

BINDU MADHAVI DOKALA

Bloomington, Indiana, USA

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EDUCATION

Indiana University Bloomington

August 2023 - May 2025

Master of Science in Computer Science (GPA: 3.83/4)

Indiana, USA

Coursework: Software Engineering, Applied Algorithms, Elements of AI, Machine Learning, Database Concepts

Gayatri Vidya Parishad College of Engineering

June 2017 - June 2021

Bachelor of Technology in Computer Science (GPA: 8.6/10)

Visakhapatnam, India

Coursework: Object Oriented Programming, Operating Systems, Computer Networks, Web Technologies, SQL

SKILLS

Languages: Java, Python, C++, C, Go, JavaScript, HTML, CSS, TypeScript, SQL

Front-end Technologies: React, Angular, Bootstrap, Thymeleaf, Junit, Jquery

Back-end and Databases: Spring Boot, Spring MVC, Kotlin, Django, Node, REST API, PostgreSQL, MySQL, Apache

Software: Kubernetes, Azure, Docker, Git, Jenkins, NPM, Jira, Bitbucket, Postman, IntelliJ, VS Code, STS, Jupyter

Miscellaneous: Data Structures, ML, AI, AWS, DBMS, Front-end and Backend development, DevOps, Linux, Agile, SDLC

EXPERIENCE

Software Engineer

January 2022 - July 2023

Bosch Global Software Technologies

Coimbatore, India

- Collaborated with 10 developers to build the "**Bosch Rexroth**" web app, accessible in 96 languages, contributing to the development of key features including secure login, search, notifications, cart, payments, and profiles.
- Developed scalable microservices and RESTful APIs using containerization, processing millions of concurrent requests with a 40% improvement in response time and a 25% uplift in performance.
- Spearheaded the migration from Elasticsearch to MongoDB for Content-as-a-Service, reducing infrastructure costs by 25% and increasing content retrieval speeds by 40%.
- Implemented a caching layer, minimizing database queries by 50% and halving page load times through lazy loading and code splitting.
- Managed Spring Microservices on Azure with Kubernetes, achieving 99.9% uptime and minimizing issue resolution times by half using ELK logs.

Programmer Analyst Trainee

October 2021 - December 2021

Cognizant Technology Solutions

Chennai, India

- Partnered with 8 developers to implement an e-commerce website, elevating user engagement by 20% through improved performance and functionality.
- Led the strategic upgrade of the transaction processing system, optimizing architecture and workflow to achieve a 40% increase in throughput and a 20% reduction in processing time.

PROJECTS

Concert Ticket Booking System ([website](#)) | React, Django, PostgreSQL

- Created a concert ticket booking system featuring secure login, search, booking, payment, and user profiles, resulting in a 100% enhancement in ticket booking efficiency.
- Engineered a business management portal and chat support, resulting in a 30% increase in workflow efficiency and streamlining of operations.

Caring Plates | Java, Spring Boot

- Designed a web application using Java and Spring Boot that connects restaurants with surplus food to NGOs and individuals to facilitate food donation and reduce wastage. Enabled real-time listing and claiming of food items, reducing food wastage by 40%.

Visual Media Captioning | Computer vision, Deep Learning, NLP, Python

- Designed a system utilizing a Seq2Seq model with LSTM to generate captions for input images and videos, enhancing media description accuracy by 90%.
- Trained the model on a dataset of 2,000 videos and 120,000 sentences, achieving a BLEU score of 0.86 for high accuracy in description generation.