NANDIGAM AKSHAY

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Summary

Results-driven Software Engineer with expertise in **full-stack development, AI/ML, cloud computing, and scalable system design**. Adept at developing robust, high-performance applications and optimizing system performance in Agile environments. Passionate about problem-solving, automation, and innovation in enterprise software solutions.

Skills

- **Languages & Frameworks:** Python | C | C# | SQL | ASP.NET Core | JavaScript | React | Django
- **AI & Cloud:** AI/ML | TensorFlow | Deep Learning | Google Cloud (Vertex AI) | Azure | REST APIs | Docker
- **Databases & Web:** MySQL | DBMS | HTML | CSS
- **Core Programming Skills:** Object-Oriented Programming (OOP) | Data Structures & Algorithms(DSA) | Problem Solving
- **Tools:** Git | Github | VS Code | Postman | Linux | Shell Scripting

Experience

Hackathon — **Nasa Space Apps Challenge** — *Hyderabad* — **06/2023 - 06/2023**

- Led a 4-member team to build a satellite **data visualization platform** (React, Python) for analyzing NASA Earth data, improving data accessibility for scientists by **40%.**
- Trained ML models (TensorFlow) to predict climate patterns with **20% higher accuracy** vs. baseline methods.
- **Integrated real-time data streaming** using WebSocket and Plotly, enabling dynamic updates of satellite imagery and reducing latency by **25%.**
- Competed against **30+ teams** and secured Top 5 ranking for technical innovation and scalability

Education

Bachelor of Technology — **VNR Vignana Jyothi Institute** — *Hyderabad* — **09/2020 - 09/2024**

- Major in Electrical and Electronics Engineering

Projects

AI Disaster Management and Response System *(Enterprise-level application development)*

- Built an **enterprise-level MVP application** for real-time disaster predictions, emergency alerts, and community safety, significant enhancing **preparedness by 70%.**
- Built interactive **features** like posts, reels, stories, group chats, and community tools using **React, ASP.NET Core,** and **Django**, creating a user-centric platform for communication and collaboration.
- Integrated **AI/ML and Deep Learning models** to analyze climate data and automate alerts for 2k+ simulated users.
- Developed a platform for **community formation**, enabling users to form groups, share updates, and discuss real-time disaster situation in their areas.

Voice Assistant *(AI-Powered Application)*

- Built a desktop voice assistant using Python, SpeechRecognition, and **OpenAI GPT API.**
- Integrated **Google Calendar API and Weather API**, improving user productivity by **60%**.

Bode Plot Generator *(Web-based tool for system stability analysis)*

- Developed a responsive **web tool** using **Python** and **JavaScript** to generate Bode plot of a transfer functions, providing results like gain margin, phase margin, and crossover frequencies.
- Designed to assist **junior students** in understanding system stability concepts interactively.

Anti-Sleep Device for Drivers *(IoT-Based Safety System)*

- Designed an IoT-based system using Arduino, relay modules, and sensors to detect drowsiness and trigger alarms through sound and vibration, enhancing driver safety in real time.

Mentorship

- **AI/ML Workshop:** Served as a mentor in an AI/ML workshop aimed at helping junior students understand fundamental concepts and applications of artificial intelligence and machine learning. **(01/2024 - 02/2024)**
- **Tutor:** Programming | Data Structure and Algorithms | career advice | coding interview prep

Certifications & Achievements

- **Google Code Jam** - Ranked in **Top 2,500 Rank** globally ***(04/2023)*.**
- **NASA Space Apps Challenge** - Ranked **Top 5** for innovative satellite data visualization project **(06/2023).**
- **Google Cloud Skill Badge -** Mastered **prompt design and AI/ML deployment** within **Google Cloud Vertex AI *(11/2024)*.**