Venkata Naga Sri Sai Pranavi Kolipaka

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SUMMARY

Detail-oriented Computer Science graduate with a strong foundation with practical experience through internships, assistantship, and projects in both Java Full-Stack Development and Data Science. Proficient in developing secure, scalable web applications and analyzing complex datasets to derive actionable insights. Skilled in technologies including Spring Boot, React, Python, SQL, and cloud platforms (Azure, AWS). Published researcher and experienced Graduate Teaching Assistant with excellent communication and teamwork skills. Passionate about delivering high-quality, impactful software solutions, committed to continuous learning, and driven by a proactive, result-oriented mindset.

EDUCATION

MS, Computer Science | Concentration in Artificial Intelligence
University of South Carolina, Columbia, SC

Bachelor's, Computer Science | Specialization in Data Science
Koneru Lakshmaiah Education Foundation, Guntur, India

GPA: 3.6/4.0

Aug 2023 – May 2025

GPA: 4.0/4.0

WORK EXPERIENCE

Graduate Teaching Assistant, University of South Carolina

Aug 2023 - May 2025

- Mentored and tutored a diverse class of 60+ undergraduate students in **HTML**, **CSS**, and **JavaScript**, fostering a strong foundation in web development principles.
- Designed and conducted interactive, hands-on lab sessions to reinforce theoretical concepts, improving overall class performance by 20% based on feedback and grades.
- Provided one-on-one technical support to students, assisting with debugging and troubleshooting over 100 codebases, which contributed to a significant reduction in assignment errors.
- Developed and shared best practices for responsive design, cross-browser compatibility, and efficient coding techniques, boosting students' confidence and coding efficiency.
- Created supplementary learning materials, including tutorials and walkthroughs, that enhanced learning outcomes and increased student engagement in labs and coursework.

Web Development Intern, Verzeo Edutech Private Limited

Nov 2022 - Jan 2023

Responsive Website Development

- Built a 3-page responsive website using ReactJS, CSS, and Bootstrap, reducing page load times by 30% and enhancing
 accessibility for over 95% of devices.
- Improved user engagement by designing an intuitive interface optimized for diverse audiences.

e-Approval System

- Automated student admission eligibility verification for over 500 applications, reducing manual intervention by 90%.
- Built a full-stack application using HTML, CSS, Servlets, and MySQL, improving approval speed by 50% and ensuring 90% accuracy in eligibility checks.

Deloitte Australia Data Analytics Job Simulation on Forage

August 2025

Applied data visualization and business analysis using Tableau and Excel to deliver actionable insights.

Data Science Intern, Yhills Edutech Private Limited

Feb 2023 - Mar 2023

- Built predictive and classification models (Linear & Logistic Regression) with 80%+ accuracy.
- Focused on data preprocessing, feature engineering, and evaluation.

PROJECTS

E-Commerce Microservices Application

E-Comm Microservices Project

Tech Stack: ReactJS, Spring Boot, Spring Cloud, Eureka, API Gateway, H2 Database, Docker

- Built a scalable e-commerce system with microservices for products, orders, and users, ensuring modularity and independent deployment.
- Implemented service discovery with Eureka and API Gateway for secure routing and load balancing.
- Developed product and order management features with persistent storage using H2, enabling seamless CRUD operations.
- Containerized services using **Docker** for **consistent deployment and scalability** across environments.

User Management Web Application (CRUD)

User Management Project

Tech Stack: ReactJS, Spring Boot, MySQL

- Built a responsive web app managing 1,000+ user records with CRUD functionalities.
- Optimized data retrieval, reducing access time by 40% and improving operational efficiency.

User Management System with Enhanced Security

User Management Security Project

Tech Stack: ReactJS, Spring Boot, Spring Security, JWT, MySQL

Designed a secure system to manage 500+ employee records with role-based access and authentication.

Improved data security by 95% and implemented admin/user dashboards for seamless role handling.

Weather Forecasting Application

Tech Stack: ReactJS, Node.js, Express, MongoDB, OpenWeather API

- Built a full-stack weather app with user authentication, geolocation, and weather history tracking.
- Implemented secure APIs and responsive UI to deliver real-time weather data with personalized search history.

Certificate Management Web App - Certaethon

Certaethon-frontend

Weather Forecasting Application

Tech Stack: HTML, CSS, Bootstrap, JavaScript, RESTful APIs, Azure Blob Storage, Azure Logic App, Azure Function App, Azure Form Recognizer

- Developed a responsive web app to manage and track certifications, enabling 200+ users to upload, modify, and view certificates securely.
- Integrated Azure Blob Storage and Form Recognizer OCR to automate certificate data extraction and storage, reducing manual entry by 80%.
- Designed an admin dashboard to monitor all user certifications and view annual adoption trends, improving administrative oversight and reporting accuracy.
- Leveraged Azure Logic Apps and Function Apps for backend automation, enhancing system efficiency and reliability.

Hotel Booking Data Analysis Project

Hotel Booking Project

Tech Stack: Python, Pandas, Matplotlib, Seaborn, Data Visualization, Data Analysis

- Analyzed hotel booking data from 100,000+ records to identify key trends and guest demographics.
- Developed **5+ visualizations** to examine booking distribution, highlighting Portugal, Great Britain, and France as top sources of guests.

COVID-19 Patient Pre-condition Data Analysis

Covid-19 Data Analysis

Tech Stack: Tableau, Data Visualization, Data Analysis

- Analyzed data from 500+ COVID-19 patients to identify key pre-existing conditions linked to critical outcomes.
- Developed 5+ interactive dashboards, highlighting correlations between 10+ preconditions and severe cases, supporting healthcare decision-making.

TECHNICAL SKILLS

- Programming Languages: C, Java, Python (Pandas, NumPy, Matplotlib, Scikit-Learn), R
- Front-End: HTML, CSS, JavaScript, React.JS, Angular, Bootstrap
- Back-End: SpringBoot, Servlets, JSP, Hibernate, Express.JS, Node.JS, REST APIs, SpringBoot Microservices
- Databases: MySQL, MongoDB, PostgreSQL
- Cloud: AWS, Azure
- Tools and Software: Eclipse, Visual Studio Code, Git and GitHub, Postman, Jira, Trello
- Relevant Courses: Data Structures and Algorithms, Software Engineering, Artificial Intelligence, Database System Design,
 Predictive Modeling

CERTIFICATIONS

- Certified Oracle Cloud Infrastructure Foundations Associate, Developer Associate, Autonomous Database Specialist.
- Certified Aviatrix Multi-Cloud Networking Associate Engineer.
- Certified Microsoft Azure Developer Associate.
- Certified in Cambridge English (ESOL) with a focus on ensuring effective communication of technical findings to diverse
 audience.
- Co-Author for the paper, "Performance of CNN for NIDS", published in NeuroQuantology Journal.
- Presented the paper, "Unsupervised Clustering Techniques", in SmartCom 2023 conference.