

# Pavan KishoreVaddi

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## SUMMARY

**Full-Stack Software Engineer skilled in Java 11+, Python 3, Spring Boot, React, and microservice architectures. Proficient in Agile development, CI/CD (Jenkins, GitHub Actions), TDD, and cloud deployments (AWS / Azure / GCP). Strong focus on system design, application resiliency, security, and event-driven architecture. Certified in Azure AI, AWS Generative AI, Scrum, and Database Management.**

## TECHNICAL SKILLS

- **Languages:** Python, C, C#, JavaScript (ES6+), TypeScript, SQL , Java 11+, Python 3
- **Frameworks & Tools:** ASP.NET MVC, .NET Core, Spring Boot, Flask/FastAPI, Hibernate, Node.js, Express.js, React.js, Angular, Bootstrap
- **Databases:** SQL Server, MySQL, MongoDB (SQL/NoSQL)
- **DevOps/Cloud:** Jenkins, GitHub Actions, Azure, Docker, Kubernetes, Terraform, AWS EC2 / Lambda / S3, GCP Compute
- **Testing Tools:** JMeter, Selenium, Jest, Jasmine, Postman
- **Other Skills:** Systems Analysis & Design, Database Migration, Unit/Integration Testing, Debugging, Documentation, CI/CD, AI & Prompt Engineering
- **Practices & Concepts:** Agile (Scrum), Event-Driven Architecture, Continuous Integration / Delivery (CI/CD), Test-Driven Development (TDD), Secure Coding Practices, Application Resiliency & Monitoring

## EXPERIENCE

### O2- Hospitals and Health Care Minneapolis, MN

**June 2025 – Present Mobile Application Developer**

- Collaborating with cross-functional teams to design, develop, and maintain scalable and secure mobile applications in the healthcare domain.
- Implemented **event-driven services** and **Python/Java APIs** for real-time data synchronization between healthcare modules.
- Followed **Agile sprints and TDD**, writing unit and integration tests to improve code reliability and deployment confidence.
- Building responsive UIs and seamless API integrations using modern frameworks (React, Angular, Java, Python).
- Designed and deployed **scalable, resilient APIs** in **Java Spring Boot and Python FastAPI**, improving backend throughput by 30 %.
- Applied **TDD** and participated in **Agile ceremonies** to ensure code quality and predictable delivery.
- Implementing database solutions and backend services to ensure reliable performance and real-time data flow.
- Optimizing application security, performance, and scalability through continuous testing and monitoring.
- Contributing across the full SDLC (Agile/Scrum) including requirements analysis, coding, debugging, deployment, and post - release support.
- Designed and optimized AI-driven prompts to improve chatbot accuracy and enhance patient engagement workflows.
- Performed systems analysis and design in healthcare applications, gathering requirements from stakeholders and translating into technical solutions.
- Collaborated with cross-functional teams (UX, product managers, QA) to build AI-powered features with responsive UIs.
- Implemented and tested database migration strategies for healthcare datasets •      Created technical documentation for APIs, workflows, and system architecture.
- Delivered a mobile app feature that improved patient engagement and usability (reduced support queries )

### Eastern Illinois University

**Graduate Research Assistant**

**Jan 2024 - May 2025**

- Assisted faculty in advanced research on cloud computing, DevOps pipelines, and full stack development.
- Designed **scalable microservice architecture** using Java Spring Boot and Python FastAPI to simulate enterprise workflows.
- Implemented **CI/CD pipelines and cloud deployments (AWS/GCP)** to demonstrate application resiliency and continuous delivery.

- Developed **async Python APIs** and integrated **PostgreSQL data models** aligned with cloud-native best practices.
- Produced **design and architecture artifacts** documenting microservice interactions and data flows.
- Built scalable web applications to simulate SSO flows and experimented with AI/NLP prompts for identity verification and secure microservices.
- Conducted performance testing using JMeter and monitored logs using Splunk.
- Assisted in drafting research papers, running experiments, and validating systems using academic and industry benchmarks.
- Managed and structured datasets using SQL and NoSQL databases for machine learning research.
- Led study sessions and mentored undergraduate students in Java, web technologies, and cloud tools.
- Developed and documented prompt engineering best practices for research projects.
- Contributed to a collaborative lab environment following Agile methodology, maintaining sprint boards and documentation via JIRA.

**V4Infotec**

**Jan 2022 – Aug 2023**

**Client: Walmart |Role: Full Stack Developer**

- Designed and developed **scalable and resilient microservices** using **Java Spring Boot**; improved system performance and operational stability.
- Executed end-to-end software solutions including **design, development, testing, deployment, and maintenance**, aligning with SDLC standards.
- Gathered and analyzed data to build dashboards and visualizations supporting continuous improvement initiatives.
- Contributed to **architecture reviews, code quality metrics, and CI/CD pipelines**, ensuring secure and high-quality production releases.
- Followed **TDD and code review processes**, improving code coverage and reducing defects
- Supported the upgrade of legacy systems to Java 11, gaining hands-on experience with enhanced concurrency utilities to boost performance.
- Contributed to the design and maintenance of microservices, collaborating with senior developers and data teams to integrate APIs and cloud services. Worked with users and business teams to gather requirements, design solutions, and migrate legacy systems to modern platforms.
- Helped optimize and test RESTful APIs, and integrated AI-powered features into retail applications to improve user satisfaction. leveraging Postman for validation and JIRA for bug tracking and test case management.
- Worked with MySQL to build and query databases, supporting reporting and delivering actionable business insights.
- Partnered with teammates to implement unit testing frameworks and basic automation, improving reliability and reducing defects.
- Developed responsive UIs using ReactJS, HTML, and CSS, ensuring seamless integration with NodeJS-based back-end services.
- Assisted in migrating legacy front-end systems to ReactJS, resulting in better performance, usability, and maintainability.
- Integrated front-end applications with RESTful APIs to enable smooth data flow and real-time updates.
- Supported database migration from legacy MySQL to modern SQL-based systems, ensuring minimal downtime and data integrity.

