JIN W. ROH

Engineering Lead

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PROFILE

Engineering lead with over 10 years of experience in backend and frontend development, as well as people management. Seeking independent contributor (IC) roles.

EXPERIENCE

Ocrolus Inc.

Ocrolus processes financial documents using machine learning and human-in-the-loop. In addition to extracted data, clients receive insights such as fraud signals, income flow, and risk analytics.

Engineering Lead
Dec 2021 - Sept 2024

- Managed and grew a distributed full-stack team (**U.S. and India**) from 3 to 8 engineers.
- Delivered the classification product (**Python / Flask**), enabling mortgage clients to eliminate manual review time when assessing applicant eligibility (e.g., employment, credit score).
- Led technical strategy to scale document processing volume by 10x: optimized queries and partitioned large tables (**Postgres / SQL**), introduced event-driven systems (**Kafka**), and implemented in-memory caching (**Redis**).
- Kickstarted the organization's transition from a monolith to **microservices architecture in Flask (Python)** by migrating team-owned product domains into isolated services.
- Planned and executed a year-long initiative to refactor and migrate legacy data to a new model, while ensuring API backward compatibility for clients throughout the process.

Senior Software Engineer
Nov 2020 - Dec 2021

- Designed workflows in **Spring (Java)** to extract data points from documents for enterprise clients. Introduced parallelization schemes and integrated machine learning models, reducing turnaround time by over 60% (15 minutes to 7 minutes).
- Implemented a data validation service in **Flask (Python)** for income forms (e.g., pay stubs, bank statements), increasing data accuracy from 96% to 99%.
- Built hourly integration testing framework to ensure service level agreements (99.99% uptime). Deployed on **AWS (Amazon Web Services)** using **Kubernetes, Helm**, and **Docker**.
- Developed bounding box drawing and image manipulation features in web-based UI application in **React (Typescript)** for data entry personnel.
- Doubled the number of supported form types by designing a new forms data model to handle multi-dimensional data (e.g., nested tables). Promoted to lead as a result.

Dialpad Inc.

Dialpad offers video conferencing, messaging, and business / virtual phone software (cloud communications platform), similar to Zoom, Slack, and Microsoft Teams.

Senior Software Engineer
Aug 2016 - Sept 2019

- Developed mobile-specific **REST APIs in backend** and corresponding mobile features such as finding active users, VoIP call setup and hangup, and screen sharing.
- Led end-to-end projects to implement push notifications to support real-time messaging in both iOS (Swift) and Android (**Java / Kotlin**) Dialpad apps.
- Implemented the mobile analytics backend service in **Django (Python)** and integrated with Dialpad's main analytics stream processing in **Kafka**.

Software Engineer
Jan 2015 - Aug 2016

- Collaborated with a team of four on the Dialpad Android (**Java**) application to deliver features such as VoIP, call controls, search, and contacts management.
- Utilized the audio and video APIs to implement voicemail and video playback functionality.

Spartan Software Inc.

Spartan Software provides cloud-based solutions in localization / translation industry.

Software Engineer
Jun 2013 - Jan 2015

- Created a web application for translators to peer-review translated documents. Developed with **Spring (Java)** and deployed on **AWS EC2 (Amazon Web Services).**
- Implemented document review functionality, allowing reviewers to compare original and translated documents, comment and flag errors, and score translations.

EDUCATION

Aug 2009 - May 2013

University of California - **Berkeley**
- B.S. in **Electrical Engineering and Computer Science**