

Lokesh Bhushan

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Experience

Graduate Research Assistant

Dec 2023 – Present

State University of New York, Bu alo, US

- Quantified lag time between prescribed burns and wildfires to inform proactive fire management strategies.
- Identified vegetation types with varying wildfire risks post-prescribed burns using data analysis.
- Analyzed spatial-temporal dynamics of proximity and time since burns on wildfire likelihood.
- Recommended fire management strategies to help reduce future wildfire risks.

Systems Engineer

Apr 2022 – Aug 2023

Tata Consultancy Services, Kolkata, India

- Designed machine learning models to predict employee attrition and streamline hiring processes for an HR solutions client increasing product efficiency by 20%.
- Implemented sentiment analysis models to analyze employee feedback, improving engagement strategies.
- Automated resume screening processes using natural language processing, reducing manual effort by 30%.

Associate Consultant

Aug 2019 – Apr 2022

Capgemini, Mumbai, India

- Built predictive models to monitor cloud resource utilization in a custom multi-cloud service portal, optimizing cost and performance by 15%.
- Developed anomaly detection algorithms to identify irregularities in cloud usage, enhancing system reliability by 10%.
- Formulated machine learning solutions for workload forecasting, reducing downtime by 15%.
- Integrated machine learning pipelines to automate scaling decisions, improving resource allocation efficiency.

Projects

Full-Stack Data Cleaning Web Application

- Developed a full-stack web app for automated data pre-processing, offering manual and AI-driven options.
- Integrated RAG for prompt-based data cleaning, with results downloadable as CSV files.
- Defined a dashboard to visualize dataset insights, including feature importance and outlier detection.
- Provided actionable recommendations for data preprocessing based on dataset analysis, improving user efficiency by 40%.

Wildfire Prediction Modeling

- Created ML models using Python and TensorFlow to predict wildfire behavior based on geospatial data.
- Conducted statistical analyses to identify trends and improve model performance.

Customer Fraud Detection System

- Devised machine learning models using XGBoost and Random Forest to detect fraudulent transactions.
- Conducted feature engineering to identify high-impact predictors of fraud across millions of customer records.

Education

Master of Science in Industrial Engineering: Data Analytics

Aug 2023 – May 2025

University at Bu alo, The State University of New York, USA

GPA: 3.84

Bachelor of Technology in Aerospace Engineering

Jul 2015 – Jun 2019

Indian Institute of Engineering Science and Technology (IIST), Shibpur, India

Skills

Python, TensorFlow, Keras, PyTorch, SQL, LSTM, CNN, Random Forest, SVM, Feature Engineering, Predictive Modeling, LangChain, Matplotlib, Seaborn, Azure, Machine Learning, Deep Learning, MySQL