# SAI SATISH MASINA

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#### **SUMMARY**

Results-driven software engineer with experience in Agile development methodologies and proficiency in multiple programming languages. Skilled in designing, building, and deploying scalable applications using cloud platforms and DevOps tools. Proven ability to analyze problems, create coding solutions, and collaborate with teams to deliver high-quality software products. Dedicated to leveraging technical expertise to drive business growth and innovation.

## TECHNICAL SKILLS

Programming Languages: Node.js, JavaScript, Python, Go, Java, C#, C++, TypeScript, .NET

Cloud Platforms: Azure, Google Cloud, IBM Cloud, AWS, Cloud Foundry, PaaS, IaaS

Databases: Cassandra, Redis, MongoDB, MySQL, PostgreSQL, Oracle, NoSQL, Distributed SQL, SQL, Store Proc

Data Analytics: Power BI, Power BI Analytics, Tableau, Cognos, Data Bricks, Scikit-learn, TensorFlow, LSTM, ETL

Pipelines, Data Pipeline, Data Flow

**Devops And Deployment:** DevOps, Deployment automation, Kubernetes, Docker, Ansible, Puppet, Chef, Terraform, CI/CD pipelines, Jenkins, GitHub Actions, GIT workflows, Repo management

**Software Development:** Front-end design patterns, Software Development Life Cycle, Agile development methodologies, Agile, Scrum, Kanban, System Design, Microservices architecture, Change Data Capture (CDC), Debugging, Load Balancing, Integration workflow management tools, REST APIs, gRPC, Apache Airflow

#### **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.
- Utilized Agile methodologies for development and deployment

- Implemented CI/CD pipelines for cloud deployments
- Improved system performance with microservices architecture

## 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%.
- Reduced manual effort by 60% with automated dashboard
- Cut prediction latency by 40% with optimized code
- Utilized Agile methodologies for software development
- Implemented CI/CD pipelines with Docker and Kubernetes
- Built scalable applications with Java and Node/Typescript

#### **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%.
- Utilized Agile methodologies for development
- Implemented automation using DevOps tools
- Optimized database performance with SQL

## 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%.
- Utilized Agile methodologies for software development and testing
- Implemented automation using DevOps tools and CI/CD pipelines
- Enhanced application security with microservices architecture
- Optimized database performance with distributed SQL design

#### 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%.
- Optimized chat platform for 5K+ users with 99.8% uptime
- Reduced latency by 30% using WebSocket and DB optimization
- Utilized Agile methodologies for development and deployment
- Implemented CI/CD pipelines with containerization using Docker
- Improved performance with microservices architecture and Kubernetes
- Enhanced user experience with scalable and high-traffic services

## 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.
- Utilized Agile methodologies for software development
- Implemented CI/CD pipelines with Docker and Kubernetes
- Built scalable services with Node/Typescript and React
- Optimized data workflows with Azure and SQL

#### 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.
- Deployed scalable API for sub-second real-time classification

- Utilized Agile methodologies for software development
- Implemented CI/CD pipelines with Docker and Kubernetes
- Developed solutions with Java and Python programming
- Created coding fixes for moderate issues with 90% success rate

## 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.
- Implemented JWT-based RBAC, reducing unauthorized access by 98%
- Utilized Agile methodologies for development and testing
- Deployed automation using DevOps tools and CI/CD pipelines
- Improved performance with microservices architecture and Kubernetes

# **EDUCATION**

## 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**

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