

MOHIT SAI GUTHA

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EDUCATION

Boston University | Boston, USA | GPA: 3.55/4.00

Master of Science in Computer Science

Sep 2023 - Jan 2025

Relevant Coursework: Graduate Algorithms, Object Oriented Software Principles, Data Science, Database Systems

PES University | Bangalore, India | GPA: 7.73/10.00

Bachelor of Technology, Computer Science and Engineering

Aug 2018 - May 2022

Recipient of the DAC Scholarship for semesters 4 through 8 for achieving distinction

Relevant Coursework: Data Structures, Operating Systems, Web Development, Machine Learning

WORK EXPERIENCE

Genpact | Bangalore, India

Oct 2022 - Jun 2023

Software Development Consultant

- Collaborated with a team of 12 to plan and implement the client's transition from mainframe and monolithic architecture to AWS cloud and microservices, driving modernization and efficiency
- Developed Java Spring Boot microservices for payment advice services, contributing to three consecutive releases, and achieving a 70% reduction in the client's operational costs

Johnson Controls Inc | Bangalore, India

Jan 2022 - Jun 2022

Network Engineering Intern

- Designed a web application with embedded Power BI data visualizations and analytics to streamline tracking of company's transition from legacy WAN to SD-WAN, increasing efficiency by 20%
- Led a team of 6 interns from across the globe in the Future Leaders Internship Program, developing innovative alternatives to public green grants and loans, and reached the finals of the Sustainable Innovation Competition

PROJECTS

Remodeling and Unit Loss Analysis

Jan 2024 - May 2024

- Conducted a data analytics project for the Boston Government, analyzing building permits and property assessments to evaluate the impact of remodeling and conversions on housing unit availability, providing actionable insights
- Developed an advanced machine learning algorithm to calculate optimal rent caps and ideal housing unit numbers, projecting immediate benefits for 11.8% of Boston's population and potentially halving housing unit loss rate

Object-Oriented Board Game Infrastructure

Sep 2023 - Dec 2023

- Built a terminal based object-oriented board game infrastructure in Java with 6 board games, including role playing multiplayer capabilities while utilizing Factory and Singleton design patterns to emphasize scalability and reusability
- Simulated a real-world software development process using the waterfall SDLC model, implementing version control using Git, conducting code reviews, incorporating unit testing and creating detailed design documentation

SimpleDB

Sep 2024 - Dec 2024

- Designed and implemented a custom RDBMS in C++ with essential features including a SQL query parser, query optimizer, and ACID-compliant transaction management using a least recently used eviction policy
- Developed query execution and optimization for join order selection, dynamic histogram-based statistics, and physical operators like hash joins, nested-loop joins, and aggregations for efficient data retrieval

Real time crime detection from live CCTV footage

Jan 2022 - Dec 2022

- Spearheaded the development of a real-time video surveillance system using state-of-the-art video recognition model, SlowFast Networks, integrating a Flask-based user interface, achieving 93.33% anomaly detection accuracy
- Published and presented a paper in the International Conference of Recent Innovations in Research and Development, receiving the Best Presentation Award

SKILLS

Technical: Python, Java, C++, SQL, OOPs, Algorithms, Data Structures, DBMS, Networks, Operating Systems

Tools and Frameworks: Microsoft Office Suite, Pandas, Excel, Power BI, Docker, AWS, Google Cloud

Additional Skills: Git, Jira, Solidity, Shell Scripting, Spark