SHIKHAR GUPTA

Tempe, AZ • 602-515-5356 • sgupt330@asu.edu • in/shikhar-gupta-430372134

SUMMARY

Computer Science graduate student with 3+ years of experience in software development, cloud computing, machine learning, leadership, mentorship, and administrative duties.

EDUCATION

M.S. Computer Science   08/2022 - 05/2024
Arizona State University, Tempe, Arizona   GPA: 4.00
Courses: Machine Learning, Natural Language Processing, Data Visualization, Data Processing at Scale, Data Mining

B.S. Computer Science   08/2015 - 05/2019
PES University, Bangalore, India   GPA: 3.74
Courses: Artificial Intelligence, Object-Oriented Programming, Web Development, Computer Engineering, Data Structures and Algorithms

TECHNICAL SKILLS

Machine Learning/AI Expertise: Natural Language Processing, Computer Vision, Transform Learning
Programming Languages/Libraries: Python, C++, Java, GoLang, Bash, Kotlin, FastAPI, PyTorch, NumPy, Pandas
Front-End: HTML5, CSS3, Bootstrap, D3.js, JavaScript, jQuery, AJAX, Node.js, TypeScript, React.js
Tools/Databases: MySQL, Postgres, MongoDB, Docker, Kubernetes, Terraform, Chef, AWS, Azure, Openstack

PROFESSIONAL EXPERIENCE

Software Engineer II, Aruba Networks, Bangalore, IN   01/2019 - 07/2022
- Spearheaded the development of innovative solutions, resulting in an 80% reduction in person hours and accelerating product delivery.
- Restructured the Linux-based monitoring and logging infrastructure utilizing Logstash, Kibana, Filebeat, Grafana, and InfluxDB, enhancing application performance visibility and reducing the troubleshooting time by 50%.
- Engineered a Python-based tool that leveraged Docker, Kubernetes, Terraform, Chef and AWS services (EC2, S3, CloudWatch, VPC), resulting in streamlined virtual machine deployment and a 60% increase in efficiency.
- Designed a scalable and cost-effective application deployment tool utilizing Terraform, AWS Lambda, CloudFormation and S3.
- Built a multi-threaded C++ based RESTApi Load Testing tool, improving product performance by 10%.
- Led the development of a GUI-based testing tool using Python and OpenCV which reduced the QA person-hours by 50%.

Summer Intern, Stylumia Intelligence Technology, Bangalore, IN   06/2018 - 08/2018
- Engineered a Trie-based algorithm integrated with Elasticsearch's autocorrection for real-time autocompletion search, enhancing search efficiency by 10%.
- Developed a State-of-the-Art NLP Algorithm for the accurate classification of various types of products.

PROJECTS

Generating Visualizations using Large Language Models   01/2023 - 05/2023
- Created an automated system that utilizes GPT-3, D3.js, and VegaLite to generate high-quality visualizations based on user requirements.

Scaling Graph Processing with Kubernetes, Kafka, Neo4   01/2023 - 05/2023
- Implemented a distributed architecture supported by Kubernetes and Kafka to handle continuous document streams.
- Utilized Neo4j's native scaling capabilities to deliver scalable graph processing with high throughput and low latency.
- Reduced latency by 50% and enabled the system to scale to meet increased demands.

Enhancing Disease Diagnosis using Machine Learning   01/2023 - 05/2023
- Refined image classification, segmentation, localization models for polyps, abnormalities in chest X-rays, pulmonary embolisms using ResNet and Swin Transformers.
- Significantly improved accuracy and reduced false positives by 5%.

WORK EXPERIENCE

Research Intern, Cloud Computing & Big Data Center, Bangalore   06/2017 - 06/2018
- Programmed a middleware for object storage (Swift) and the orchestration unit (Heat) for OpenStack.
- Published "Orchestration Based Hybrid or Multi Clouds and Interoperability Standardization" at IEEE CCEM (2018).