

# JIN W. ROH

Engineering Lead

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## PROFILE

Engineering lead with over 9 years of experience across backend, frontend, native mobile development, and people management.

## 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, enabling mortgage clients to assess applicant eligibility (e.g., employment, debt-to-income ratio) and reduce manual review time.
- 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 meet service level agreements. Wrote **Helm charts, Dockerfiles**, and deployed on **AWS (Amazon Web Services)** using **Kubernetes**.
- 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**.
- 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.

#### Software Engineer

Jan 2015 - Aug 2016

### 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

University of California - **Berkeley**

Aug 2009 - May 2013

- B.S. in **Electrical Engineering and Computer Science**