Darpan Sakhala

Education

Indiana University Bloomington - Bloomington, IN, USA

August 2023 - May 2025

Master of Science, Computer Science

GPA: 3.6/4

Coursework: Relevant Coursework: Applied Algorithm, Machine Learning, Computer Networks, Database Concepts.

Savitribai Phule Pune University, Pune, India

Aug 2019 - June 2023

Bachelors of Engineering, Computer Engineering

GPA: 3.7/4

Technical Skills

Programming Languages and Databases: Python, Java, C++, HTML, CSS, SQL, Javascript.

Full Stack Dev: ReactJS, NodeJS, Angular, Django, Flask, MongoDB, PostgreSQL, MySQL, REST APIs.

DevOps & Cloud Technologies: Docker, Jenkins, Salesforce Marketing Cloud, Kubernetes, AWS, GCP, Azure.

Machine Learning: TensorFlow, PyTorch, Keras, XGBoost, Neural Network, Natural Language Processing (NLP), Large Language Model (LLM), NumPy, Pandas, Scikit Learn, Hadoop, Tableau, Matplotlib, PowerBI.

Project Management tools & Methodologies: Github, API Design, Asana, Jira, Agile, CI/CD, Distributed Systems, Scrum.

Work Experience

Software Developer

July 2024 - Present

Indiana University Bloomington | Java, Spring Boot, AWS Lambda, RESTful APIs, Docker, Git Indiana. United States

- Revamped Salesforce CRM-based applications by creating RESTful APIs with Java (Spring Boot) and JSON, decreasing data exchange latency by 25% and boosting user adoption by 30% through more efficient recruitment workflows.
- Introduced AWS Lambda for serverless operations, cutting infrastructure costs by 15% while standardizing Git-based version control and Docker containerization to enhance scalability and streamline deployments.
- Refined web-based tools with HTML, CSS, and React, improving functionality and user experience by 20% and elevating responsiveness for both internal and external users.

Data Engineer Research Assistant

December 2024 - Present

Indiana University Bloomington | Python, Django, Tableau, MySQL

Indiana. United States

- Designed scalable data ingestion pipelines in Python (with Django) to automate MySQL ETL processes for large-scale data scraping, accelerating throughput by 40% and supporting advanced NLP use cases for policy engagement.
- Created interactive dashboards in Tableau to visualize multi-layer sentiment analysis, enabling stakeholders to identify trending insights with 92% classification accuracy and reducing manual classification tasks by 35%.

Software Developer Intern

May 2024 - July 2024

 $Hyphenova \mid C++, MERN Stack, Kubernetes, Django$

California. United States

- Developed new features for the influencer-brand matching engine using Django, PostgreSQL, C++, and Kubernetes, elevating user engagement by 25% and supporting high-traffic, event-driven workflows.
- Conceived and deployed personalized recommendations in a MERN environment (MongoDB, Express, React, Node.js), enhancing backend throughput by 30%.
- Automated data pipelines by orchestrating tasks with Docker and Git, cutting manual operations by 40% and improving release cadence.

Full Stack Developer Intern

May 2022 - December 2023

RunwalSoft | HTML, CSS, JavaScript, React, MySQL

Maharashtra, India

- Created web-based applications using HTML, CSS, and JavaScript with React, enabling cross-functional teams to collaborate more effectively and raising productivity by 20%.
- Deployed a fully featured e-commerce platform for the Australian market using React, Node.js, and MySQL, boosting revenue by 15% and expanding the client's market presence.
- Accelerated customer order and sales management workflows with robust security protocols (OAuth), elevating user experience and reducing order processing time by 25%.

Projects

Harmonify | MERN Stack (MongoDB, Express.js, React.js, Node.js)

• Built a music-centric social platform with real-time track sharing that lifted engagement by 40% and improved performance by 30% through optimized React components and backend APIs.

Epileptic Seizure Detection using CNN | Python, CNN, Pandas, NumPy, TensorFlow, Keras, LSTM, Matplotlib

• Implemented a CNN-driven method for epileptic seizure identification achieving over 90% accuracy, further enhanced by LSTM layers and thorough data visualization for critical clinical insights.

NYC School Bus Delays Analysis | SQL, Python, Airflow, AWS S3, PostgreSQL, Power BI, Excel

• Engineered an ETL pipeline for 600K+ NYC school bus delay records using Python and Airflow, storing raw data in AWS S3, transforming it in PostgreSQL, and delivering insights via optimized Power BI dashboards all while reducing processing time by 45%.