

**Michael 'Misha' Litchev | Software Engineer**  
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**Expatria ([expatriaonline.com](https://expatriaonline.com)) – Seattle, WA**

*Interactive planner & research portal for retiring abroad, incl. immigration, taxes, real-estate, healthcare & cost of living.*

**Software Engineer, Full-Stack**

**12/2024 - 12/2025**

- Architected, designed & programmed an offline-first, data-dense platform for global immigration
- Integrated headless, 'always-on' agentic co-pilot to guide the user through complex, multi-step processes
- Orchestrated automated, agentic workflows with OpenAI, Claude, N8N, Gemini, Linear & Cursor APIs
- Implemented Manifest V3 Chrome Extension including an embedded, local Gemini Nano LLM model
- Deployed Node.js microservices to handle logic related to Stripe-based subscription & one-off payments
- Persisted user & application data using Postgres, caching local user data with IndexedDB
- Charted interactive, animated world, continent & national maps with TopoJSON & GeoJSON
- Designed aesthetically pleasing, consistent CSS using Tailwind, animations with Framer Motion & Three.js
- Compiled comprehensive demographic & statistical data about countries into consumable npm packages
- Led User Research sessions, leading to tangible UX improvements & workflows tailored to behavior
- Abstracted platform code into a reusable front-end boilerplate, available for purchase.
- Orchestrated CI/CD pipeline w/GitHub actions & AWS services like S3, Cloudfront, KMS, Lambda & EC2
- Optimized SEO with 2000+ statically generated pages w/ data about countries, cities & immigration docs
- Engineered web & mobile-optimized workflows, including TikTok-style navigation for tablet users.
- Programmed quality-of-life modules, incl. a command palette, onboarding module & achievements system
- Benchmarked performance metrics using Lighthouse & react-scan, tracking TTP & unnecessary re-renders
- Tested codebase via unit & snapshot testing with Jest & React Testing Library, Cypress for e2e test flow
- Logged API services & webhooks using Cloudwatch; monitored front-end issues & sessions with Sentry
- Additional functionality includes international tax calculations, blog, a step-by-step onboarding system including animated gifs, animated platform tour, cost-of-living comparison tools & document storage.

**Cedar AI ([cedarai.com](https://cedarai.com)) – Seattle, WA**

*Modern software for freight railroads, bringing them into the 21st century with automation & artificial intelligence*

**Software Engineer, Mobile & Web**

**10/2021 - 1/2024**

- Led engineering for ARMS Mobile, a cross-platform Flutter mobile app that runs in production on iOS, Android & web, onboarding over 20 railroads and over 150 industrial daily active users during my tenure.
- Designed IAM-based UI rendering & dynamic tree-based navigation, also integrating OAuth providers
- Benchmarked perf metrics in designing large, multi-indexed list views w/ multiple interaction patterns
- Implemented on-device machine learning models for optical character recognition & QR scan workflows
- Implemented offline-first storage using Hive, accounting for unstable network environments in the field
- Managed deployment workflows on all three production environments, including iOS, Android and Web
- Tested & deployed REST & Protobuf-based gRPC APIs in Python, within a Bazel monorepo environment
- Built data-dense UI in React w/Typescript, managing state with a combo of Redux, Hooks and Context.
- Built & maintained reusable components for internal component library, used across front-end codebases.
- Continuously served on-call for Sev-1 or Sev-2 incidents for the mobile application using PagerDuty.
- Traveled to five different states (CA, AL, KY, GA, WA) to onboard clients, build relationships & code onsite.
- Provided technical sales support to existing and prospective customers, giving demos & answering queries
- Created product marketing & onboarding resources, such as gifs, tutorial slideshows & feature docs
- Internationalized the UX into three different languages, specifically Spanish & Punjabi (Gurmukhi script)
- Implemented Android/iOS push notifications, error logging & session tracking via DataDog
- Added new marketing pages & content for our landing site [cedarai.com](https://cedarai.com) for mobile, transload, intermodal.

**Open Source Maintainer, Assorted NPM Packages**

*'seattle-open-json' is a collection of standardized JSON objects about the civic resources available in the Puget Sound.*

*'yi-jing-oracle' is a packaged algorithm for the yarrow-stalk method of ancient Chinese divination & assorted resources.*

**Author, 'Journey to the East; Post-COVID China' || Career Break & Travel**

**1/2024 - 10/2024**

*Published on Amazon, available through print and [digitally on Kindle](https://www.amazon.com/dp/B0C8J8J8J8). A travelogue that walks through Hong Kong, Shenzhen, Xi'an, Shanghai, Beijing and more to tell the history of imperial China, modern culture, food, tech & more.*