Allenki Akshay

Education

Vellore Institute of Technology - Andhra Pradesh	2022 - 26
Bachelors in Computer Science and Engineering	
Narayana Junior College, Hyderabad	2020 - 22
M.P.C Telangana State Board of Intermediate Education	
Krishnaveni High School, Mancherial	2019 - 20
Telangana State Board of Secondary Education	

Experience

Software Engineer Intern | Live 🗹

Remote, IN

Navigate Labs

Sep 2024 - Feb 2025

- Architected "Nexus Platform," an online code editor integrated with artificial intelligence (AI) for educational institutions, enhancing interactive learning and coding.
- Employed cutting-edge technologies including Next.js, Python, and AWS services for robust and scalable application architecture and created an interactive dashboard for utilization tracking.

Software Engineer Intern | Certificate 🗹 | Live 🗹

Amaravati, IN

Vellore Institute of Technology, Andhra Pradesh

Sep 2023 - Sep 2024

- Led a team of five developers in the development of the official VIT-AP University website. Architected a scalable system design capable of handling 1+ million monthly requests.
- Implemented using Next Js and Tailwind CSS for a responsive front-end and Strapi headless CMS for efficient content management, resulting in improved SEO 40%.
- Deployed on AWS, using S3, EC2, RDS, Amplify, and Auto Scaling Groups to achieve 99.9% uptime and streamlined CI / CD pipelines.

Full-Stack Engineer Intern | Certificate

Remote, IN

Indian Institute of Technology, Bombay

May 2023 - Apr 2024

- Constructed using a React.js-based speech recognition system, reducing customer wait times by 25% and improving first-call resolution, boosting service efficiency.
- \circ Led the integration of an Audio Transcription API that processed more than 10,000 files monthly, cutting transcription times by 75% and improving service delivery.
- Implemented a serverless Python Flask backend with Redis, accelerating deployment by 40% and improving response rates by 25%, focusing on crucial API integrations for transcription and translation.

Full Stack Developer Intern

Remote, IN

TIMESERA ERP

Mar 2024 - Aug 2024

Projects

VITopia Website | Code Repo

 $Live \ \square$

- Built a QR-based ticket verification system for VITopia 2025 and VITopia 2024, streamlining entry for 30,000+ attendees over three days in 2025 and 20,000+ attendees over two days in 2024, effectively eliminating ticket fraud. Enhanced seamless ticket purchases and automated bulk email distribution to 10,000+ students.
- Engineered a high-performance barcode and QR code scanning system, reducing verification time by 80% and preventing duplicate entries. Optimized logistics for T-shirt distribution, ensuring zero delays or mismatches.

Pothole Detection

- Created a real-time pothole detection system using YOLO v8, trained on 10,000+ images, and deployed on NVIDIA Jetson Nano.
- Achieved 97.3% mAP@50 with 94.2% precision and 95.7% recall for pothole and manhole detection.
- Improved road maintenance efficiency by enabling high-accuracy detection for proactive repairs.

Certificate Generator | Code Repo

 $Live \ \square$

• Launched a Certificate Generator web application, leveraging Next.js and Tailwind CSS for the front-end; personally resolved 15+ bugs within the first week, ensuring optimal performance on Vercel.

 Conceptualized and coded a full-stack Resume Builder application, integrating Firebase authentication and Redux for state management, which had 50 sign-ups in the first week, demonstrating immediate user adoption.

Technologies

Cloud: AWS, Azure, GCP. Languages: Java, Python, JavaScript, TypeScript.

Libraries: Numpy, Pandas, Matplotlib, NLTK, Spacy, Whisper, Tensorflow, Pydub, Pyannote.

Frameworks: YOLOv8, Next.js, React.js, Vue.js, Node.js, Express.js, Prisma ORM, Django, Flask, Headless CMS(Strapi,Sanity).

Devops Tools: Docker, Kubernetes, GitHub Actions.

Databases: MySQL, PostgreSQL, MsSQL, SQLite, MongoDB, Redis.

Real-time Systems: WebSockets, Socket.io, WebRTC.

Relevant Coursework: Data Structures & Algorithms, Operating Systems, OOPS, Database Management

System, Cloud Computing, Natural Language Processing, Computer Networks. **Soft Skills:** Leadership, Communication, Client relations, Learning agility.

Awards and Achievements

Acknowledged Contributor − EMNLP 2024 Paper Link "Enhancing ASR Cross-Lingual Proper Noun Recognition Using Large Language Models"	Nov 2024
AWS Academy Cloud Foundations Badge Z	Oct 2024
AWS Academy Cloud Architecting	Oct 2024
Amazon Machine Learning Summer School Program	July 2024