Yuwei Liang

949.529.7109 | fredlyw@gmail.com | linkedin.com/in/yuweiliang | yuweiliang.com | Los Angeles, CA

Summary

Software engineer with **10+ years** building production e-commerce, marketplace, payments, and billing systems. At Cart.com, I develop **OMS/WMS inventory** and make high-risk changes safer through production measurement, characterization testing, and observability. I also build mutation-testing and AI delivery safeguards that verify changes and tests behave as intended.

Experience

Cart.com

Feb 2026 – Present

Software Engineer, WMS Inventory & Marketplace — *Remote*

- **Inventory Integrity:** Investigated negative inventory across fulfillment centers and shaped the team's deduct-on-pick design after measuring concurrent batch behavior and ruling out location locking.
- **Safe Change & Measurement:** Delivered characterization suites, ledger attribution without changing a high-volume legacy table, and a facility scorecard to guide safe remediation.
- **Inbound Inventory:** Owned and deployed an inbound-PO ship-complete hold in a Django OMS/WMS, improving order consolidation for clients waiting on inbound stock. Added a regression proof that caught a release-loop defect before production.
- **Lot Integrity:** Added shadow telemetry and shadow-first cross-SKU lot validation at the inventory save layer for a lot-controlled client, targeting wrong-lot shipment defects.
- **Production Reliability:** Improved production observability by correcting ineffective metric-monitor configuration and validating telemetry delivery; identified asynchronous processing and data-pipeline reliability gaps.
- **Vendor Payouts:** Designed and shipped a marketplace vendor payout system end-to-end, supporting vendor disbursements after launch.
- **Vendor Integration Reliability:** Maintained vendor EDI integrations, diagnosing data and mapping issues to keep partner transactions flowing.
- **Test Verification:** Built an automated mutation-testing harness that verifies regression suites catch introduced defects.
- **AI Delivery Standards:** Turned an AI-assisted delivery postmortem into red-first verification guidance and agent-contract safeguards for future changes.

Houzz, Inc. — Marketplace

2018 – Feb 2026

Full Stack Software Engineer — *Los Angeles, CA*

- **Checkout & Payments:** Re-architected order creation to improve API responsiveness and integrated Apple Pay Express Checkout for mobile web, contributing to growth on that checkout surface.
- **Billing & Accounting:** Built a TIN/EIN tax-compliance system integrated with NetSuite to help marketplace partners meet IRS requirements; recovered overpaid sales tax through an Avalara API integration.
- **Payment Terms:** Led a multi-term payment system that reduced engineering involvement in net-term setup; shipped a quick-pay incentive to improve contribution margin.
- **Product Ads:** Diagnosed and fixed a Google Ads conversion-tracking issue, restoring reliable campaign measurement and enabling data-driven optimization.
- **Supplier BI:** Led engineering of a supplier-insight reporting platform with sales, inventory, and ads analytics.

Zobrist Consulting Group 2015 – 2018

Software Developer *Los Angeles, CA*

- Led development of *Mobilecom*, a SaaS mobile-first storefront for IBM WebSphere Commerce, helping client sites improve the mobile shopping experience.

Projects

Loopii Mar 2026 – Present

Festival companion app — Coachella 2026

- **Solo-Built & Shipped:** Designed, built, and shipped **Loopii** — a React Native (Expo) iOS app — solo from zero to TestFlight in **~6 weeks**, used by a private squad on the ground at Coachella 2026 W2.
- **Claude-Driven UX:** Drove the entire UX system — screens, navigation, day/night theming with 4 colorways, component composition — with Claude as the design partner, iterating on AI-generated design previews before translating to React Native.
- **AI & Release Engineering:** Integrated a Claude-powered in-app FAQ assistant and artist-recommendations engine; automated TestFlight delivery with Fastlane (auto-version bump, build, upload, GitHub release) behind a one-command deploy.

Technical Skills

Languages: Java, Python, JavaScript/TypeScript, PHP, SQL

Backend: REST/GraphQL APIs, microservices, distributed systems, event-driven architectures, query optimization, Node.js

Frontend & Mobile: React, Redux, React Native (Expo), HTML5, CSS3, responsive web

Data & Storage: MySQL, Postgres, Snowflake, Redis, DynamoDB, Elasticsearch, Solr, data pipelines

Cloud, DevOps & Observability: AWS (Lambda, DynamoDB, S3, API Gateway), Firebase (Firestore, Cloud Functions, Auth), Kubernetes, Docker, Terraform, CI/CD, Datadog, Grafana, on-call rotation

Integrations: NetSuite, Avalara/AvaTax, Stripe, Plaid, Apple Pay, Google Ads

AI & Developer Tooling: Claude Code, agentic development workflows, agent contracts and capability guards, LLM-assisted code review, MCP servers

Testing & Change Safety: characterization testing, golden-master suites, mutation testing, Playwright, pytest, Django test framework

Education

M.S., Software Engineering University of California, Irvine 2015

B.S., Information Security Beijing University of Posts and Telecommunications 2013

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