

# MOHIT SAI GUTHA

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## EDUCATION

**Boston University** | Boston, USA | GPA: 3.6/4.0

Master of Science in Computer Science

Sept 2023 – Jan 2025

Fall'23 Coursework: Graduate Algorithms, Data Engineering @ Scale, Data Science, Database Systems

**PES University** | Bangalore, India | GPA: 7.7/10.0

Bachelor of Technology, Computer Science and Engineering

Aug 2018 – May 2022

Relevant Coursework: Machine Learning, Web Development, Data Structures, Network Engineering

## 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 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

Google Cloud-Based Web Application for Data Processing and Access Control

Sept 2024 - Dec 2024

- Deployed and scaled a containerized web application using Google Kubernetes Engine (GKE), ensuring seamless traffic distribution, high availability, and fault tolerance for handling increased traffic loads efficiently
- Integrated Cloud SQL to store and manage request logs in a normalized database structure, while using Apache Beam and Dataflow for large-scale analysis of cloud-stored files, improving data processing and reporting capabilities

Epidemic Engine Data Pipeline

Jan 2024 - May 2024

- Implemented an end-to-end, dockerized data pipeline, enabling real-time processing of over 1 million health event records, with batch analysis using Hadoop, MapReduce, and PySpark along with scalable data ingestion using Kafka
- Deployed a Spark ML model using Gradient Boosting Trees within Docker for real-time retraining from Kafka-streamed data, achieving a 99.8% accuracy rate and a 99.7% F1-score for health risk predictions

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, R, Java, C, OOPs, DBMS, Networks, Algorithms, Data Structures, Machine Learning

*Tools and Frameworks:* Microsoft Office Suite, Pandas, Docker, Google Cloud, PostgreSQL, Power BI, Tableau

*Certifications:* Advanced SQL using Big Query (Kaggle), Data Visualization (Kaggle)

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