OMKAR KAKADE

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Skills

TOOLS
Git
Bash
Docker
Nginx

AI/ML
Tensorflow
PyTorch
Pandas
Numpy
Scipy
Matplotlib
OpenCV
spaCy
scikit-learn

DATABASES
SQL
PostgreSQL
SPARQL
Firestore
AWS Neptune

CLOUD
Microsoft Azure
Amazon Web Services - AWS
Google Cloud Platform - GCP

LANGUAGES
JavaScript
Python
TypeScript
Java

WEB
Nest.js
HTML
Spring
CSS
Angular
Django
Celery

Certifications

AWS Certified Solutions Architect - Associate	2019 - 2022
AWS Certified Developer - Associate	2020 - 2023
AWS Certified SysOps Administrator - Associate	2020 - 2023

Experience

Software Engineer — Somerville, MA
Motorola Solutions — Nov. 2021 - Feb. 2024

- Full-Stack SWE on CAPE, a low-latency P2P drone video & control platform. (*Product Link*)
- Developed features like Viewer Management and Mission Planning, driving a 5x growth in customer base.
- Integrated drone live streams with internal services, enhancing ecosystem functionality. (*Press Release*) (*Python, Django, Azure EventHub*) .
- Migrated frontend from Angular 9 to 13, reducing vulnerabilities by 30% and improving load times by 54%.
- Built Docker containers for local development, cutting setup time by 25x. (*Docker, Django, Angular, PostgreSQL, Redis, Nginix*)

Software Engineer - AI/ML — Boston, MA
Bola AI — Feb. 2021 - Oct. 2021

- <u>**Voice Enabled Dental EHR System**</u> - Designed scalable cloud infrastructure to support a 3x growth in users. (*Azure, Docker, NGINX, App Gateway, Prometheus, Grafana, Typescript, Nest.js, WebSockets, Angular, Electron, Sentry*)
- Built CI/CD pipelines, reducing deployment time to under 10 minutes. (*Github Actions*)
- Developed a custom speech model improving response time and accuracy by 10% while reducing costs by 58%. (*Deepgram ASR, Typescript, Python*)

Machine Learning Engineer — Orlando, FL
Siemens — Jan. 2020 - May 2020

- <u>**Internal Predictive Analytics Platform**</u> - Built Docker images for custom R-based time series forecasting models, improving scalability.
- Reduced model deployment costs by 64% using *SageMaker* batch transforms. (*AWS Sagemaker*)

Software Developer — Orlando, FL
Siemens — May 2019 - Dec. 2019

- **Search Application for Knowledge Graph** - Developed a RESTful API for a serverless search app using AWS, Graph Database and NLP techniques. (*Python, Java, spaCy, Apache Jena, Flask, Springboot, AWS Lambda, API Gateway, Neptune, S3, Angular*)
- **Cloud Resource Management** - Implemented cloud resource management API, saving 87% in EC2 costs.

Senior Software Engineer — Vancouver, CA
Motorola Solutions — Feb. 2024 - Current

- Lead infrastructure and security compliance for CAPE with 99.95% SLA.
- Developed an auto-update mechanism for Android apps, reducing update times by 3x.
- Built a log-processing microservice for flight telemetry data, which improved user experience and backend efficiency.
- xFN task - Collaborated with the Video Services team to deploy services to secure Azure GovCloud environment in Canada region.

Education

Rochester Institute of Technology — Aug. 2017 - Dec. 2020
Master of Science Computer Science

University of Pune — Aug. 2012 - May 2016
Bachelor of Engineering Computer Engineering

Projects

Performance and Deployment of Deep Neural Net on Edge Devices — 2020

- Deployed InceptionNet and MobileNet on Raspberry Pi 4, optimizing for accuracy, CPU/memory usage, and latency using techniques like quantization, weight clustering and weight pruning. (*Python, TF-Lite*)

Multi-core, Cluster, GPU and Map-Reduce Projects - https://bit.ly/2IJBf8B — 2018

- Developed solutions for large-scale mathematical problems using multi-core, cluster, GPU, and Map-Reduce techniques. (*Parallel Java 2, Java, C*)