# Vivek Gaddam

Albany, NY | +1 (518)-844-3684 | **▼** vgaddam@albany.edu | **in** LinkedIn | **Q** GitHub | Portfolio

### Summary

Full-stack Developer with 3+ years of experience in React.js, Java, and Drupal, proficient in AWS, CI/CD, and Docker. Developed 4+ scalable, secure web apps reducing load time by 50% and automated CI/CD pipelines, cutting rollback rates by 60%. Delivered AI/ML and IoT solutions improving system accuracy by up to 90%.

## EXPERIENCE

### Software Developer for WebNY

May 2024 - Present

New York State Office of Information Technology Services

Albany, NY

- Developed and maintained 10+ secure, WCAG-compliant Drupal websites using PHP, JavaScript, and Bootstrap.
- Optimized 50+ modules with custom hooks and caching, reducing vulnerabilities by 70%.
- Enhanced frontend UX with responsive Twig layouts and mega menus; performed code and visual reviews to ensure accessibility, consistency, and halved page load time.
- Automated CI/CD via **Jenkins** and **Docker** on Acquia, decreasing rollback rates by 60%.

Founder & CEO March 2022 – April 2023

EFORGE NexGen Innovations Pvt. Ltd.

Hyderabad, India

- Engineered AI/IoT solutions with Python, Firebase, and AWS, reducing decision latency by 35%.
- Created full-stack Android Studio apps with real-time analytics, improving client ops by 40%.
- Constructed scalable data infrastructure using cloud-based services (AWS, Azure) for processing large volumes of data, shortening report generation time by 40% and improving data accessibility.

Research Intern

January 2021 – March 2022

New Conference of Explanation Control Cont

NewGen Innovation Center, CVR College of Engineering

Hyderabad, India

- Configured ML models for smart irrigation, increasing water efficiency by 25%.
- $\bullet$  Published 3 papers and filed 3 patents on smart agriculture and urbanization prediction.
- "Machine Learning Perspective to Foster Accuracy & Prediction of Urbanization using Automatic Weather Station" philstat.org/1451
- "Smart Precision Agriculture using IoT Data Analytics" philstat.org/1450

#### PROJECTS

### PlanVoyage – Destination Recommendation Web App

- Developed a full-stack travel recommendation app using **Next.js**, **Express.js**, **MongoDB**, and Tailwind CSS with optimized **API** queries and indexed search, reducing latency by 40%.
- Implemented a personalized engine with JWT-based user identity and access system with RBAC and session control for personalized recommendation engine, category-based filtering, and responsive UI, boosting engagement by 45%, deployed on Vercel.

### AI based Smart Interview Preparation App (PrepSmart)

- Pioneered a **React.js** interview platform with **OpenAI**-driven feedback, using **TypeScript** and CSS, evaluating spoken and coded responses, resulting in 80% positive user feedback and a 60% completion rate.
- Integrated JWT-based RBAC, WebSocket-enabled live interviews, and AWS-hosted backend with CI/CD pipelines, ensuring 95% uptime and 70% boost in data privacy.

# E-Commerce Application

- Engineered a secure **Express.js** and MongoDB backend with JWT and **OAuth2**-based identity management, access control layers, and encrypted session storage for 1,000+ concurrent users
- Deployed 15+ microservices in **Azure Kubernetes** with **Docker**, **Terraform**-based CI/CD, and **Caddy** reverse proxy; implemented automated testing and Azure Blob Storage for media delivery.

### Smart Precision Farming Using IoT Data Analytics

- Designed an AI-powered precision farming system using **Python** and **Scikit-learn** to predict optimal crop resource allocation with 90% accuracy, reducing waste by 15%.
- Performed EDA with **Pandas/Matplotlib** to identify agro-patterns and trained **Machine Learning** models on IoT sensor data, improving irrigation automation accuracy by 30%.

# EDUCATION

### University At Albany, State University of New York

August 2023 - May 2025

 $Master\ of\ Science\ in\ Computer\ Science$ 

Albany, NY

### SKILLS

Languages & Frameworks: Java, Python, JavaScript, TypeScript, React.js, Node.js, Next.js, Spring Boot, .NET, Drupal, Twig, Tailwind, Bootstrap

Cloud & DevOps: AWS (EC2, S3, Lambda), Docker, Kubernetes, Jenkins, Terraform, Git, GitHub Actions, Azure (AKS, Blob)

Databases & APIs: PostgreSQL, MongoDB, DynamoDB, MySQL, RESTful APIs, RBAC, JWT

Tools & Practices: VS Code, JIRA, JUnit, Selenium, Agile, CI/CD, WCAG

#### CERTIFICATIONS

AWS Certified Developer – Associate – Amazon Web Services | Certificate Software Engineering Job Simulation – JPMorgan Chase & Co. | Certificate Web Developer Certificate – UDEMY | Certificate Java, Python, JavaScript Programming – HackerRank | Certificate Database Programming with SQL – Oracle | Certificate