

# Sagar Gupta

 Sagargupta16 |  sagar-gupta-16-10 |  sg85207@gmail.com |  +91-8770532413

## Education

**National Institute of Technology Warangal, Telangana**  
Master of Computer Application (MCA)

August 2021 - June 2024  
8.38 CGPA

## Experience

**Amazon Web Services**  
Professional Services

August 2024 - Present  
Hyderabad, India

**Project:** DevOps Infrastructure Automation - State Street

- Developed and maintained reusable Terraform modules for critical AWS services including EventBridge, CloudWatch, SNS, EBS, and AWS Detective, ensuring standardized infrastructure deployment
- Implemented comprehensive unit testing framework using tfest to validate Terraform modules, ensuring infrastructure reliability.
- Designed and delivered technical specifications and user guides aligned with enterprise security hardening guidelines.
- Collaborated closely with stakeholders to gather requirements and ensure delivery of infrastructure solutions meeting business needs

**Technologies:** AWS (EventBridge, CloudWatch, SNS, EBS, Detective), Terraform, tfest.

**Project:** Medical Image Classification MLOps Pipeline

- Developed a complete MLOps pipeline on AWS SageMaker, automating the entire ML lifecycle from data processing and multi-model training to an ensemble model, with retraining triggered by new data uploads.
- Implemented production-ready SageMaker endpoints with blue-green deployment, auto-scaling, and real-time monitoring for drift detection, providing zero-downtime model updates and automatic rollback capabilities.
- Utilized Terraform for infrastructure provisioning and built CI/CD pipelines using AWS CodePipeline and CodeBuild to deploy the entire system, including a CloudFront front-end and a scalable API Gateway + Lambda inference API.

**Technologies:** AWS (SageMaker, CloudWatch, Lambda, API Gateway, EventBridge, Codepipeline, Cloudfront), Terraform, Python.

**Amazon Web Services**  
Associate Professional Services, Internship

March 2024 - July 2024  
Hyderabad, India

**Project:** ECS Application Deployment with Terraform

- Led migration of on-premises web application to AWS ECS, implementing high-availability architecture and CI/CD pipeline using AWS CodePipeline, reducing maintenance overhead.
- Architected infrastructure as code using Terraform, managing AWS resources including VPC, ALB, and ECS clusters while implementing blue-green deployment strategy for zero-downtime updates.
- Automated Docker image building and deployment process through integration of AWS CodeBuild, CodeDeploy, and Amazon ECR, streamlining application delivery workflow.
- Established comprehensive monitoring solution using AWS X-Ray and CloudWatch for distributed tracing and full observability of application performance.

**Technologies:** AWS (ECS, CodePipeline, ECR, X-Ray, CloudWatch), Terraform, Docker, Git

**Ikarus-3D**  
Software Developer Associate, Internship

May 2023 - July 2023  
Mohali, India

**Project:** Web Application Containerization and Deployment

- Led containerization of application with Docker and orchestrated deployment to AWS using ECR and ECS services.
- Implemented comprehensive CI/CD pipeline using GitHub Actions, automating build, test, and deployment processes.
- Standardized codebase with linting tools and deployed SonarQube on AWS EC2 with RDS integration for code analysis.

**Technologies:** AWS (EC2, ECR, ECS, RDS), Docker, GitHub Actions, SonarQube, Python, JavaScript.

## Industry Certifications

- AWS Certified Cloud Practitioner
- AWS Certified AI Practitioner
- AWS Certified Solutions Architect – Associate
- AWS Certified Machine Learning Engineer – Associate
- AWS Certified Developer – Associate
- HashiCorp Certified: Terraform Associate

[Certificate](#)  
[Certificate](#)  
[Certificate](#)  
[Certificate](#)  
[Certificate](#)  
[Certificate](#)

## Personal Projects

---

- Placement:** Implemented a secure and scalable MERN-stack MCA Placement Portal with robust security, role-based access, and interactive data visualization using AG Grid and AG Charts. 
- Ledger Sync:** Developed a full-stack financial reconciliation platform with immutable transaction audit trails, Excel ingestion, and advanced analytics using FastAPI, React, and SQLite. 
- Contact Manager:** Engineered a full-stack MERN application to streamline contact management with complete user authentication and CRUD operations, featuring a user-friendly UI with dark/light modes. 
- Personal Portfolio:** Crafted an interactive portfolio website showcasing my skills and achievements, optimized for multiple devices, with a smooth refresh-free navigation. 

## Technical Skills and Interests

---

**Languages & Frameworks:** C++, Python, Java, JavaScript, SQL, React, Express.js, Fast-API, Rest-API

**Cloud & DevOps:** AWS (EC2, ECS, CloudWatch, SageMaker, CodePipeline, EventBridge, etc.), Terraform, Docker, Ansible.

**Developer Tools:** Git, GitHub Actions, MongoDB, MySQL, SonarQube, Unity Engine

**Soft Skills:** Leadership, Teamwork, Communication, Critical Thinking.

**Coursework:** Cloud Computing, DSA, Database, Game Development, Web Technologies, Image Processing

**Areas of Interest:** Full-Stack Development, DevOps, MLOps, Cloud Computing, Data Science, Game Development.

## Positions of Responsibility

---

- **Class Representative**, MCA Final Year, National Institute of Technology, Warangal. Aug 23' - Jun 24'
- **Additional Secretary**, CSEA - NITW, focusing on Contest and Development teams. Aug 23' - Jun 24'

## Achievements

---

- 4th Position in TriNIT Hackathon.
- 1st Position in Coding Cauldron Online VERSION 23', organized by NIT-Trichy.
- 1st Position in QFiesta IGNOSI 22', organized by NIT-Warangal.
- 1289th Position(Top 5%) at Google Kick-start Round E '22. 
- 3rd Position in INFOTREK '22 LOGIC HEAD, organized by NIT-Trichy.
- 3rd Position in Event MOTHRA - VERSION '21, organized by NIT-Trichy. 

## Coding Platform Profiles

---

[LeetCode\(Sagargupta1610\)](#) : Over 1100+ DSA problems solved, 100+ contests participated, 1950+ rating.

[GFG\(sagargupta10\)](#) : Over 350+ DSA problems solved.

[HackerRank\(Sagargupta1610\)](#) : Achieved 6 Star (Problem-Solving) , 5 Star (C++).

[CodeChef\(sagargupta\\_16\)](#) : Achieved 3 Star Rating and Participated 20+ Rated Contests.