

Jie(Jeni) Wang

☎ (626) 632-1566 | ✉ wang109@gmail.com | 📧 jeniwang | 🌐 wangjeni | 📍 Los Angeles, CA/Remote

Skills

Languages: Python | Java | C# | C++ | SQL | HCL/Terraform
Development: Git | Docker | Kubernetes | CI/CD | LLM | .NET | Micronaut | Java Spring | Junit | REST API | Bitbucket | Grafana

AWS: S3 | IoT | Lambda | CLI | Cloudwatch Alarms
OCI: S3/ADB | Network | CI/CD Pipeline | Instances | WFaaS | GenAI/RAG | Load Balancer | CLI | LLM

Work Experience

Oracle Cloud Infrastructure - Media Services

Austin, TX

Software Developer II

September 2024 - Present

- Learned to **design high-level and low-level** file metadata extraction system with **AI integration** for media assets while prioritizing customer business needs of **global file storage** and **instant global access**.
- Created **AI conversation agent** using an internal agent builder framework, **WayFlow Core**, and provided various **OCI GenAI** and open source **LLM Endpoints** while also utilizing **RAG and custom libraries** to generate metadata information about media assets.
- Created custom **OCI images** via **CLI** for WebUI and Admin nodes of Diskover, a metadata extraction software, to distribute these nodes.
- Improved test coverage by **68%** using **Micronaut framework** annotations by implementing relevant control plane **integration tests**.
- Implemented secure client-to-server **API** traffic with **mTLS certificate** verification over **TCP** connections, protecting **100%** of API requests between client requests and **Oracle Managed Kubernetes (OMK)** API pods via a proxy DNS and load balancer.
- Deployed **OCI load balancer** in OMK via **Helm charts**, configured cluster and network parameters, and monitored pod health to ensure high availability and failover for API services, achieving **32%** faster request processing.
- Automated **Cloud Infrastructure** deployment resources such as Virtual Cloud Networks (VCN), Subnets, Virtual Machines, Identity policies, Object Storage, and many more using **Terraform/ HCL**, an IaC language, to create control plane resources.
- Provisioned a public subnet within an **OMK** cluster to enable load balancer routing for public incoming traffic from a proxy server.
- Built isolated test environments by pulling **Docker** container images to run integration tests in controlled instances.
- Authored **Dockerfiles** to package resources into optimized Docker images and published images to **OCI Artifactory** for deployment.
- Conducted five-part benchmarking for Tigris, a global storage software, by developing custom scripts to measure availability and response times, testing cross-region performance with **S3** storage and retrieval.
- Automated database **schema migrations** on **Oracle Autonomous Database** using **Liquibase** schema change logs, ensuring consistent schema updates across environments.

Pacific Biosciences

San Diego, CA

Software Engineer II

March 2023 - November 2023

- Implemented a **on-prem to cloud dashboard data migration agent** utilizing **C#** in **.NET**, applying dependency injection to isolate components and using principles like **encapsulation** to provide a more secure and testable software.
- Established a secure connection to **AWS IoT Core** using **MQTT**, leveraging **mTLS** authentication to ensure encrypted communication.
- Created a directory scanner that triggers a callback function to upload payload to **AWS S3** when subscribed topics are published to.
- Transferred unorganized file data from **S3** buckets to filtered Data Warehouse service using **AWS lambda functions** as a trigger event and **SQL** statements in **Snowflake** as storage instructions.
- Displayed organized data using **Sigma** (PowerBI tool) to display analysis metrics for customers in an interactive, digestible format, leading to a **32%** increase in customer user experience.
- Engineered real-time monitoring dashboards by integrating **AWS Loki logs** with **Grafana**, decreasing mean detection time by **73%**

Amazon

San Diego, CA

Software Developer Engineer

May 2022 - March 2023

- Implemented components of application using Amazon's internal **Service-Oriented Architecture** to orchestrate **API** calls to enable cross-ledger debt offset and recovery project that retrieved **\$13M USD** in India after one year.
- Developed automated **integration tests** to ensure accuracy of ledger balance updates for seller accounts using **mock** to simulate external API interactions leading to a **27%** increase in ledger balance accuracy.
- Configured **AWS CloudWatch** alarms to provide alerts on metrics and latency of workflows, services, and API calls for proactive performance management, enforcing **30 minute** response times.
- Performed on-call duties such as responding to alarms and maintaining **CI/CD** pipeline readiness for all phases of deployment.
- Engineered **Low-Level Designs** detailing workflow process for retrieving balances and functions to offset them.

Illumina

San Diego, CA

Full Stack Software Engineer

October 2021 - April 2022

- Developed high-performance DNA sequencing and analysis software using the **MVVM (Model-View-ViewModel)** architecture in **C#** on the **.NET** Framework, leveraging **WPF** to deliver an intuitive user interface that enhanced workflow efficiency and reliability.
- Captured error handling between server of the new platform using message dialogues in **C#** resulting increased UI experience by 37%.
- Validated inputs of the equipment using **REST API** calls made to the server and cross-referenced with local input list.
- Constructed automation framework for JAMA test cases using **C#** to aid Software Test Engineers in the testing process.

Education

University of California San Diego

La Jolla, CA

Major: Data Science B.S. Minor: Management Science

September 2017 - June 2021