

# OMKAR KAKADE

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## Skills

### LANGUAGES

JavaScript  
Python  
TypeScript  
Java

### WEB

Nest.js  
HTML  
Spring  
CSS  
Angular  
Django  
Celery

### DATABASES

SQL  
PostgreSQL  
SPARQL  
Firestore  
AWS Neptune

### CLOUD

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

### AI/ML

Tensorflow  
PyTorch  
Pandas  
Numpy  
Scipy  
Matplotlib  
OpenCV  
spaCy  
scikit-learn

### TOOLS

Git  
Bash  
Docker  
Nginx

## Certifications

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

## Experience

Senior Software Engineer Motorola Solutions	Vancouver, CA Feb. 2024 - Current
<ul style="list-style-type: none"><li>Lead infrastructure and security compliance for CAPE with 99.95% SLA.</li><li>Developed an auto-update mechanism for Android apps, reducing update times by 3X.</li><li>Built a log-processing microservice for flight telemetry data, improving user experience &amp; backend efficiency.</li><li>xFN task - Collaborated with the Video Services team to deploy services to secure Azure GovCloud environment in Canada region.</li></ul>	

Software Engineer Motorola Solutions	Somerville, MA Nov. 2021 - Feb. 2024
<ul style="list-style-type: none"><li>Full-Stack SWE on CAPE, a low-latency P2P drone video &amp; control platform. [Product Link]</li><li>Developed features like Viewer Management &amp; Mission Planning, resulted in 5X customer growth.</li><li>Integrated drone live streams with internal services, enhancing ecosystem functionality. [Press Release] (Python, Django, Azure EventHub) .</li><li>Migrated frontend from Angular 9 to 13, reducing vulnerabilities by 30% &amp; improving load times by 54%.</li><li>Built Docker containers for local development, cutting setup time by 25X. (Docker, Django, Angular, PostgreSQL, Redis, Nginix)</li></ul>	

Software Engineer - AI/ML Bola AI	Boston, MA Feb. 2021 - Oct. 2021
<ul style="list-style-type: none"><li><b>Voice Enabled Dental EHR System</b> - 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)</li><li>Built CI/CD pipelines, reducing deployment time to under 10 minutes. (Github Actions)</li><li>Developed a custom speech model improving response time and accuracy by 10% while reducing costs by 58%. (Deepgram ASR, Typescript, Python)</li></ul>	

Machine Learning Engineer Siemens	Orlando, FL Jan. 2020 - May 2020
<ul style="list-style-type: none"><li><b>Internal Predictive Analytics Platform</b> - Built Docker images for custom R-based time series forecasting models, improving scalability.</li><li>Reduced model deployment costs by 64% using <i>SageMaker</i> batch transforms. (AWS Sagemaker)</li></ul>	

Software Developer Siemens	Orlando, FL May 2019 - Dec. 2019
<ul style="list-style-type: none"><li><b>Search Application for Knowledge Graph</b> - 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)</li><li><b>Cloud Resource Management</b> - Implemented cloud resource management API, saving 87% in EC2 costs.</li></ul>	

## Education

Rochester Institute of Technology Master of Science Computer Science	Aug. 2017 - Dec. 2020
University of Pune Bachelor of Engineering Computer Engineering	Aug. 2012 - May 2016

## Projects

Performance and Deployment of Deep Neural Net on Edge Devices	2020
<ul style="list-style-type: none"><li>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 )</li></ul>	
Multi-core, Cluster, GPU and Map-Reduce Projects - <a href="https://bit.ly/2IJBf8B">https://bit.ly/2IJBf8B</a>	2018
<ul style="list-style-type: none"><li>Developed solutions for large-scale mathematical problems using multi-core, cluster, GPU, and Map-Reduce techniques. ( Parallel Java 2, Java, C )</li></ul>	