# Jesse Earle

Boston | earle.jesse@gmail.com | (908) 399 - 1635

Fullstack developer with 15+ years building scalable web applications and data-driven systems using React, TypeScript, and modern JavaScript.

## Leadership and Technical Proficiency

| **Leadership & Strategy** | **Architecture & Technologies** | **Core Development** |
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| Team Leadership & Mentoring | System Design & Architecture | **Frameworks**: React, Node.js, Express |
| Technical Vision & Roadmap | Cloud Transformation (AWS) | **Languages**: TypeScript, JavaScript, Go |
| Stakeholder Collaboration | API Design (REST, gRPC) | **Databases**: PostgreSQL, MSSQL, Redis |
| Budget & Planning Support | Microservices & Distributed Systems | **Build Tools**: Docker, Vite, SWC, Webpack |
| Hiring & Talent Development | CI/CD & DevSecOps | **Testing**: Jest, Vitest |
| Legacy System Migration | Data Pipelines & Integration | **Package Mgmt**: Yarn, Bun, PNPM |
| Agile Project Management | Monorepo Strategy (NX, Lerna) |  |

## Work History

### Senior Consultant | ExodusPoint (07/2021 – Present)

* Built real-time street orders dashboard monitoring trade execution across brokers, improving trading operations visibility.
* Created stress-testing platform applying historical Black Swan volatility to live portfolio data for forward-looking risk assessments.
* Developed real-time options pricing dashboard for exotic derivatives with PV calculations based on live market data and user-defined barriers.
* Architected team-wide monorepo strategy using NX, SWC, and PNPM; resolved ESM/CJS conflicts and reduced CI build times by 50%+.
* Delivered bonus allocation API and frontend automating year-end compensation workflows.
* Built calendar event APIs and UIs supporting scheduling integration across internal tools.

*TypeScript, React, Node.js, PostgreSQL, Protobuf, gRPC, gRPC-Web, Vite, SWC, NX, PNPM, Ant Design*

### Vice President/Architect | MSCI Inc. (10/2020 - 11/2023)

* Architected end-to-end real estate data platform serving external clients through REST APIs, integrating MSSQL and Elasticsearch with custom React frontend.
* Built scalable data pipeline migrating real estate data from MSSQL to Snowflake, enabling enhanced client analytics.
* Implemented authentication/authorization system using AWS Cognito and Node.js, securing multi-application client access.
* Designed modern monorepo architecture with Yarn workspaces and Vite, enabling React package code sharing while maintaining AngularJS/Webpack compatibility.
* Established feature management strategy using LaunchDarkly for controlled rollouts and A/B testing.

*TypeScript, React, Express, Node.js, MSSQL, Elasticsearch, AWS Cognito, Snowflake, LaunchDarkly, Yarn, Vite, AngularJS, Webpack*

### Senior Consultant | Morgan Stanley (03/2018 - 08/2020)

* Built Fixed Income Real Time Finance, Budget, and Headcount Dashboard architectures, UIs and APIs.
* Transitioned API architecture to modern Node.js/Express for user-friendly APIs while leveraging existing KDB+/Q for real-time stream processing of large financial datasets.
* Migrated Cross Desk Administration from Angular.js to React module by module until Angular.js removal.
* Translated Fixed Income analyst specs into realtime UIs and APIs.
* Modernized Cross Desk Dashboard build from grunt-based concat to Webpack/ESNext/Babel pipeline.
* Built Fixed Income Finance Email Builder/Scheduler Dashboard architecture, UI and APIs.

*React, React Hooks, Express, Node.js*

### Senior Engineer | OkCupid (06/2017 – 01/2018)

* Built administrative portal for moderators to review fake profiles and abusive messages.
* Created server-side rendering service for React applications.
* Implemented payment frontend with backend API integration.

*React, Redux Thunk, Node.js, Sass, Pub, Docker*

### Co-Founder | Swett/Pineaapl.io (08/2015 – 12/2017)

* Built automated exercise tracking application linking hardware beacons with exercisers to track treadmill/elliptical distances and free weight repetitions.
* Created analytics system gathering real-time customer feedback on service/speed/quality metrics at checkout.
* Developed dashboard analyzing customer ratings with hourly, daily, weekly, and monthly breakdowns to identify problematic locations and timeframes.

*Swift, OAuth2.0, Node.js, Express, Sequelize, Docker, PostgreSQL, Estimote, Firebase, React, Redux, Redux Sagas, Reselect, Styled Components, React Router, React Native, Chart.js*

### Senior Software Engineer | Yieldmo (02/2016 – 05/2017)

* Built internal fullstack application using Node.js/GraphQL and React/Redux to manage and generate ad creatives deployed on Google’s DFP.

*React, React Router, Redux, Docker, Babel, Webpack, GraphQL, Mocha, Chai, Enzyme, Node.js, Express, ESLint, Karma, OAuth2.0*

### Senior Frontend Software Engineer | MallHawk, Inc (09/2014 – 09/2015)

* Built I Wanna v1, a location-based app suggesting destinations with vendor discounts.
* Built MallHawk v1, a marketplace for local vendors competing with online retailers via automated reverse auction.

*ObjectiveSugar, Lockbox, FBSDKCoreKit, FBSDKLoginKit, Adjust, AFNetworking, Alamofire, PromiseKit, OCMapper, RestKit, Ember, Ember CLI*

### Consultant | High5Games (03/2014 – 09/2014)

* Built UI/API for filtering, sorting, and searching game data.

*AngularJS, Node.js, Mocha, Chai, Gulp, Browserify, WordPress, Bootstrap*

### Senior Software Developer | Shopbeam (03/2013 – 03/2014)

* Built infinite scrolling dashboard for content publishers.
* Created AWS S3 Node.js module for streaming and storing images.

*AngularJS, Browserify, Node.JS, Express, Stylus, Jade, Sequelize, Postgres, Redis*

### Senior Software Developer | ICC Lowe Thermal (03/2011 – 09/2012)

* Built 4-player touch table game for Microsoft Surface (PixelSense).
* Developed multiple websites and e-detailers.

*Objective-C, Ruby, C#, MonoTouch, Surface 2.0 SDK, Express, RoR, CSS, HAML, JSON, MySQL*

### Software Developer | Enterprise Systems & Services, Rutgers University (03/2010 – 03/2011)

* Built Rutgers frontend Undergraduate Admission application.

*Dojo, Java, SpringMVC, Oracle*

### Programmer | Chromecell (09/2009 – 03/2011)

* Built cell line lineage tracker for robotics department.

*Python, wxPython, COM*

## Education

*Rutgers, The State University of New Jersey, Computer Science (2006–2010)*