

# Daw-Ran Liou

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## EDUCATION

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### Cornell University

*Master of Engineering in Mechanical Engineering*

Ithaca, NY

*August 2012 – May 2013*

### National Taiwan University

*Bachelor of Sciences in Mechanical Engineering*

Taipei, Taiwan

*September 2007 – June 2011*

## EXPERIENCE

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### Senior Software Developer

December 2019 – Present

*Kira Systems (acquired by Litera in September 2021)*

*Remote*

- Maintained and developed the Clojure and ClojureScript full-stack SaaS application that makes Generative AI, Machine Learning (ML), and Natural Language Processing (NLP) technologies accessible to legal professionals for contract reviews and M&A due diligence
- Collaborated with Designers, Product Owners, and Quality Engineers to ensure the application UI is accessible, consistent, and optimized using Functional Reactive Programming with ClojureScript, Google Closure Library, and the Reagent library, on top of the JavaScript React framework
- Contributed to the Smart Summary project that seamlessly integrates Azure OpenAI's Large Language Models (LLMs) into lawyers' contract review workflow
- Contributed to the Smart-Field Sharing project that implements mutual TLS for secure authentication without complex account management when transferring sensitive Machine Learning models from one firm to another
- Lead the in-app Activity Log feature from prototype to production that gives firm administrators the visibilities of user activities of current and past projects while conforming to the General Data Protection Regulation (GDPR) for user data
- Ensured on-time and consistent delivery of product releases by supporting DevOps with knowledges to both our software architecture and our custom Jenkins CI/CD pipelines

### Software Engineer

December 2013 – July 2019

*KLA (formerly KLA-Tencor)*

*Milpitas, CA*

- Developed and maintained the distributed machine control software in Java for generations of Opto-mechanical Wafer Inspection Systems that give the necessary feedback to semiconductor fabrication plants to observe and tune their processes to improve yields.
- Supported the Jython (the Python implementation in Java) interpreter environment to enable System Engineers to troubleshoot the System interactively and to contribute diagnostic scripts to the source code.
- Initiated the experimental general-purpose asynchronous data logging library project using Clojure with core.async, interoping with the legacy Java codebases.
- Solo-developed and deployed a full-stack web application with React, Python Flask, and SQL database for internal data visualization and analytics.
- Founded the company-wide Python Study Group in 2016 and organized the weekly meetups group before passing the baton to the next organizer in 2019.

## OPEN-SOURCE CONTRIBUTIONS

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[metosin/reitit](https://github.com/metosin/reitit) | *Clojure*

July 2019 – November 2019

- Implemented the example project demonstrating a minimal Reitit Ring app with Integrant
- Improved the public API data specs to fix the bugs [#296](#) and [#376](#)

[cljdoc.org](https://github.com/cljdoc/org) | *Clojure*

October 2018 – February 2019

- Added the 404 page and the sitemap to improve user experiences
- Improved the local setup documentation

## SKILLS

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**Languages:** Clojure, ClojureScript, Java, Python, SQL (Postgres), Go, JavaScript, HTML, CSS

**Developer Tools:** Git, Docker, Amazon Web Services, Jenkins, GitHub Actions, Emacs