AMOGH JAGADISH TAMBAD

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EDUCATION

Master of Science, Computer Science May 2025
Arizona State University, Tempe, AZ 4.00 GPA
Relevant coursework: Cloud Computing, Data Processing at Scale, Data Mining, Software Security

Bachelor of Technology, Computer Science May 2021
REVA University, Bangalore, India 3.77 GPA
Relevant coursework: Data Structure and Algorithms, Operating Systems

SKILLS

Languages and Databases: Python, C++, Bash, SQL (Postgres), NoSQL (MongoDB), Go, Scala, HTML, JavaScript, Java
Tools and Frameworks: AWS, Linux (RHEL, Ubuntu), PostmanAPI, Docker, Kubernetes, Nginx, Gunicorn, Flask, FastAPI, Node.js, Zookeeper, Splunk, Github Actions, Terraform, Ansible, Git, Gitlab, Prometheus, Grafana, Jenkins, Cribl, Zabbix, Chef
Miscellaneous: Distributed Systems, RESTful APIs, Microservices Architecture, Object-Oriented Programming, Agile, SDLC, Configuration Management, Infrastructure Management

PROFESSIONAL EXPERIENCE

Research Assistant, VISA Lab Jun 2025 - Present
Arizona State University, Tempe, AZ

- Developing **FlowBench**, a workflow-based distributed benchmark by leveraging **Python**, **Docker**, and edge computing principles to evaluate custom software performance metrics and optimize deployment algorithms
- Built and tested a video analytics workflow via **OpenCV** on a containerized microservices architecture with **Kubernetes**, implementing serverless functions for motion detection, frame extraction, face detection, and recognition

Site Reliability Engineer Intern Jun 2024 - Aug 2024
Arch Mortgage Insurance, Greensboro, NC

- Filtered and routed logs from OpenShift Kubernetes clusters to Splunk using Cribl Stream pipelines, reducing **daily Splunk storage usage by 40–50 GB** and improving **log search performance by 20%**
- Designed an automated pipeline using Ansible and Red Hat registry APIs to sync updated catalog images to Nexus Repository, reducing manual update time by **90%**

System Engineer - 1 May 2021 - Jul 2023
Cerner Healthcare, Bangalore, India

- Migrated 80% of data from on-prem to **AWS**, enhancing data access flexibility, security, and cost-efficiency
- Participated in regular on-call rotations, leveraging **Zabbix** and **Splunk** for system health monitoring, troubleshooting server issues, and resolving production alerts within 15 minutes, maintaining **99.99%** service reliability
- Troubleshot and resolved **Jenkins** pipeline issues, minimizing support ticket resolution time by **40%** and ensuring **99.9%** uptime for **CI/CD** workflows, leading to uninterrupted deployment pipelines
- Managed **300+** bi-weekly microservice deployments, including Splunk and non-Splunk-based services, using **Chef**, accelerating delivery of new UI and backend features in a fast-paced production environment

ACADEMIC PROJECTS

JobTrail - Go based job tracking Jun 2024 - Present

- Developed a Firefox extension and a **Go** backend (Gorilla Mux, database/sql) to capture and ingest job application data, storing entries in a structured **SQL database**
- Added signal-based graceful shutdown to export data to CSV and truncate the table automatically, saving 1–2 hours/week otherwise spent manually tracking applications

End-to-End Deployment Automation Mar 2025 - Apr 2025

- Automated end-to-end AWS EC2 provisioning using **Terraform**, **Ansible**, **Jenkins**, and **GitHub Actions**, enabling reproducible infrastructure setup and hands-free web service deployments
- Built and optimized CI/CD pipelines to dynamically retrieve instance IPs, configure secure SSH access, and deploy services, eliminating manual intervention and resolving IAM and resource issues in production-like environments

AWS-Based Face Recognition App Feb 2024 - May 2024

- Developed and deployed a **Flask**-based image recognition app using **Gunicorn** on AWS EC2, enabling HTTP-based uploads and forwarding images to S3 via SQS for asynchronous processing
- Designed an auto-scaling app tier that scaled up to 20 EC2 instances based on SQS queue depth, ensuring efficient, real-time image processing under varying workloads