Sakshi Ambadkar

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Education

Arizona State University, *Masters of Science - Information Technology* *Aug2022 - May 2024*

RCOEM , *Bachelors of Engineering - Electronics with Minor Computer Science* *Aug 2019 - June 2022*

Experience

Volvo Group - S*oftware Engineering Intern* *Jan 2024 - May 2024*

- Utilized ETL tools such as Databricks and Azure Data Factory to automate data workflows, improving efficiency
- Implemented data structures in Python, Java, and C++ to solve complex problems and optimize code
- Implemented Django Rest Framework for seamless frontend-backend integration through RESTful APIs
- Utilized Git commands for version control and gathered data from Oracle and Azure databases
- Implemented NoSQL databases such as MongoDB for efficient data storage and retrieval
- Implemented Object-Oriented Programming principles in software design and development
- Utilized Power BI, Tableau and Power Automate for data visualization and automation tasks.

Discount Tire - *IT Intern* *May 2023 - Aug 2023*

- Contributed to platform modernization efforts and gained exposure to AWS services such as EKS and EC2
- Utilized Agile tools to track progress, manage backlogs, and enhance team visibility
- Integrated automated testing into CI/CD pipelines to ensure code quality and reliability before deployment
- Designed and implemented ETL processes to transfer data from multiple sources into data warehouses for analysis .

Stralto Global - *Data Engineer* *Jan 2022 - June 2022*

- Optimize data processing workflows and database queries to improve performance and reduce latency
- Document data pipelines, architectures, and processes for maintainability and knowledge sharing
- Skilled in writing and optimizing complex SQL queries for data extraction, transformation, and analysis
- Experienced in managing relational databases such as MySQL, PostgreSQL, and Oracle, ensuring high performance
- Integrated with various APIs to fetch and process data, ensuring seamless data flow between systems
- Built robust data pipelines using Python to handle large datasets and support data engineering tasks
- Utilized Python libraries such as pandas, NumPy, and Matplotlib for data analysis and visualization.

Verzeo - *Full Stack Engineer* *Jul 2020 - Sep 2021*

- Developed and maintained full-stack web applications, ensuring high performance and responsiveness
- Implemented front-end interfaces using modern JavaScript frameworks like React
- Optimized back-end APIs with Node.js and Express, and managed PostgreSQL schema and queries
- Implemented automated testing, continuous integration, and code quality processes, while maintaining documentation.

Publications and Certifications

Publications - IOT-Enabled Smart Shoe for Blind **(**IEEE)

Certifications - Crash Course on Python (Coursera) , SQL for Data Science (Coursera**)**

Projects

Bank Loans UI (Github)

- Developed a Node.js backend to manage bank loan data in a MongoDB Atlas cloud database using Prismam ORM
- Utilized Node.js, JavaScript, Prisma, and MongoDB.

Bank Loans Backend(Github)

- Constructed a dynamic user interface and seamlessly connected to Bank Loans Backend REST APIs
- Enabled CRUD operations on MongoDB Atlas-hosted loan data and utilized React, JavaScript, HTML, and CSS

Music Records Database Design (Github)

- Designed a relational database for music records, featuring SQL Server with triggers and procedures, and NoSQL
- Utilized NORMA, SQL Server, Couchbase, and Azure Data Studio.

Diabetic Retinopathy Detection

- Trained a Convolution Neural Network to recognize and categorize diabetic retinopathy stages using a Kaggle dataset of size 78 GB and achieved a training accuracy of 0.92 and validation accuracy of 0.61. Successfully predicted Moderate DR, Proliferative DR, and No DR with corresponding probabilities.

The Successor's Shoe for Blind

- Crafted an innovative shoe equipped with obstacle detection, pothole detection, slippery surface detection, and high-temperature object detection sensors. Built an Android app with GPS-GSM tracking, SOS, and piezoelectric power, featuring navigation, voice alerts, and health data display.

Tracking System Using IOT for School buses for Child Security

- Engineered a specialized school bus tracking system using Android and IoT technology, integrating fingerprint, Wi-Fi, Bluetooth modules with real-time GPS tracking.