

# Mckenzie Irwin

Lead Software Engineer

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React and Node.js developer currently building full-stack applications which power the desktops of financial traders. Passionate about continuously improving developer experience and experimenting with new frameworks and technologies.

## SKILLS

**Languages:** HTML, CSS, Javascript, Typescript, Node.js

**Frameworks:** React, Next.js, Express.js, Bootstrap, Mantine, Tailwind CSS

**Technologies:** React Router, React Query, Redux, Zustand, Interop.io, MongoDB, Socket.io, Jest, Vitest

**Tools:** Git, Github, Bitbucket, Jira, Figma, VS Code, Docker, Vite, Rollup, Webpack, npm

## WORK EXPERIENCE

**Lead Software Engineer** | TD Securities | App Engineering & Design | Jun. 2023 - Present

- Managed a team of 7 developers to rebuild and enhance a legacy application responsible for managing precious metal fulfillment & replenishment for all of TD's Canadian retail banks.
- Reduced errors in metal order creation by ~80% through dynamic field validation, alerts for potential duplicate orders, and providing near-real-time inventory information per product.
- Achieved a rapid nine month delivery on the legacy rebuild by leveraging my internal development kit which provides solutions for common technical challenges such as data fetching/caching, state management, authentication, and internal API integrations.

**Senior Software Engineer** | TD Securities | Precious Metals Automation | Jun. 2021 - Jun. 2023

- Architected and led the development of a new real-time precious metals auction platform.
- Improved auction trader efficiency ~4x by automating aspects of the deal creation process (ie. form auto-population, credit checking, etc) and allowing concurrent deal submissions through an intermediary service that integrates with the book of record.
- Streamlined the disparate service infrastructure by utilizing MongoDB change streaming to establish an event-based architecture that seamlessly integrated all relevant services.

**Software Engineer** | TD Securities | Internal Tooling Development | Jul. 2020 - Jun. 2021

- Developed an application portal (akin to Adobe Creative Cloud) to catalog all internal apps, provide the ability to save and relaunch multi-app workflows with one click, and enable client-side [interop](#) between applications launched via the platform.
- Reduced time-to-production for new internal projects from weeks to days by producing a standardized application starter (used by 20+ production apps as of Dec. 2023).
- Increased developer efficiency and code reusability through the publication of an internal component library (ie. Custom Table, Collapsible Sidebar, Dynamic Tooltip, etc).

## EDUCATION

**BSc. Computer Science (Honours)** | Ryerson University | Dean's List

## PERSONAL PROJECTS

**RateMyRotation** - Review platform for TD's associate program. Allows candidates to rate their job rotation and gain insight before selecting their next role. **Tools:** React, Google Firebase, Material UI