

Motivated by deep awareness of the [human](#), social aspect of software development. Passionate about [Lean](#), [TDD](#), [DDD](#), [CI/CD](#), [Functional Programming](#), [WIP limits](#), and [Mob Programming](#). When I grow up, I want to use [OCaml](#) or [Rust](#) in production. I'd probably want to work at [Netflix](#) if I didn't abhor the entertainment industry.

Experience

2021 - present **Engineering Team Lead** **CauseMatch**

Breathed new life into an ailing project by assuming leadership of a team of six engineers and guiding them to many improvements in both process and product. The team had been seen as ineffective, but is now considered to be the most successful in the company.

- Engendered significantly improved communication and collaboration within the team.
- Achieved team-wide understanding, appreciation, and adoption of layered architecture on Node.js backend and React/Redux/Saga frontend, which reduced the level of coupling in the codebase, lowered the rate of defect incidence, improved code readability, and increased the degree of shared code ownership.
- Instituted a process for collaborative design review and technical planning on a per-feature basis, which paved the way for smoother collaboration, reduced development risk, and lowered defect incidence in the released product.
- Achieved team-wide understanding, appreciation, and adoption of Domain-Driven Design, to improve communication between engineering and the company-at-large and to better suit the product to the needs of the users.
- Facilitated the adoption of a more effective git branching workflow, along with the ability to deploy any PR to a testing environment, which significantly reduced delays in the development process and increased the team's throughput, release cadence, and ability to put code in production with confidence.
- Standardized the development and maintenance of automated end-to-end API tests with every PR, further improving confidence in the codebase.
- Introduced modern devops as a discipline critical to the success of the development process as well as the security, availability, and maintainability of production systems. (Yes, I did most of the devops.)
- Expanded the team and raised the craftsmanship standards by taking ownership of the entire engineering hiring process.
- Instituted dedicated time for professional growth, including weekly coding dojo and book club sessions. Provided low-risk opportunities for the team to experiment with new technologies and methods while developing new features.
- Established regular team retrospectives for continual process improvement.
- Did some coding also! Revamped api token management, rbac, webhooks, and email notifications. Implemented pdf receipt rendering service with bidi support. Devised and implemented a fraud threat scoring system which successfully identified and blocked fraudulent donations.

2016 - 2020 **Senior Software Engineer** **Mokriya (acquired by Nagarro)**

Demonstrated initiative and technical leadership on several consulting projects:

Glean Analytics

- Designed and built application engine using Python coroutines to implement hexagonal architecture for an N-Tier API, which separated business logic from side-effects, improving maintainability and testability of the app.
- Implemented role-based, endpoint-level- and data-dependent, multi-criteria, object-level API permission enforcement.
- Instigated significant design and architecture improvements in data pipeline built on AWS StepFunction.
- Documented collaboration standards for Git and Python.

Aryeh Leib Taurog

Siemens Energy Innovation Center

- Inferred entity relationships and query needs from CRM data export to produce a GraphQL API which surpassed client's expectations. The API included an auth-dependant data schema and query execution optimizations which allowed clients to access large data sets quickly and securely.
- Significantly expanded capabilities of Flask REST API for querying time-series data from InfluxDB and Druid.
- Implemented complete devops solution for API services with GitLab CI, Amazon CloudFormation, and ECS, which achieved significant flexibility and performance improvements over Zappa-based Lambda deployment, and which enabled the team to focus entirely on the code.
- Built and deployed custom Tyk API gateway to enforce granular claims-based access rules and present cached virtual endpoints.
- Devised and maintained systems for unit testing custom Tyk middleware functions as well as for integration testing the API gateway on a local development machine. The test suites thus implemented sped the middleware coding cycle by several orders of magnitude and kept cluster downtime to a minimum.
- Eked correct results and reasonable performance from MySQL on various queries by tricking it into doing the right thing. Please don't make me work with MySQL.
- Documented extensively system architecture, implementation, testing, deployment, and management.

Verizon Digital Signage

- Jump-started large React/Redux/Redux-Saga project by quickly bringing team up to speed on the platform, architecture, and best-practices.
- Introduced Travis automated testing and continuous deployment for front-end project which proved critical in facilitating collaboration with QA, designers, and management.
- Quickly found and fixed numerous elusive bugs.

2010 - 2018 Senior Software Engineer Uncle Bob's Money

Architected and developed, from the ground up, Django-based SaaS for options traders:

- Built high-performance data pipeline for numerical analysis of option pricing and fast insertion into the database.
- Implemented subscription system integrating multiple payment gateways.

Education

B.S. Physics Harvey Mudd College

Open Source

pgcopy A Python library for bulk-loading data into PostgreSQL using [binary copy](#).

rst-resume A \LaTeX stylesheet used to produce this great-looking resumé from [reStructuredText](#).

hanoi The Tower of Hanoi, in Elm.