

Nouraldin Farge

Software Engineer | React, TypeScript & Product Development

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Summary

Early-career React/TypeScript software engineer building user-facing frontend, full-stack, and desktop products. Released three Windows portfolio applications with public repositories and verifiable artifacts, plus a case study of a private alpha. Uses AI coding agents under human review; retains final responsibility for testing, safety, and releases.

Technical Skills

Frontend: React, TypeScript, JavaScript, HTML/CSS, Vite

Application Development: Tauri, Rust, Electron, Node.js, Express, Python, Windows, REST, WebSockets

Data & Validation: SQLite, SQL, JSON Schema, Zod, schema-validated imports

Testing & Delivery: Git, GitHub Actions, CI/CD, Vitest, Playwright, pytest, Cargo, Clippy, CodeQL, SBOMs, SHA-256, provenance attestations

Projects

GameVault v0.3.5 [GitHub] [Release] | *React, Rust/Tauri, SQLite* 2026-Present

- Built a portable React/Tauri game library and launcher with a relative-path SQLite catalog, launch history, backups, and allowlisted metadata from official store pages.
- Hardened review-gated ZIP imports against path traversal, unsafe Windows names, links and reparse points, and decompression abuse; required explicit approval before promotion and supported rollback.

DrawScope v0.6.5 [GitHub] [Release] | *React, Rust/Tauri, Python, SQLite* 2026-Present

- Built a React/Tauri research workbench over a reproducible 41,598-row SQLite archive spanning six lottery games, with row-level provenance and documented data gaps.
- Enforced a time-ordered 60/40 discovery-confirmation split across 250 walk-forward trials with contract tests spanning TypeScript, Python, and Rust.

Research Studio v0.1.0-alpha.24 [Case Study] | *Electron, React, TypeScript, Express, SQLite* 2026-Present

- Built a private bilingual catalog-enrichment workflow validated against read-only snapshots of 31,521 series and 2,242,170 episodes, with isolated working copies and batches capped at five records.
- Treated AI output as untrusted by enforcing schema and evidence gates, requiring human approval before applying changes, and generating recoverable exports; published a source-free case-study snapshot on August 15, 2026.

Day-Trading Teacher v0.36.0 [GitHub] [Release] | *React, Rust/Tauri, local JSON, Zod* 2026-Present

- Built a 13-lesson local-first trading education app that unifies decision planning, historical replay, paper practice, journaling, reflection, and spaced review.
- Implemented deterministic decimal calculations in Rust, Zod-validated lesson imports, and provenance-aware Fidelity trade-history review; intentionally excluded live signals, advice, and order execution.

Experience

Independent Software Engineer 2026-Present

Self-Directed Portfolio Products

- Owned product and engineering delivery for four self-directed portfolio products: three public releases and one private alpha, from requirements and architecture through testing, documentation, and release decisions.
- Used AI coding agents to accelerate implementation and iteration; personally reviewed changes, resolved failures, validated claims, and retained final authority over safety, licensing, data sources, and releases.

Technical Assistant (Additional Experience) Jun 2015-Sep 2015

Chicago Public Schools

Chicago, IL

- Supported staff and classroom technology by diagnosing hardware and software issues and explaining practical fixes to non-technical users.

Education

Northeastern Illinois University

May 2023

Bachelor of Arts in Computer Science, Cum Laude - GPA: 3.74

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