

MANALI SHELAR

Bloomington, IN | [+1 \(812\)-553-1456](tel:+18125531456) | manalivshelar@gmail.com | [LinkedIn](#)

EDUCATION

Master of Science in Data Science, Indiana University Bloomington

May 2024

Course Highlights: Applied Algorithms, Advanced Database Concepts, Introduction to Statistics, Data Mining, Usable AI, Applied Database Technologies, Exploratory Data Analysis, Data Visualization, Big Data Applications, Time Series Analysis.

Bachelor of Engineering in Information Technology, University of Pune (India)

June 2020

Course Highlights: Database Management Systems, Design and Analysis of Algorithms, Machine Learning and Application, Cloud Computing, Information and Cybersecurity, Distributed Computing Systems, Social Media Analytics, Software Testing.

EXPERIENCE

Data Scientist | Observatory on Social Media (OSoMe), Indiana University Bloomington

Oct 2023 - Present

- Driving a prompt-based integration via **Large Language Models (GPT-4)** to enhance Helios-Web, a pioneering network visualization tool rooted in IU research.

Research and Analytics Intern | Institutional Analytics, Indiana University Bloomington

Jan 2024 - May 2024

- Engineered **predictive models** to analyze factors impacting term retention for undergraduate cohorts.
- Developed and maintained **Power BI dashboards** to visualize key metrics influencing student retention, securely handling sensitive student data.
- Conducted ad-hoc analyses to support business and model risk functions, refining retention strategies with data-driven insights.

Associate Consultant | Capgemini (Mumbai, India)

Jul 2020 - Jun 2022

- Designed and customized tools for clients in diverse sectors such as healthcare and supply chain, tailoring solutions to meet unique client requirements.
- Managed client data by preparing and optimizing SQL tables, triggers, and procedures, resulting in a 25% increase in query efficiency and a 30% reduction in data retrieval times.
- Led the Solutions team in identifying and addressing day-to-day operational challenges faced by projects, resulting in the development of 4 packaged solutions used by 10+ clients to streamline their processes and reduce costs by an average of 15%.

Senior Analyst Intern | Capgemini (Pune, India)

Jan 2020 - May 2020

- Performed exceptionally in a challenging Senior Developer Trainee Program, focused on Java EE. Accomplished 3 individual and team projects, elevating code quality by 15% with adept business, financial, and analytical skills.

PROJECTS

Loan Default Prediction System

Jun 2024

- Developed a robust machine learning model to predict loan defaults, aiming to enhance the stability and accuracy of credit risk assessments. Also leveraged alternative data sources to improve financial inclusion for clients with little or no credit history.

Technical Stack: Python, TensorFlow, Scikit-learn, SQL, Jupyter Notebook

Recession Prediction System

Jan 2023 – Apr 2023

- Created a comprehensive predicting system for assessing the probability of recessions in the United States across various time frames leveraging key economic indicators such as Treasury Bond Rates, GDP, CPI, Unemployment Rate, among others.

Technical Stack: Jupyter Notebook, Flask, **Python**, **MySQL**

Online Payment Wallet

Apr 2020 – Jun 2020

- Developed Payment Wallet Application using which customers can add/withdraw money from the wallet, send/receive money, and view credit, debit, money transfer, and account information.

Technical Stack: Visual Studio, **Oracle Database**, Spring Boot, Angular

Vehicle Detection System

Nov 2019 - Mar 2020

- Developed a system that uses CCTV surveillance video of Traffic on highways to identify vehicles then classify vehicles, and detect vehicles entering the wrong lane. [\[Link to Paper\]](#)

Technical Stack: Matlab

Image Processing Techniques Used: Background Elimination, Histogram of Gradient Orientation algorithm, Canny Edge Algorithm.

SKILLS

LANGUAGES: Python, R, Java, JavaScript, C++, Angular, Spring Boot, React, SQL

TECHNOLOGIES/ FRAMEWORK: Keras, TensorFlow, PyTorch, BERT, GPT 4, BigQuery, Tableau, Power BI, Snowflake, GCP, AWS (Redshift, S3, Sagemaker), JIRA, Google Analytics, Spark, Docker, Kubernetes, Excel, Azure, SAS, Visual Studio, Hadoop, Git, Agile.

DATABASES: PostgreSQL, MySQL, MsSQL, Oracle 19c, MongoDB, SQLite, Neo4j, Cassandra

CERTIFICATIONS: Microsoft Azure AI Fundamentals(Aug 2024), Snowflake Data Application Builder(April 2024), Introduction to Embeddings with the OpenAI API(Mar 2024), Prompt Engineering for Developers(Feb 2024), Fundamentals of Databrick Lakehouse (Jan 2024), AWS Cloud Practitioner Essentials (Dec 2023), Advanced Deep Learning with Keras(Oct 2023), Introduction to TensorFlow in Python (Oct 2023), Introduction to Deep Learning with Keras (Oct 2023), Power BI Essentials (Jun 2023), Tableau Essential Training (Jun 2023), Manipulating Time Series Data(Mar 2023), Agile Software Development (Uni. of Minnesota, 2021).