

SHEFALI SAXENA

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EDUCATION

- University of Illinois Urbana-Champaign IL, USA
Master of Science in Information Management; GPA: 4/4 Aug 2023 - May 2025
Courses - Data Warehousing and Business Intelligence; Information Modeling; Data, Statistical Models and Information
- Institute of Engineering and Technology, DAVV Indore, India
Bachelor of Engineering – Electronics & Instrumentation; Jul 2017 - May 2021
Courses – Machine learning, Computer Science, Database Management Systems, Data Mining, Methods of Data Science

SKILLS

Programming Languages: Python, ReactJs, Java 11, SQL, R, C++

Libraries & Databases: PyTorch, Pandas, NumPy, Matplotlib, Seaborn, Streamlit, Scikit-learn, Keras/Tensorflow, OpenCV, scikit-multiflow, Oracle DB, MySQL

Tools/Frameworks and Technologies: Flask, REST API, AWS Cloud (S3, EC2, QuickSight), JIRA, MobilenetV2, MS Office

ETL & BI TOOLS: Tableau, Microsoft Power BI, Talend Open Studio

WORK EXPERIENCE

- **LTIMINDTREE LTD.** Pune, India
Software Engineer Oct 2021 - Apr 2023
 - Collaborated with cross-functional team on Python & React based multi-tenant Chatbot designed to reduce email communication by answering redundant user queries and automating 65% basic workflows.
 - Designed APIs for 7 core Chatbot functionalities using Python's NLTK module and Flask framework for back-end development, which were communicating with front-end in React, via REST API and increased code coverage from 38% to 80%
 - Implemented statistical features using Pandas module to optimize user interactions, enhancing self-service
 - Resolved 32 major security vulnerabilities and Black Duck Scan issues in codebase, maintaining high performance metrics and stringent security standards
- **Graduate Engineer Trainee** Jun 2021 - Sep 2023
 - Participated by leveraging SQL in an internal project aimed at enhancing transactional processes across multiple departments within a banking institution.
 - Conducted ETL operations with Power Query to standardize one million data rows in MS Excel, delivering capacity utilization insights to stakeholders.
- **eManageHealth Technologies** Bangalore, India
Data Science Intern May 2018 - Aug 2018
 - Developed and validated machine learning models, resulting in a 20% increase in the accuracy of healthcare predictions. This contribution advanced the technology platform, making healthcare services 30% more accessible and streamlining traditional processes.
 - Conducted exploratory data analysis utilizing Python to understand trends, patterns, and insights within healthcare data, thereby assisting in making informed decisions.

PERSONAL PROJECTS

- **OptiDrive Development Team, UIUC** Champaign, USA
Team Lead August 2023 - Present
 - Contributing to the development of OptiDrive under Dr. David Forsyth's team, deploying a sophisticated vehicle direction identification system that intertwines vehicle detection, tracking, and direction recognition, smart traffic management systems.
 - Implemented and fine-tuned a fusion of algorithms— YOLO for precise vehicle detection, SORT for meticulous vehicle tracking, and vector-based direction recognition, resulting in exemplary accuracy and reliability during real-world applications.
- **Real-Time Face Mask Detection** Pune, India
 - Contributed in developing a real-time face mask detection application using Deep Learning, Python, Keras/Tensorflow, and datasets of 2000+ images from Kaggle
 - Analyzed detection results to validate model efficiency with 96.77% accuracy rate
- **Credit Card Fraud Detection** Indore, India
 - Leveraged Python and Isolation Forest algorithm to develop a robust anomaly detection system
 - Analyzed the system by monitoring transactional data, credit card fraud, or unusual purchasing behavior detected in real-time, helping prevent financial losses

CERTIFICATIONS

- Oracle Certified Professional: JAVA SE 11 Developer (Exam Number : 1z0-819 (link))
- Software Engineering Virtual Experience from JPMorgan Chase & CO.
Completed practical tasks using python in front-end web development, Data visualization using perspective and establishing financial data feeds