzzy matching

# Prediction of Amazon Cart Prices: A Multivariate Parameter Approach | Self Project

Mar 202

- Built a pipeline for feature transformations with different models and their hyper tuning using RandomizedSearchCV
- Employed XGBoost regressor and linear regression to manage null values, enhancing quality and preprocessing efficiency
- ullet Created custom features, implemented random forest regression, and attained an  ${f R^2}$  score of  ${f 0.94}$  through optimization

# Quora Question Pairs: Identifying Duplicate Questions $\mid$ Self Project

Feb 2024

- $\bullet \ \ \text{Devised an } \textbf{NLP} \ \text{model}, \ \text{detecting duplicates with} \ \textbf{80.65\%} \ \text{accuracy}, \ \text{indicating the duplication probability for questions}$
- Conducted **text preprocessing**, removing HTML Tags, punctuation, and special characters, enriching the feature set
- Designed custom features like common word count and advanced metrics, enhancing inputs for RF and XGBoost

#### Competition

#### Kharagpur Data Science Hackathon 2022

- Qualified in the Kharagpur Data Science hackathon, optimizing HCP channels with XGBoost and Random Forest
- Enhanced prescription accuracy with time series forecasting and linear regression, ensuring compliance with constraints

# **Technical Skills**

Languages: C++, Python, JavaScript, HTML/CSS, MySQL

Standard Libraries: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, XGBoost

Software/Tools: Git, Tableau, MS Excel, Jupyter Notebook, Google Colab, MS PowerPoint, Adobe Photoshop

Courses: Programming and Data Structure, Artificial Intelligence, Statistical Foundation of AIML, Project Management

#### Achievements

- Earned a bronze badge on CodeChef for problem-solving(110+ problems) and consistent participation in coding contests
- Achieved the highest rating of 1547 on LeetCode, solving 300+ problems, and 250+ intensive problems on InterviewBit
- Recognized as a 5-star coder on HackerRank, solving 130+ problems on Coding Ninjas with coding contest participation
- Secured town rank 2 in the 10th Board examination, and achieved town rank 1, receiving a laptop in the 12th Board
- Attained district rank 2 in the National means cum merit scholarship examination 2015 among 50k+ students statewide

# Leadership / Extracurricular

# Space Technology Students' Society | Sub Head

Aug 2021 - Apr 2022

- Led the management of the Spats and NSSC Design Team, ensuring efficient coordination and execution of all projects
- Orchestrated a team of 25 members to organize India's largest space tech fest effectively, NSSC'22, with a 5k+ footfall

#### Students' Alumni Cell | Design Associate

Jan 2021 - Nov 2021

- Worked under the dean of Alumni Affairs & Branding to enhance interaction between 10k+ students and 40k+ alumni
- Compiled, designed, and published the 'Institute Yearbook 2021', reaching and engaging over 100k+ IIT KGP Alumni