

# Sai Harshitha Sivalingala

**SKILLS**     in harshithasivalingala     |     ✉ harshithasivalingala22@gmail.com     |     🌐 HarshithaSivalingala

Java | JavaScript | C++ | HTML | CSS | Sass | SQL | Python | TypeScript | NoSQL  
React JS | Node JS | Redux | Express | MongoDB | Git | AWS | Docker | Firebase | Jenkins | Figma | Unity | CI/CD  
Front-end | Back-end | Full-stack | Micro Services | User Experience | Mixed Reality | OOPs | AI | Machine Learning | DevOps

## EXPERIENCE

**Research Assistant** - Iowa State University, United States 08/2024 — Present

- Implemented continuous authentication mechanisms for Mixed Reality systems, enabling secure multi-user access on devices designed for single-user use.
- Enabled real-time transitions between users, maintaining an uninterrupted experience while ensuring secure identity verification.
- Improved device usability in public safety and healthcare sectors by allowing secure and accountable access to shared Mixed Reality devices, minimizing data leakage risks, and reducing downtime for authorized users.
- Research outcomes support the development of scalable identity frameworks for shared Extended Reality environments.

**Software Engineering Internship** - EPAM Systems, Hyderabad, India 07/2022 — 02/2023

- Gained in-depth expertise in AWS, Docker, Jenkins, and cloud computing, building real-world, scalable solutions.
- Automated development workflows and CI/CD pipelines, reducing manual deployment errors and improving release speed by 40%.
- Applied understanding of the Software Development Lifecycle (SDLC) to implement DevOps practices that improved code quality, deployment speed, and team collaboration across each stage.
- Demonstrated the ability to translate DevOps concepts into practical solutions, contributing to operational efficiency and continuous delivery of high-quality software.

**Full-Stack Developer (Intern)** - StudyOwl Education Pvt Ltd, Bengaluru, India 06/2021 — 08/2021

- Developed and maintained a full-stack web application for a student learning platform using the MERN stack (MongoDB, Express.js, React, Node.js).
- Implemented role-based access and interactive dashboards, improving platform security and usability across diverse user groups.
- Integrated RESTful APIs, ensuring reliable data flow across the system, and enhancing overall platform performance.
- Collaborated with designers and educators to improve UI/UX, leading to a 20% increase in student engagement.
- Mentored 10+ students in the MERN stack, providing hands-on guidance with coding, debugging, and building robust applications, helping them deliver projects on time.

## EDUCATION

**Master of Computer Science** - Iowa State University, United States, *GPA : 3.61* 01/2024 — 12/2025

**Bachelor of Information Technology** - JNTU Hyderabad, India, *First class with Distinction* 07/2019 — 08/2023

## PROJECTS

**ChargeShare: Peer-to-Peer EV Charging Network** 12/2024 — Present

- Implementing a platform that connects EV owners with available charging stations through location-based discovery and real-time availability tracking.
- The system incorporates a dynamic booking mechanism, secure payment processing, and user feedback features to ensure a seamless and reliable charging experience.
- Exploring AI-powered demand prediction and adaptive pricing models to optimize station availability and cost efficiency.

**Tech Stack:** React.js, Node.js, PostgreSQL, Git, AI

**Real-Time Exercise Monitoring Application** 02/2024 — 05/2024

- A real-time exercise recognition and repetition counting system using BlazePose and MediaPipe, enhanced with LSTM and bidirectional LSTM with attention mechanisms for improved accuracy.
- Evaluated on a dataset of six common exercises, achieving competitive performance for fitness monitoring.

**Tech Stack:** MediaPipe BlazePose, TensorFlow, OpenCV-Python, Conda, Machine Learning

**School Shop** 11/2022 — 01/2023

- Developed a full-stack e-commerce platform enabling students from the same institute to buy and sell books, electronics, and stationery, with distinct user and admin views, product management, and a complete cart and purchase system.
- Created a responsive UI using React to provide an intuitive and user-friendly experience across devices.
- Focused on data consistency and real-time updates with MongoDB for product and order management.

**Tech Stack:** MERN Stack, Redux, JavaScript

## ACHIEVEMENTS

**Scholar at Women In Software Engineering (WISE):** Led the top-ranked project, 'Human Pose Estimation for Fitness Application,' in the TalentSprint WISE program, managing a team of 4 and demonstrating technical expertise and leadership amid the COVID-19 pandemic.

**Google's 30 Days of Cloud Challenge:** Completed Google's 30 Days Cloud Challenge Engineering Track, gaining hands-on experience with advanced cloud technologies and expertise in scalable infrastructure management and deployment strategies.