

Lalu Prasad Lenka

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EDUCATION

TRINITY COLLEGE DUBLIN

M.Sc. in Data Science
Sept 2021 - Aug 2022 | Ireland
GRADE - I - Distinction (Semester 1)

COLLEGE OF ENGINEERING AND TECHNOLOGY

B.Tech. in Computer Science
Jul 2014 - Jun 2018 | India
CGPA - 8.72/10 | GRADE - I

ACHIEVEMENTS

Kaggle 4x Expert | 2020
Two silver (top 5% among 4k competitors) medals.

Excellence Award | 2018
Awarded for outstanding performance by Aptus Data Labs.

Winner IEEE Colloquium | 2016
Awarded first prize for [paper](#) presentation at IIT Bhubaneswar IEEE colloquium.

CET Merit Scholarship | 2015-2018
Granted merit scholarship every year of undergraduate studies.

COURSEWORK

GRADUATE

Machine Learning
Artificial Intelligence
Applied Statistical Modelling
Optimization Algorithms for ML/DL
Computer Vision
Distributed Systems
Data Visualization

UNDERGRADUATE

Data Structures and Algorithms
Object-Oriented Programming
Databases
Software Engineering

SKILLS

PROGRAMMING LANGUAGES

Python • PySpark • MySQL • R • C++

TOOLS AND LIBRARIES

Pandas • NumPy • Scikit-learn •
Hive • Hadoop • Keras • PyTorch •
Tensorflow2 • OpenCV • Kafka •
PowerBI • MLflow

DATA SCIENCE IN PRODUCTION

Azure • AWS Sagemaker • AWS
Code deploy • Databricks •
Docker • Kubernetes • CI/CD •
Spark • Git

WORK EXPERIENCE

AAYS ANALYTICS | DATA SCIENTIST

December 2020 - August 2021 | Mumbai, India

- Performed profit erosion analysis using multivariate descriptive and regression analysis to find the root cause of profit erosion across five major sub-brands of a confectionery giant. Discovered loss-making consumer pack types and adverse cost components. Performed prescriptive analysis & suggested business actions that **optimized existing revenue streams by 18%**.
- Developed and deployed an intelligent supply chain solution for a fast-fashion client that finds repeatable SKUs and forecasts their 14 weeks sales and required inventory. The solution helped the client **maintain optimal stock levels for all SKUs and increased profitability by 15%**.

APTUS DATA LABS | JR. DATA SCIENTIST

August 2018 - November 2020 | Bengaluru, India

- Developed and deployed an LSTM based Named Entity Recognition model to detect complex chemical names and medicines in drug formulation documents that helped **reduce manual efforts by 90%**.
- Developed and deployed a deep learning pipeline to locate and recognize texts in machine screens like temperature, pressure, etc., and log it directly to the database that helped **reduce human error and operations cost by 40%**.
- Built a proof-of-concept IoT-streaming analytics platform on an **eight node Spark cluster**. The stream of real-time sensor data was collected using Kafka, processed using ML models on Spark, and output fed to the live Power BI dashboard.

TATA CONSULTANCY SERVICES | MACHINE LEARNING INTERN

June 2017 - July 2017 | Chennai, India

- Developed a CNN-RNN based neural network to detect text present in product images that helped the team to build more robust text extraction software.

RESEARCH

AI FOR SAFE & EFFICIENT LANE CHANGING FOR CONNECTED AUTONOMOUS VEHICLES | MASTER'S THESIS | December 2021 - Present

- Evaluated efficiency and safety aspects of SOTA reinforcement learning and game theory based lane changing approaches.
- Working on implementing an actor-critic multi-agent reinforcement learning algorithm with **safety enhanced** and **efficient** reward function.

AI FOR GOOGLE CHROME DINOSAUR GAME USING NEUROEVOLUTION | UNDERGRADUATE THESIS | March 2018- July 2018

Implemented a Neuroevolution based artificial intelligence agent which learns and plays Chrome's dinosaur game by itself within ten minutes.

GESTURE TO SPEECH USING LEAP MOTION CONTROLLER | CO-AUTHOR | CONFERENCE PAPER | 2017 | Submitted to INDIACOM IEEE Conference- Pune, India

Proposed machine learning algorithm that read hand sign gestures from leap motion controller and converted them into speech to aid hearing and speech impaired people.

[Recommendations available on LinkedIn Profile](#)