Dinesh Pandikona

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PROFESSIONAL SUMMARY

Detail-oriented computer science student specializing in backend development and algorithmic *problem-solving*. Passionate about *mathematics*, *distributed systems*, and *machine learning*, with a strong commitment to building scalable solutions in industries where performance and reliability are critical

EDUCATION

M.S in Computer Science, Northeastern University

2023-2025

Operating Systems, Algorithms, Databases, Machine Learning

Boston

B.S in Computer Science, VNR VJIET

2018-2022

Distributed Systems, Data Structures, Design Thinking, Calculus

Hyderabad

WORK EXPERIENCE

Backend Software Engineer, Intern

07/2024 - 12/2024

Bose Professional

Framingham

- Worked on a next-gen audio platform, enabling users to manage setups across various locations within seconds
- Improved reliability by **30%** by building features that enforced rules and initiated events based on various audio parameters, enhancing the logic engine for consistent device performance across **distributed systems** using **Go**
- Utilized Memberlist, GraphQL, and Erlang/OTP framework to develop scalable web services optimizing realtime audio data synchronization, reducing latency by 25% through effective concurrency and caching strategies

Fullstack Software Analyst

02/2022 - 08/2023

Deloitte

Hyderabad

- · Worked on an enterprise finance management platform, enabling users to track expenses and visualize budgets
- Increased stakeholder engagement by 22% by developing features such as real-time expense tracking and collaborative, multi-user data editing—like JIRA—using React, TypeScript, and PostgreSQL, with an intuitive UI
- Reduced processing time by **50%** by building Java-based GUI tools to automate four critical tasks and implementing **SQL** scripts that enabled users to run requirement-based jobs, significantly improving efficiency

Machine Learning Engineer, Intern

02/2021 - 06/2021

Blaze Automation

Hyderabad

- Worked on an elderly-care monitoring system, enhancing patient care through non-intrusive machine learning
- Partnered with a multidisciplinary team to develop a robust and scalable ML model in Python, achieving 86% accuracy in anomaly detection using **OpenTelemetry** data collected from proprietary in-home IoT devices
- Developed a proof of concept, resulting in a published research paper that highlighted the project's innovation

PROJECTS

MAZY AI | Python, Algorithms

April 2025

- Created an educational tool that helps novice programmers and AI students visualize complex search algorithms
- Built with Pygame to demonstrate pathfinding algorithms like A* on customizable maze dimensions and pace

HADI | Java, Swing September 2024

- Developed a desktop image editor to incorporate mathematical concepts and programming design paradigms
- Built with Java, packed with features like load, channel extraction, filters, compression, histogram generation

TECHNICAL SKILLS

Languages: Golang, Java, Python, TypeScript

Frameworks/Databases: Node.js/Next.js (MERN), PostgreSQL, MySQL, Redis (certified)
Libraries/Cloud: React.js, Redux.js, Azure (CosmosDB), AWS (EC2, RDS, Lambda)

Toolkits: REST/GraphQL APIs, Kafka, Docker, CI/CD, Pandas, PyTorch, TensorFlow, LLMs