amitheshsathish@gmail.com +1-319-936-9922

SKILLS

- Languages: Python, Java, C++, C, SQL, HTML, Haskell, JavaScript, React.
- Technologies: AWS, Azure, GCP, REST APIs, Git, LLM/LMM serving infrastructure, LLM/LMM evaluation framework, Model training Framework, Deep Learning Frameworks (PyTorch, TensorFlow, Caffe), Apache Spark, scikit-learn.

EDUCATION

• The University of Iowa

Iowa City, IA

Bachelor of Science in Computer Science; GPA: 3.3

 $Aug. \ 2020 - June \ 2025$

 Coursework: Database Systems, Computer Organization, Intro to Networks, Data Structures & Algorithms, Linear Algebra, Numerical Methods, Theory of Computation, Probability and Statistics, Software Development.

• The University of Iowa

Iowa City, IA

Entrepreneurial Management Certificate; GPA: 3.4

Jan. 2021 - June 2025

CERTIFICATIONS

• Edureka Data Science and AI, Prompt Engineering - DeepLearning.AI, AWS Cloud Practitioner

EXPERIENCE

• Warner Music Group

New York, NYC

Software Engineer Intern

Nov. 2023 - Mar. 2024

- Developed machine learning models to predict album and single rankings by analyzing over 100TB of data.
- Spearheaded automation of ad targeting strategies, achieving a 20% reduction in customer acquisition costs
- Improved ad targeting and artist campaigns using Python, scikit-learn, and machine learning algorithms, including Linear Regression.
- Researched and experimented with advanced machine learning techniques (e.g., Gradient Boosting, Random Forest, XGBoost) to further improve predictive accuracy.
- Built and optimized data pipelines using tools like Apache Spark and Pandas, reducing data processing time by 40%.
- Optimized MySQL queries by using **Stored Procedures**, improving database response time by **50**%, enhancing system efficiency.

• Quantum Leap Technologies

New York, NYC

Software Engineer Intern

Dec. 2024 - present

- Engineered and deployed scalable backend microservices using **Python** (**FastAPI**), **Java** (**Spring Boot**), and **C++**, enabling seamless integration with third-party **REST APIs** that reduced partner onboarding time by 30%.
- Provisioned and optimized cloud resources on AWS (EC2, Lambda) improved system scalability to handle 100k+
 concurrent users, cutting latency by 20%.
- Designed and implemented ETL pipelines using **Apache Spark**, **SQL**, and **PostgreSQ**, reducing daily batch data processing time from **5 hours** to **3 hours** and improving data reliability by **15**%.
- Developed and refactored front-end components in **React** and **JavaScript**, leading to a **25**% improvement in page load speeds and **15**% higher user engagement on the web platform.
- Collaborated in a cross-functional Agile team of 8 (developers, designers, QA) by participating in sprint planning, daily stand-ups, and retrospectives, which improved sprint velocity by 20% and ensured on-time delivery of key product features.

PROJECTS

Disaster Assistance Management System (DAMS)

- * Built a full-stack disaster assistance system with React.js, SQL, and a Python (FastAPI/Flask/Django) API for authentication, resource allocation, and user interactions.
- * Designed interactive dashboards and reports using **React Chart.js/D3.js** for data visualization and disaster response insights.
- * Set up CI/CD pipelines using **GitLab and GitHub** with automated tests and code quality checks via **SonarQube** and **Pytest** for backend logic.

- Health Care Database Model

- * Built a role-based access control (RBAC) web interface using **JavaScript**, **HTML**, **and Python Flask**, securing data access for patients, doctors, and administrators.
- * Contributed to a distributed healthcare system using **AGILE methodologies** by integrating electronic records, insurance, and appointments with a normalized **MySQL database**.
- * implemented **stored procedures and parameterized SQL** queries for billing calculations, insurance copay/deductible resolution, and lab test updates to enhance data integrity.

- SanjiBOT Cooking AI Chat Bot

- * Created a personal chatbot using **GPT-3.5 Turbo API and Python** to generate step-by-step recipes based on ingredients and time, with optional translation into any language.
- * Engineered a multilingual translation system, enabling recipe generation in 1000+ languages, broadening accessibility for global users.
- * Built and visualized the chatbot using **React.js and HTML**, providing a user-friendly interface for interaction.