

# SAI SATISH MASINA

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## TECHNICAL SKILLS

**Programming Languages:** Java, Python, Go, C++, C#, SQL, JavaScript, TypeScript  
**Frontend:** React, Next.js, Redux, HTML, CSS  
**Backend:** Node.js, Django, Spring Boot, REST APIs, gRPC, Microservices  
**Databases:** PostgreSQL, MySQL, MongoDB, Redis  
**Cloud & DevOps:** AWS (EC2, S3, Lambda), Docker, Kubernetes, Terraform, CI/CD (Jenkins, GitHub Actions)  
**AI & Data:** TensorFlow, Scikit-learn, LSTM, ETL Pipelines, Apache Airflow  
**Other:** Agile (Scrum, Kanban), System Design, Load Balancing, Debugging

## EXPERIENCE

**Teaching Assistant - C# and Java Courses at University of Houston - Clear Lake** *Jan 2023 - Dec 2023*

Skills Used: Java, C#, Teaching

- Collaborated with students and professors to improve learning outcomes by 30%.
- Evaluated 200+ coding projects and enhanced algorithmic problem-solving.
- Conducted weekly office hours for 50+ students.
- Graded 500+ assignments and exams with consistent evaluation.
- Developed sample code and materials for Java and C#.

**Content Strategist at Upgrad** *Apr 2022 - Jul 2022*

Skills Used: Recommendation Systems, Analytics, Strategy

- Built a course recommendation system, improving engagement by 50%.
- Expanded the course catalog and gained recognition via university partners.
- Analyzed user feedback from 10,000+ users to enhance content.
- Collaborated with SMEs to ensure industry relevance.
- Improved course visibility and conversion rates by 25%.

## PROJECTS

**URL Shortener** (Python, FastAPI, MySQL, Redis, Docker)

- Built a service handling 500K+ daily requests with 99.9% uptime.
- Optimized Redis caching to cut DB queries by 85%.
- Deployed microservices via Docker & Kubernetes.

**Air Quality Prediction using LSTM** (Python, TensorFlow, Flask, Next.js)

- LSTM model with 92% accuracy for real-time air quality forecasting.
- Dashboard reduced manual effort by 60%.
- Prediction latency cut by 40%.

**OLAP Cube Deployment** (Python, SQL Server, MDX)

- Created ETL pipelines for 1M+ records/day.
- Enhanced OLAP query speed by 40%.
- Improved scalability, reducing storage needs by 25%.

### **Full Stack E-Learning Platform** (Java, Hibernate, JavaFX, HTML, CSS, JavaScript, MySQL)

- Developed a secure learning platform with role-based access control.
- Improved MySQL indexing and API query efficiency by 50%.

### **Real-time Chat App** (Node.js, WebSockets, MongoDB, Next.js)

- Chat platform with 5K+ concurrent users and 99.8% uptime.
- WebSocket and DB optimization reduced latency by 30%.

### **Stock Market Data Pipeline** (Python, PostgreSQL, Apache Airflow)

- Real-time ETL for stock data of 50+ companies.
- Reduced data lag by 45% using optimized Airflow DAGs.

### **Fake News Classifier** (Python, TensorFlow, NLP, Flask, React, Next.js)

- Built LSTM-powered classifier with 90%+ accuracy.
- Sub-second real-time classification with scalable API.

### **DevConnect - Developer Networking Platform** (React.js, Node.js, MongoDB, JWT, Next.js)

- Platform with 3K+ users and 20K+ interactions.
- JWT-based RBAC reduced unauthorized access by 98%.
- Optimized caching and schema for 40% faster responses.

## EDUCATION

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### **Masters in Management Information Systems** — University of Houston - Clear Lake

GPA: 3.82

Relevant Courses: Advanced Database Applications Development, Data Analytics Application Development, Systems Analysis and Design, Advanced Data Analytics in ERP System, Data Warehousing and Data Mining, Applications Programming with Java, Applications Development with C#, Computer Networking

## CERTIFICATIONS

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Operating Systems and You - Becoming a Power User

System Administration and IT Infrastructure Services

Technical Support Fundamentals

The Bits and Bytes of Computer Networking

Using Python to Access Web Data

Python Data Structures

Programming for Everybody (Getting Started with Python)

Data Analysis and Representation, Selection and Iteration

Algorithms, Data Collection, and Starting to Code