

Vaishnavi Tirumala

Hyderabad, Telangana

Email: vaishnavitirumala.33@gmail.com | **Ph:** +91 7993197919
<https://www.linkedin.com/in/vaishnavi-tirumala-157831251/> | <https://github.com/vaishnavi0604>

PROFESSIONAL SUMMARY

Computer Science graduate skilled in **Java**, **OOPs**, **Data Structures**, and **SDLC**. Familiar with **Agile development**, **RESTful APIs**, and **cloud** technologies. Passionate about **problem-solving** and eager to apply technical skills to real-world software development.

EDUCATION

Bachelor Of Technology (BTech) – CSE

KESHAV MEMORIAL INSTITUTE OF TECHNOLOGY | Hyderabad, India

Nov 2020-May 2024

- **GPA:** 8.0 (Relevant **Coursework:** Data Structures and Algorithms, OOPs, Database Management Systems).

TECHNICAL SKILLS

Languages: Java (OOPs & Multithreading), Python, C++ (Basics), SQL, Node.js.

Frameworks: Spring Boot (Basics).

API Development and Testing: Postman.

Cloud Services and Databases: Hybrid-Cloud, AWS. (EC2, S3, Lambda, API Gateway), Microsoft Azure, MySQL.

Containers and Version Control: Docker, Git, GitHub, VSCode.

Software Development & Methodologies: Software Development Life Cycle (SDLC), Agile.

Soft Skills: Adaptability, Communication Skills, Problem Solving skills, Interpersonal Skills, Analytical Skills.

PROJECTS

1. Inventory Management System

- Developed a cloud-based inventory management system using **Python** and **YOLOv5**.
- Integrated **Roboflow** for efficient image preprocessing and dataset augmentation, improving model generalization.
- Built an interactive web interface using **Streamlit** to enable real-time inventory monitoring and user interaction.
- **Tools:** Python, YOLOV5, Roboflow, Streamlit, Git.

[Live Link](#) | [GitHub Link](#)

2. Task Management

- Designed and implemented a **RESTful API**-driven task management system using **Java** and **Spring Boot** following **Agile SDLC** principles.
- Followed **SDLC** best practices and Agile methodology for development and testing.
- Integrated **MySQL** for persistent data storage and optimized API responses for performance.
- **Tools:** Java, Spring Boot, MySQL, Git, RESTful APIs.

[GitHub Link](#)

3. Image Encryption Using AES Algorithm

- Developed an **AES-256** encryption framework for cloud-based image security.
- Integrated **XOR-Cipher** for additional cryptographic security.
- Built a **React.js** user interface for an interactive encryption experience.
- **Tools:** AES Algorithm, React.js, GitHub.

[GitHub Link](#)

CERTIFICATIONS

Python For Data Science -NPTEL: Learned Python core concepts and implementation in Data Science.

Introduction to Agile Development and Scrum - Coursera : Gained foundational knowledge of Agile methodologies and Scrum framework.

ACHIEVEMENTS & EXTRACURRICULAR ACTIVITIES

- Active member of National Service Scheme (NSS), contributing to community-driven problem-solving initiatives.
- Volunteer Aakarshan Drawing Club (KMIT).