

Robert Levy

Oakland, CA • 510-316-9114

r.p.levy@gmail.com • [linkedin.com/in/rplevy](https://www.linkedin.com/in/rplevy)

Senior Software Engineer Clojure, ClojureScript, Machine Learning

Deliver innovative and scalable software solutions with Clojure, ClojureScript, and Machine Learning expertise. Design and optimize high-performance systems, enhance user engagement through front-end and back-end integration and lead architectural development. Proven success in streamlining complex processes, driving collaborative solutions, and delivering impactful software enhancements in dynamic, data-driven environments.

TECHNOLOGIES:

Programming Languages: Clojure, ClojureScript, JavaScript, Node.js, Perl, Common Lisp, Emacs, Python, R, Matlab, Java, SQL, Datalog, GraphQL, Regular Expressions (RegExps)

Data and Stream Processing: Kafka, KStreams, Samza, Hadoop, RabbitMQ, Elasticsearch, RethinkDB, Cassandra, HBase, Datomic, MySQL, Interbase/Firebird, Oracle, DB2, PostgreSQL

Web Development and Frameworks: React, Reagent, re-frame, Material Design, Ant Design, Compojure, Pedestal, HTTP/REST

Testing and DevOps: Docker, Jenkins, CircleCI, TravisCI, Github Actions, AWS (EC2, RDS, S3, Lambda, SNS), Google Cloud, Heroku

Machine Learning and Algorithms: Machine Learning (Logistic Regression, kNN, Decision Trees, Random Forests, Neural Nets, Evolutionary Computation)

Database Management: PostgreSQL, Datomic, RethinkDB, Cassandra, HBase, MySQL, Interbase/Firebird, Oracle, DB2

COMPETENCIES: Software Development, Software Architecture, Machine Learning (Logistic Regression, kNN, Decision Trees, Random Forests, Neural Nets, Evolutionary Computation), Distributed Systems, Front-End Development, System Integration, Search Systems, Predictive Modeling, Real-Time Systems, Testing Practices, Stream Processing, UI Development, Performance Optimization

PROFESSIONAL EXPERIENCE

Cisco
Engineer (Clojure)

Mar 2020 - Nov 2024

Played a pivotal role in enhancing Cisco's SecureX platform, contributing to security solutions development, module integration, and innovative uses of generative AI. Focused on optimizing security workflows and improving user experiences through architectural design and hands-on development of key features.

- Enhanced threat detection by introducing LLM-based summarization and ranking for malware threats, resulting in new product development for the XDR team.
- Streamlined user credential management across modules by designing and implementing hierarchical module support, improving usability and efficiency.
- Drove architectural design and development of SecureX modules, collaborating with multiple teams for product integration.
- Improved user experience through creation of new APIs and dashboard tiles for integrated modules, elevating platform utility.
- Guided and mentored new engineers, fostering growth into productive team members.
- Championed cross-team collaborations, ensuring delivery of integrated platform features and maintaining high operational standards.

Starcity
Principal Software Engineer

Apr 2019 - Feb 2020

Served as technical lead for payments and operations teams, driving custom Stripe payouts and key mobile app features development. Oversaw high-priority production projects, delivering solutions under tight timelines and providing crucial support for property management and accounting operations.

- Delivered timely payouts by completing implementation of custom Stripe-based system after taking over full project responsibility
- Released mobile app with integrated push notification system by researching options, creating detailed system design, and implementing end-to-end solution.
- Enhanced operational support by developing property management and accounting features within legacy Clojure stack, increasing platform functionality.

- Led post-reorganization technical operations, providing critical production support and driving development for member operations.

Dividend Finance**Apr 2018 - Mar 2019****Senior Software Engineer**

- Improved user engagement by developing the ClojureScript portal using re-frame and material UI, enhancing financing solutions.
- Streamlined financing operations by creating APIs for solar and home improvement integration with legacy systems, boosting operational efficiency.
- Strengthened backend support through development of Clojure APIs, ensuring secure and scalable solutions for financing needs.
- Collaborated cross-functionally to align software development with business goals, optimizing platform delivery for target users.

TalkIQ**Aug 2017 - Apr 2018****Frontend Software Engineer**

- Improved user experience by implementing real-time and post-call features for Omni product using ClojureScript with Om/React.
- Strengthened product design by contributing to feature interactions and enhancing user workflows through design processes.
- Elevated code quality and reliability by establishing and refining testing practices across frontend systems.
- Optimized product features by integrating user feedback into design and development processes.

Funding Circle**Sep 2015 - Aug 2017****Senior Software Engineer**

- Increased platform reliability by designing and implementing distributed stream processing systems with Clojure, Kafka, and Mesos.
- Developed dynamic UI applications using ClojureScript and Reagent/Re-frame, improving user interaction and interface performance.
- Optimized testing processes by creating robust tools and strategies for end-to-end testing of stream processing topologies.
- Enhanced system scalability and stability by engineering resilient distributed architecture aligned with business growth needs.

Sonian**Jan 2014 - Dec 2014****Senior Software Engineer**

- Enhanced data retrieval by creating and maintaining search DSL using Elasticsearch for complex search-related services.
- Improved system performance by developing robust email archiving and metadata solutions utilizing Clojure and Datomic.
- Ensured system reliability by managing and optimizing Elasticsearch maintenance for scalable, efficient search operations.
- Boosted service functionality through development of advanced search features tailored to user needs and system requirements.

Runa**Mar 2013 - Oct 2013****Senior Software Engineer**

- Increased customer sales lift by designing and implementing high-performance ML algorithms using Clojure.
- Improved modularity and scalability by re-architecting predictive modeling infrastructure, enhancing overall system performance.
- Optimized promo engine services, meeting stringent latency and load requirements and contributing to acquisition by Staples.
- Boosted e-commerce customer sales by extracting, developing features, tuning models, and implementing precision algorithms.

PRIOR EXPERIENCE**Draker**, Software Engineer (Clojure, Cassandra, PostgreSQL)**Akamai**, Software Engineer (Clojure, Perl, Javascript, PostgreSQL, PCI compliance)**Brandeis University, Library & Technology Services**, Web Developer (Perl, JS, PostgreSQL, MySQL, Oracle DB2, Python/Django, TCL)**MGH/HST Martinos Center**, Programmer/ Research Assistant (Perl, matlab)**Courier Systems**, Desktop & Web Developer (Delphi, PHP, Javascript, Interbase/Firebird, MySQL)**SUNY Oswego**, Research Assistant (Neural network architecture, training, and testing for connectionist research.)

EDUCATION & PROFESSIONAL DEVELOPMENT**BA, Cognitive Science & Linguistics**, State University of New York at Oswego. College Honors Program.**Thesis:** Limerick Generation by Evolutionary Computation with Neural Network as Fitness Evaluator (implemented in Common Lisp)