# Aman Dhakad

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### **EDUCATION**

Master of Science, Information Technology and Management

Illinois Institute of Technology

Jan 2023 - Dec 2024 Chicago, IL

Bachelor of Technology, Computer Science and Engineering

Rajiv Gandhi Proudyogiki Vishwavidyalaya

May-2018 - Jun-2022 Indore, India

### PROFESSIONAL EXPERIENCE

## **HieCOR Software Technologies**

Feb 2022 - Nov 2022

Software Engineer

- Developed and debugged dynamic user interfaces using **React**, **JavaScript** enhancing user experience while collaborating with crossfunctional teams.
- Built server-side applications with **Node.js** and **Express** to improve **API** response times and processing efficiency.
- Created **RESTful APIs** in Diango for improved application scalability and integration capabilities.
- Reduced **SQL** database retrieval times by optimizing queries, improving efficiency for over 1,000 users.
- Participated in Agile sprints and managed code versions with Git, enhancing teamwork and reducing project delivery times.

# **Pep Coding Education**

Jul 2021 - Dec 2021

Remote

Software Engineering intern

- Analyzed data from 800+ online students, identifying patterns in user behavior, learning progress, and performance metrics using **Python, Pandas, and NumPy,** driving platform improvements that increased student retention by 15%.
- Designed and optimized database queries using **PL/SQL** for efficient data extraction, improving data retrieval speed and accuracy. Managed data storage and organization to enhance reporting capabilities and support informed decision-making
- Generated monthly reports using **Tableau**, showcasing key insights on platform growth, user demographics, and learning outcomes, contributing to a **20%** increase in targeted marketing efforts.
- Built and implemented data models in **PostgreSQL**, enhancing data storage, retrieval efficiency, and supporting better decision-making processes across the platform.

### **PROJECTS**

# ASL Prediction using Vanilla CNN 5 Layered Architecture | Link

• Deployed a CNN model using Flask for predicting American Sign Language with 85% accuracy, utilizing Pandas, NumPy, TensorFlow, and Flask

### **Assistive Vision | Link**

- Developed "Assistive Vision" for visually impaired users, providing real-time object descriptions and auditory feedback via webcam.
- Utilized BLIP for image captioning, OpenCV for video capture, and pyttsx3 for text-to-speech, creating an accessible solution to enhance environmental awareness.

#### Sales analysis (Microsoft Fabric)

- Designed a data warehouse using a data lake medallion architecture, following the ETL process with Microsoft Fabric and Azure Blob Storage, reducing report generation time by 30%.
- Produced accurate facts and dimensions for the warehouse, creating Power BI reports with actionable insights, increasing business efficiency by 20%.

#### **Sentiment Analysis for U.S. Election Prediction**

- Conducted sentiment analysis on 100,000+ election-related tweets using NLP, achieving 75% accuracy in classifying voter sentiment and predicting election trends.
- Performed data preprocessing, exploratory analysis, and sentiment classification, providing valuable insights into voter sentiment.

# Face recognition Attendance System | Link

• Developed a face recognition attendance system using OpenCV (LBPH) with 95% accuracy for 2,000+ students, enabling real-time video processing with 98% accuracy. Integrated a Tkinter GUI, improving user experience and reducing navigation time by 25%.

#### **SKILLS**

- Programing Languages: HTML, CSS, JavaScript, MySQL, Pl/SQL, Python, Java, shell Scripting, C++
- Framework & Libraries: Node.js, Django, Flask, Express.js, React.js, .NET, OpenCV, Pandas, NumPy, scikit-learn, TensorFlow
- Database Technology: MySQL, PostgreSQL, MongoDB, DynamoDB, Apache Spark
- Machine Learning: Supervised Learning, Reinforcement, Neural Networks, AI-powered solutions, NLP
- DevOps and Cloud: CI/CD, Docker, Kubernetes, Git, Agile, MLflow, AWS (EC2, S3, RDS, ECS), Azure
- Software Development and Design: Software Systems Design, Full Stack Development, Cross Domain Knowledge.

## **ACHIEVEMENTS AND CERTIFICATION**

- Google Data Analyst Certificate: Proficient in data analysis techniques, visualization, and statistics | Link
- Ranked 6th in Data Structure and Algorithm and 4-star coder status on Code chef | Link