

Shikhar Gupta

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TECHNICAL SKILLS

Certification: AWS Solution Architect - Associate, AWS Cloud Practitioner

Languages & Libraries: Python, Golang, JavaScript, D3.js, NodeJS, ReactJS, Django, FastAPI, Plotly, Bootstrap

CI/CD Tools: Ansible, Chef, Docker, Git, Helm, Kubernetes, Ngnix, Jenkins, Kafka, Terraform

Databases: PostgreSQL, MongoDB, Neo4j, Redis, S3, DynamoDB, InfluxDB

EXPERIENCE

Arizona State University | 10 Months

08/2023 – Present

Research Aide | ReactJS, D3.js, Mapbox, Leaflet, Bootstrap, AWS

Tempe, AZ

- Leading the development of a dashboard featuring a GIS-based mapping and analytics tool, facilitating a 360-degree view of the community, empowering users to build resilience, and utilizing actionable insights.

Hewlett Packard Enterprise (Aruba Networks) | 3 Years

01/2019 – 07/2022

Software Engineer II | Python, Golang, Jenkins, PostgreSQL, Kubernetes, Microsoft Azure

Bangalore, India

- Led the development of a cross-platform testing solution utilizing Python for a network security compliance tool, to enhance end-to-end testing efficiency and slash resource requirements by 80%, expediting product deployment.
- Engineered an innovative Golang-based solution for deploying virtual machines across ESXi, Hyper-V, KVM, AWS, and Azure, resulting in a 60% efficiency boost and streamlined process.
- Crafted a comprehensive solution using Python to detect vulnerabilities across product code databases, ensuring robustness in software development practices resulting in a 15% reduction in potential security risks.
- Built a robust multi-threaded RESTapi Load Testing tool utilizing Jmeter, which contributed to a notable 10% enhancement in product performance.
- Restructured the monitoring and logging infrastructure using Logstash, Kibana, Filebeat, Grafana, and InfluxDB, enhancing application performance visibility and reducing troubleshooting time by 50%.
- Developed a Python-based automated UI testing solution using OpenCV, resulting in a 50% reduction in QA personnel workload.

EDUCATION

Master of Science in Computer Science

08/2022 – 05/2024

Arizona State University | Tempe, AZ, USA

GPA: 4.0/4.0

Courses - Cloud Computing, Data Visualization, Data Processing at Scale, Data Mining

Bachelor of Technology in Computer Science

08/2015 – 05/2019

PES University | Bangalore, KA, India

GPA: 3.7/4.0

Courses - Web Development, Data Structures & Algorithms, Object-Oriented Programming

PROJECTS

CloudVision | Python, Golang, EC2, DynamoDB, Lambda, S3

- Created a multi-tier architecture with instant auto-scaling capabilities, seamlessly adapting to dynamic workloads and ensuring efficient processing of 1000+ requests per second.
- Leveraged AWS Lambda, SQS, and DynamoDB to achieve a processing speed of 50 frames per second and efficiently route the inferences to S3 for analysis.

Firearm Watch | Kafka, MongoDB, Docker, Terraform, EKS, Helm, Ansible

- Integrated an object detection model using AWS Lambda and SageMaker, reducing pipeline inference time by 80%.
- Implemented an ETL pipeline to handle continuous frame streams and efficiently route model inferences to S3 for retrieval and analysis.

KeyVault | FastAPI, Kubernetes, Redis

- Designed a key-value store system, handling 1,000+ requests per minute, achieving 99.99% uptime, and scaling to manage 1TB+ data volumes, ensuring continuous reliability and availability.

GraphFlow | Python, Neo4j, Kubernetes, Kafka

- Engineered a resilient, high-throughput data processing pipeline leveraging Kafka, Neo4j, meticulously optimized to manage continuous data streams efficiently, achieving a notable 40% processing efficiency improvement.