**V4Infotec**

**Jan 2021 - Dec 2021**

**Front End Application Developer (Intern)**

**Role: Front End Application Developer**

- Led front-end development of dynamic and responsive web applications using Angular and React, with a strong focus on performance and user experience.
- Developed and maintained Node.js-based backend services to ensure smooth and efficient data communication across systems.
- Built reusable and modular UI components, integrating RESTful APIs to deliver real-time, interactive features.
- Conducted thorough testing using Jest, Jasmine, and Selenium to ensure reliability across different browsers and devices.
- Collaborated with DevOps teams to deploy and manage applications on AWS and Docker, streamlining CI/CD pipelines for faster and more reliable releases.

**V4Infotec**

**Oct 2020 - Dec 2020**

**Web Developer (Intern)**

- Built responsive web interfaces using HTML, CSS, and JavaScript.
- Converted UI/UX designs into functional front-end components.
- Collaborated with designers and back-end developers for smooth integration.
- Tested and debugged for cross-browser performance.

## PROJECTS

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## **SkillMatch AI (LLM & RAG Platform) | [github.com/vaddi2017/Jd-match-score](https://github.com/vaddi2017/Jd-match-score)**

Built a Retrieval-Augmented Generation system using **Python**, **LangChain**, **FastAPI**, **Milvus**, and **React** to match resumes and job descriptions → computed semantic match scores and missing skills with LLM-based explanations.

## **AI Chatbot | [github.com/vaddi2017/ai-chatbot](https://github.com/vaddi2017/ai-chatbot)**

Developed a context-aware chatbot using **OpenAI API + FastAPI**, integrated with **React** frontend and **Redis** cache for multi-session state management.

## **Text Summarizer | [github.com/vaddi2017/text-summarizer](https://github.com/vaddi2017/text-summarizer)**

Implemented extractive and abstractive summarization models in **Python (NLTK, Transformers)** to generate concise summaries of long documents.

## **Health Tracker App | [github.com/vaddi2017/Health-Tracker](https://github.com/vaddi2017/Health-Tracker)**

Created a cross-platform wellness tracker using **React Native, Firebase, and Node.js**, providing real-time progress dashboards and analytics.

## **Code-to-Diagram | [github.com/vaddi2017/code-to-diagram](https://github.com/vaddi2017/code-to-diagram)**

Built a tool that parses **Python/JavaScript source code** and auto-generates **UML diagrams** using Graphviz and LangChain for AI-assisted explanations.

## **Interactive Portfolio Website | [github.com/vaddi2017/portfolio](https://github.com/vaddi2017/portfolio)**

Designed and deployed a personal portfolio using **React + Tailwind + Framer Motion**, showcasing projects, publications, and AI skills in an animated UI.

## **ACADEMIC PROJECTS**

### **Patient Report Tracking App (Health Care)**

**Aug 2020 - Oct 2020**

#### **Gitam University India**

- Developed and implemented a mobile application empowering patients to track, manage, and access their medical reports securely.
- Implemented user-friendly interfaces with intuitive navigation, ensuring accessibility across a range of devices.
- Integrated backend services to handle secure data storage and retrieval, complying with HIPAA or relevant data protection standards.

### **Smart Bus Ticketing system**

**May 2020 - Jul 2020**

#### **Pantech eLearning**

- Oversaw project management, assigning tasks and managing deadlines for a cross-functional team.
- Developed a user-friendly mobile application with QR scanning, fare calculation, and secure payment features.
- Designed and maintained a robust admin web panel for fare reporting and database management.
- Ensured high-quality performance through rigorous testing and security analysis, enhancing user data protection.

## **PUBLICATIONS**

- *Vaddi Pavan Kishore, Dr. Vijay Kumar Kollati. Stress Prediction Based on Social Media (Reddit). International Research Journal of Modernization in Engineering, Technology and Science (IRJMETS), Volume 05, Issue 04, April 2023. ISSN: 2582-5208 | Impact Factor: 7.868 DOI: <https://doi.org/10.56726/IRJMETS35476>*

## **LICENSES & CERTIFICATIONS**

- Microsoft Azure AI Essentials Professional Certificate: Microsoft, July 2025
- Microsoft Azure AI Essentials: Workloads and Machine Learning on Azure: LinkedIn, July 2025
- Career Essentials in Generative AI by Microsoft : LinkedIn, July 2025
- Amazon Web Services (AWS) – No-code Machine Learning and Generative AI on AWS: August 2025
- Introduction and Programming with IoT Boards: Pohang University of Science and Technology, April 2023
- Requirements Gathering for Secure Software Development: University of Colorado, November 2021
- Database Management Essentials: University of Colorado, October 2021
- Programming with Cloud IoT Platforms: Pohang University of Science and Technology, April 2023
- Scrum: Advanced Professional Certificate: LinkedIn, July 2025
- Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects: Coursera, November 2022
- Basic Image Classification with TensorFlow: Coursera, October 2020
- Data Structures: UC San Diego Extended Studies, October 2020
- Design Thinking for Innovation: University of Virginia, October 2020

- Introduction to Artificial Intelligence (AI): IBM, October 2020
- Introduction to Web Design and Development: LinkedIn, July 2025

## **EDUCATION**

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Eastern Illinois University

Computer Technology and Management

Gitam University, Visakhapatnam, Andhra Pradesh, India

Bachelor of Technology, Computer Science and Engineering