

Tim Kendrick

Rust/TypeScript/React Software Engineer

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Overview

Product-driven hard-worker with two decades' experience across multiple industries. I'm highly self-motivated, a fast learner and a committed team member with excellent problem-solving skills and a keen eye for detail and aesthetics.

Equally comfortable building pixel-perfect UIs, robust frameworks and libraries, or time-saving automation utilities and tooling. I love to tackle big problems and am passionate about developing innovative solutions to formidable technical challenges.

Frameworks / Technologies


Strong expertise in TypeScript, React, Rust, WASM, Node.js, GraphQL, gRPC, WebSockets, RxJS. I particularly enjoy building polished user interfaces, functional/stream programming, and putting CS theory into practice to solve real-world use cases.

Outside work I take on ambitious personal coding projects and like to learn new concepts from first principles. In addition to end-to-end solo product builds, I've written my own clean-room implementations of programming language interpreters and compilers, regular expression engines, actor systems, observables, virtual DOM, etc, to gain a deep understanding of how everyday tools and frameworks are implemented, which helps inform the design decisions I make at work.

Selected Work History

- **April 2024 - Present:** [Squarepoint Capital](#), Software Engineer
- **October 2023 - April 2024:** [AG Grid](#), Senior Software Engineer
- **April 2020 - August 2023:** [Marshall Wace](#), Lead UI Developer / Rust Software Engineer
- **April 2019 - December 2019:** [11:FS](#), Senior Software Engineer (freelance)
- **September 2018 - March 2019:** [Canvas Composer](#), Solo developer
- **August 2016 - August 2018:** [Deutsche Bank / DWS](#), Lead Developer (freelance)
- **September 2013 - April 2015:** [Fathom](#), Lead Developer
- **February 2013 - August 2013:** [R/GA London](#), Senior Front-End Developer (freelance)
- **August 2011 - January 2013:** [Burberry](#), Senior Front-End Developer (freelance)
- **Summer 2006 - February 2010:** [Ralph](#), ActionScript Developer

Selected Open Source Projects

- [Reflex](#) (2023) – Reactive compile-to-WASM programming language and accompanying toolchain
- [Skivvy](#) (2015) – Modular task runner for reusable build systems
- [recursive-copy](#) (2015)  – Simple, flexible file copy utility
- [memoize-weak](#) (2016)  – Garbage-collected variadic function memoizer
- Many more at github.com/timkendrick and npmjs.com/~timkendrick

Academic History

- **2005 - 2008:** Trinity College, University of Cambridge (BA degree in Philosophy)
- **2003 - 2005:** Sevenoaks School, International Baccalaureate Diploma (45 out of 45, top 0.19% of students worldwide)

Selected Job Roles and Responsibilities

Squarepoint Capital (April 2024 - present)

Led the design and implementation of a greenfield timeseries data visualisation platform with extensible query/transformation DSL, live code editor, modular UI, and user-contributed plugin ecosystem. Primary contributor to Rust / React / GraphQL and Python tiers of the stack.

AG Grid (October 2023 - April 2024)

Building developer tools and core features for the market-leading open source datagrid/charts library (ag-grid.com). Created a codemod framework and associated AST manipulation libraries.

Marshall Wace (April 2020 - August 2023)

Lead UI developer (2020 - 2022)

Joined a delivery-focused product team building the company's flagship internal portfolio management suite and associated component library. Promoted to lead UI dev, where responsibilities included React UI development, tooling, and DevOps/infra. Increasing back-end responsibilities led to a dedicated role developing streaming technologies for distributed graph systems.

Rust Software Engineer (2022 onwards)

Led the design and implementation of an open source reactive programming language (see [promo site](#) for details). Use on a production system led to codebase size reduction from 15K LOC to 5K. I wrote the compiler/interpreter/devtools in Rust, including both proprietary VM bytecode and WebAssembly back-ends, and accompanying actor-based async server runtime.

11:FS (March 2019 - December 2019)

Lead TypeScript / React Native developer building a greenfield mobile app UI for a US retail bank's new challenger offering. Singlehandedly developed a fully-functioning prototype app within three weeks of arrival, with entire polished V1 release in users' hands within less than three months.

Canvas Composer (September 2018 - March 2019)

Solo project building a modular IDE for rapid development of React applications (canvascomposer.com). Intuitive UI builder allows toggling between visual drag-and-drop workspace and source code editor. Component library plugins and integrated zero-config build tools and allow rapid application prototyping within a graphical interface. Extensive static JSX source analysis of existing code allows prototypes to be seamlessly integrated within a real codebase.

Deutsche Bank / DWS (August 2016 - August 2018)

Lead architect/developer on a graph-based streaming data framework used to power data-driven front-end applications across DWS. Project responsibilities included product direction, API/architecture design, core library implementation, development of bespoke unit-testing framework and browser plugin for developer tools.

Fathom (September 2013 - April 2015)

Lead UI developer for a real-time corporate bond trading platform for [Tradeweb](#) and accompanying [component suite](#). Responsibilities included application architecture, development of in-house component library, performance tuning/profiling, internal build tools, technical leadership.

Burberry (August 2011 - January 2013)

UI development for all interactive experiences on burberry.com, creation of in-house JS/CSS Framework (used across all campaign sites, live streamed fashion shows, press kits and in-house tools), development of in-house internationalization tools, automation / build process improvements.