

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

- 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.

Software Engineer

Motorola Solutions

Somerville, MA

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](#), [Nginx](#))

Software Engineer - AI/ML

Bola AI

Boston, MA

Feb. 2021 - Oct. 2021

- **Voice Enabled Dental EHR System** - 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

Siemens

Orlando, FL

Jan. 2020 - May 2020

- **Internal Predictive Analytics Platform** - 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

Siemens

Orlando, FL

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.

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

- 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](#))