Jaiditya Batra

EDUCATION

VIT Bhopal University

B. Tech. Computer Science and Engineering (CGPA: 9.14)

2022 - 2026

Bhopal, MP

Dyal Singh Public School

Karnal, HR 2012 - 2022

10th CBSE: 96.8%

12th CBSE: 94.6%

EXPERIENCE

IBM Research | Research Intern

May 2025 – Aug 2025

- Contributing to an access-controlled modular LLM project by developing and optimizing LoRA adaptor composition strategies—output ensembling and parameter merging—for secure, domain-specific inference with optimal accuracy, performance, and efficiency.
- Utilizing inference engines like vLLM for efficient serving with paged attention, KV cache optimization, and dynamic adapter routing.
- Benchmarking latency and memory overhead of composed LoRA modules across secure multi-tenant model deployments.

Autonmis | DevOps and Cloud Intern | Engagement Letter

Apr 2024 - Nov 2024

- Developed and maintained automated CI/CD pipelines using Jenkins and GitHub Actions, reducing deployment time by 90%.
- · Automated infrastructure provisioning and configuration using Infrastructure-as-Code (IaC) tools like Terraform, improving provisioning efficiency and reducing infrastructure-related errors.
- Implemented containerization of applications with Docker and orchestrated deployments using Kubernetes, reducing application downtime by 90%.
- Developed monitoring and alerting systems using tools like Prometheus to scrape metrics and Grafana for visualization. Utilized AWS CloudWatch to monitor and automate event responses, decreasing manual intervention by 50%.

Projects

TerraSpin | AWS (EKS, Lambda, RDS), Docker Compose, Kubernetes, Terraform, GitHub Actions, Argo CD, Next. js, Airflow, Jenkins, Helm, NGINX, Karpenter, Prometheus | Github

Sadak Soochak | Next.js, TypeScript, RDS, Flask, PostgreSQL, Prisma, Tailwind CSS, Python, PyTorch, OpenCV,

May 2024 - Present

- Automated deployments of Next.js, Apache Airflow, Airbyte, and Flask using Terraform, Helm, and CI/CD pipelines in EKS clusters with scalable EFS network storage for persistent volumes supporting Airflow.
- · Utilized Karpenter to provision spot instances with NodePools, optimizing resource utilization and reducing compute infrastructure costs by 70%.
- Configured the NGINX Ingress Controller for TLS termination within the cluster and optimized load balancer routing to send traffic directly to pods, reducing node-hopping and improving latency by 40%.

xlsxwriter, pdfkit, Streamlit | Github

Mar 2024 - May 2024

- Developed traffic regulation system using deep learning for traffic density data.
- Allows reporting road issues like potholes for resolution by involving social activists and government effectively with our 95% accurate machine learning model.

TECHNICAL SKILLS

Programming Languages: C++ (Proficient in Data Structures and Algorithms), JavaScript, TypeScript, Dart, Node.js

Frontend & Frameworks: React, Next. js, Express. js, Flutter, Tailwind CSS, Zod, Radix UI

Backend APIs: Node.js, Flask, RESTful APIs, PostgreSQL, MySQL, Prisma, Stripe, Nodemailer

DevOps & Cloud: AWS (S3, EKS, RDS, Lambda, IAM, Route53, CloudFront), Docker, Kubernetes, Terraform, Jenkins, Helm, NGINX

Databases ORMs: MongoDB, PostgreSQL, MySQL, AuroraDB, Mongoose, Prisma

Achievements

- Solved 200+ Codeforces problems and achieved a peak rating of 1250 (Pupil). Profile
- Solved 500+ LeetCode problems, ranked in the top 150k, earned dual 100-day streak badges, and a peak rating of 1530. Profile
- Innovate You 2024 24 Hour Hackathon, qualified under top 20 teams among 200+ team participated in day long hackathon organized in AISSMS, Pune. Project | Certificate

Hobbies

Chess (peak rapid rating on Chess.com: 1400) and badminton and table tennis enthusiast.

LANGUAGES

Fluent in Hindi, English, Punjabi