

SHIKHAR GUPTA

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SUMMARY

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

EDUCATION

M.S. Computer Science	08/2022 - 05/2024
Arizona State University, Tempe, Arizona	GPA: 4.00
<i>Courses: Machine Learning, Natural Language Processing, Data Visualization, Data Processing at Scale, Data Mining</i>	
B.S. Computer Science	08/2015 - 05/2019
PES University, Bangalore, India	GPA: 3.74
<i>Courses: Artificial Intelligence, Web Development, Android Development, Data Structures and Algorithms, Cloud Computing</i>	

SKILLS

Languages: Python, C++, Java, Golang, Bash, Kotlin, HTML5/CSS3, D3.js, JavaScript, jQuery, SQL (Postgres)

Libraries: FastAPI, PyTorch, NumPy, Pandas, Matplotlib, Boto3

Frameworks: Bootstrap, Material-UI, Node.js, Leaflet, React.js, Next.js

Developer Tools/Platforms: Git, Docker, Kubernetes, Helm, Chef, AWS, Azure, OpenStack

PROFESSIONAL EXPERIENCE

Research Aide, School of Community Resources and Development, ASU, Tempe, US	08/2023 - Present
<ul style="list-style-type: none">Leading the development of a dashboard using React.js to provide a comprehensive view of climate and community, empowering users to build resilience and utilize actionable insights.Designing an interface featuring a GIS-based mapping and analytics tool using Leaflet with visualizations using D3.js.	
Software Engineer II, Aruba Networks, Bangalore, IN	01/2019 - 07/2022
<ul style="list-style-type: none">Led the development of automated solutions resulting in an 80% reduction in person hours and accelerated product delivery.Restructured Linux-based monitoring and logging infrastructure using Logstash, Kibana, Filebeat, Grafana, and Influx DB, enhancing application performance visibility and reducing troubleshooting time by 50%.Engineered a Python-based tool for virtual machine deployment using Docker, Kubernetes, Terraform, Chef, and AWS services (EC2, S3, CloudWatch, VPC) resulting in a 60% efficient and streamlined virtual machine deployment.Built a multi-threaded C++-based RESTapi Load Testing tool, improving product performance by 10%.Developed a GUI-based testing tool with Python and OpenCV, reducing QA person hours by 50%.	
Summer Intern, Stylumia Intelligence Technology, Bangalore, IN	06/2018 - 08/2018
<ul style="list-style-type: none">Crafted a machine learning model for product classification and integrated it with a search bar, resulting in a 10% improvement in search efficiency.	

PROJECTS

Covid-19 Symptom Tracker Java, Kotlin, Rooms DB, Git	08/2023 - 12/2023
<ul style="list-style-type: none">Designed an Android-based health monitoring application using Kotlin, Java, and Rooms DB.Constructed a user-friendly interface to measure heart rate using the smartphone's back camera and flash with 90% accuracy, and respiratory rate using the smartphone's accelerometer with 78% accuracy.	
Real-time Firearm Detection AWS, Mongo DB, Docker, Terraform, Helm, Kubernetes, Kafka	05/2023 - 08/2023
<ul style="list-style-type: none">Spearheaded the development and integration of a real-time object detection model into the pipeline, reducing the latency by 80%.Implemented a Kafka pipeline using AWS EKS to handle continuous frame streams and efficiently route model inferences to an S3 bucket and MongoDB database for real-time retrieval and analysis.	
Generating Visualizations Using Large Language Models NLP, D3.js, JavaScript, HTML/CSS	01/2023 - 05/2023
<ul style="list-style-type: none">Created an automated system utilizing GPT-3, D3.js, and Vega Lite to generate high-quality visualizations based on user requirements.	
Enhancing Disease Diagnosis using Machine Learning CNN, PyTorch, Pandas, NumPy	01/2023 - 05/2023
<ul style="list-style-type: none">Refined image classification, segmentation, and localization models for polyps, abnormalities in chest X-rays, and pulmonary embolisms using ResNet and Swin Transformers.Significantly improved accuracy and reduced false positives by 5%.	