



Zinnith VMJ

Software Engineering
Professional

CONTACT INFORMATION

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in - [Zinnith Vmj](#)

Nagercoil, Tamil Nadu, India

SKILLS

Full-Stack Web Development

Web Scraping

Data Analysis

API Integration

Automation and Process

Improvement

Infrastructure as a Service (IaaS)

Troubleshooting and Debugging

Leadership and Team Management

Agile Methodologies

Object-Oriented Programming

APIs and RESTful Services

Data Structures and Algorithms

Software Development Life Cycle

DevOps Basics

UI/UX Fundamentals

TECHNICAL SKILLS

Programming Languages: Python, Java

Cloud Computing: AWS

Front-End Development: React.js, Angular, HTML, CSS, JavaScript

Database Management: MySQL

Back-End Development: Node.js, PHP

Development: Jupyter Notebook

Productivity: Microsoft Office Suite (Word, Excel, PowerPoint, Outlook)

EDUCATION

Bachelor of Engineering (B.E.) in Computer Science 2021 – 2025
Sathyabama Institute of Science and Technology

SUMMARY

- High-caliber Entry-Level Software Engineering Professional with hands-on experience in full-stack web application development, cloud deployment, and data analysis.
- Proficient in designing full-stack solutions with a focus on scalability, security, and responsiveness across all development layers.
- Adept at creating dynamic, user-friendly interfaces, delivering responsive designs that enhance user engagement and accessibility across devices.
- Well-versed in enhancing application performance by refining algorithms and implementing scalable architectures, achieving faster load times and improved reliability.
- Competent in automating workflows and improving processes using advanced tools and techniques, reducing manual efforts and boosting operational efficiency..

PROJECTS

AGRO-ZAP:

- Developed a MERN stack Application for Bio-control for Farmers which includes advance CNN model for image classification model for Pest Identification and LLM model which is trained according to GIS analysis that enhance the Precise agricultural farming in AI & lot.

NBAIR Bio-Control LLM Model:

- Developed a Bio-Control LLM Model for ICAR in which we used Pinecone vector database for Knowledge based learning which includes language chain, Hugging face model for data embedding. Llama model for responsive Knowledge based agent and Twilio api is used for mobile alert.

RPI Project for Satyabama University:

- Proposed a learning based solution for Satyabama Institute with the help of Raspberry Pie 4 in which helps in cost saving which was currently in Testing process with future implementation.
- In which we developed a file Sharing Application which works in offline which also AI based validation system with the help of Hugging Face and Vision Information Transformer.

Work management Web Application for Satyabama Institute:

- Developed for Ticket Rising work management Application for our Institute which helps in maintenance of Institute.
- Designed and maintained robust full-stack applications, leveraging React and JavaScript for dynamic front-end development, and Node.js with Express for back-end API integration, optimizing databases with MySQL to perform a responsive design.

Full-Stack Web Application Development

- Developed and deployed full-stack web applications, including a webview application for ICAR-NBAIR to build secure, scalable, and user-friendly solutions, adhering to government standards and modern web development practices.
- Designed and maintained robust full-stack applications, leveraging Jupyter Notebook for data analysis, React and JavaScript for dynamic front-end development, and Node.js with Express for back-end API integration, optimizing databases with MySQL and implementing responsive designs.

Application Deployment on AWS

- Orchestrated the deployment of a highly available static website on AWS S3, leveraging Infrastructure as a Service (IaaS) principles and CloudFront CDN to deliver low-latency content globally.
- Configured and optimized Route53 for DNS routing and custom domain integration, ensuring secure access through SSL/TLS encryption, enhancing website reliability by 25%.

Web Scraping for E-commerce Insights

- Devised a data extraction pipeline to scrape product and pricing insights from Amazon, utilizing web scraping frameworks such as BeautifulSoup and Selenium WebDriver for automation.
- Validated and transformed over 10,000 data points using ETL processes, delivering actionable insights through structured datasets optimized for downstream analytics.

Image Search Engine Application Using Java

- Constructed an intelligent image search engine using object detection and image matching algorithms, integrating Java for backend processing and MySQL for relational data storage.
- Refined system performance by 20% through algorithmic enhancements and implemented a responsive UI to elevate user engagement, adhering to full-stack development best practices.

ACHIEVEMENTS

National Hackathon Award: Secured **First** place in a National level hackathon under AI domine which was conducted by Birla Institute of Science and Technology Pilani , Hyderabad.

University Hackathon Award: Secured **First** place in a University level hackathon conducted during Techno Summit 2024, hosted by Sathyabama Institute of Science and Technology.

ICAR-2nd International Conference for Bio-Control: As I worked under the guidance of Dr.M. Pratheepa, Principal Scientist, me and my mam presented our research under the topic of "Predictors and Natural Enemy" at the ICAR 2nd International Conference on Bio-control. Our work focused on using a CNN model with IoT-based image data collection and processing to identify pests and their natural enemies for effective and sustainable bio-control methods (25 Feb 2025-28 Feb 2025)

Student Coordinator – PyWorld Workshop: Acted as a Student Coordinator for the "PyWorld" programming workshop organized by the Department of Computer Science and Engineering at Sathyabama Institute of Science and Technology (Oct 2022).

WORK EXPERIENCE

SOFTWARE INTENR IN BENX: Currently working as Software Developer Intern in BENX Solutions LLP in which we are currently working AI based Applications (June 2024-Current).

RESEARCH INTENR IN ICAR-NBAIR: Worked in “IOT-based pest prediction model “based Application for 3 months. Under the guidance of principle scientist Dr.M.Pratheepa in Hebbal Bangalore.(15 Oct 2024 -14 Jan 2025)

CERTIFICATIONS

Java Programming Certification
Sathyabama Institute of Science and Technology

Jul 2023 - Oct 2023

Diploma in Computer Application (DCA)
Computer Software College (CSC)

Oct 2018 - Apr 2019

Diploma in Video Production (DVP)
Computer Software College (CSC)

Mar 2019 - May 2019