Vamsidhar Reddy

Bachelor of Technology
Computer Science and Engineering
Kalasalingam Academy of Research and Education,
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EDUCATION

Kalasalingam Academy of Research and Education *CGPA: 8.16*
B.Tech in Computer Science and Engineering Sep 2022 – May 2026

INTERNSHIPS

Infosys Springboard *Sep 2025 – Nov 2025*
Backend Development Intern

- Developed end-to-end backend modules using Spring Boot, implementing JWT authentication, REST APIs, WebSocket communication, and MySQL integration; Enhanced API reliability by 30%.
- Enhanced the React–Spring Boot workflow by integrating 15+ secure API endpoints, improving data synchronization and reducing UI–backend communication issues by 40%.
- Conducted comprehensive testing with Postman, JUnit, and 50+ manual test cases, identifying and resolving 25+ defects to ensure a 98% stable deployment rate.

PROJECTS

Student Management System
Tools: Core Java, Servlets, JDBC, MySQL, HTML, CSS [O]

- Developed a full-stack Student Management System supporting CRUD operations for 500+ student records, reducing manual entry effort by 60%.
- Designed responsive JSP-based interfaces that Optimized task completion time for faculty by 35% and enhanced UI navigation consistency.
- Optimized SQL queries and backend logic, achieving a 25% reduction in data retrieval time and ensuring secure, error-free transactions.

Real-Time Face Emotion Recognition
Tools: Python, OpenCV, DeepFace, Deep Learning (CNN) [O]

- Built a real-time facial emotion recognition pipeline processing 20–25 FPS, enabling smooth and accurate expression detection from live webcam streams.
- Leveraged DeepFace's pre-trained CNN models to classify 5+ emotion categories with over 95% inference accuracy on controlled test samples.
- Implemented OpenCV visualization overlays that Boosted on-screen interpretability by 40%, ensuring clear and instant emotion feedback.

SKILLS

- **Languages:** Java, Python, C, SQL
- **Web & Backend:** HTML, CSS, JavaScript, React.js, Spring Boot, REST APIs, WebSockets
- **Databases & Tools:** MySQL, MongoDB, Git, GitHub, Postman, VS Code, IntelliJ
- **Soft Skills:** Mentoring, Leading & Organizing, Interpersonal Communication, Motivating & Encouraging

CERTIFICATIONS

- **Udemy** Java Programming Certification
- **CodeChef** Database Management Systems

PUBLICATIONS

- **HerbAI: A Deep Learning-Based Model for Real-Time Identification and Documentation of Medicinal Plants (2025)** Published research focusing on offline plant recognition using a hybrid CNN–ViT architecture. Tech: Flutter, TensorFlow Lite, Python, Dart, Android, CNN, Vision Transformers.

- **Automated Vending Machine with Reward Mechanism for Plastic Bottle Management (2025)** Published paper presenting an IoT-based smart vending system for plastic detection and recycling automation. Tech: Arduino, Servo Motors, Capacitive/Inductive Sensors, Embedded C, IoT Hardware.

ACHIEVEMENTS

- **IBM Poster Presentation** Secured 3rd Prize for showcasing innovative technological solutions
- **Extra Curricular Activities:** Awarded in various state-level and zonal competitions, including Elocution, Mock Parliament, Science Fairs, and Sports, during school.