Trace

Principal Software Developer · Northwest Indiana

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github.com/tracef

SUMMARY

Software engineer with nine years building software where it matters: public-safety systems for 911 dispatch and law enforcement, public sites for the Federal Trade Commission, and inspection software for energy and utility companies. TypeScript and React across the full stack. Tech lead who cares about process: requirements first, tests first, and a human-reviewed gate at every step, including how AI-assisted development fits a team.

EXPERIENCE

Octave

Remote

Principal Software Developer — Jan 2026 – present

Software Consultant — Jan 2022 – Dec 2025

Public-safety software for 911 dispatch and law enforcement, including OnCall Dispatch and a query tool for criminal justice data.

- Develop the query tool dispatchers and officers use to search and view criminal justice and other data, front end and back end: new features plus performance, usability and stability work.
- Built a configurable text-to-speech system end to end (configuration app, backend pattern matching, voice selection, database schema) so officers can hear critical information without looking at a screen.
- Built the real-time alert system in OnCall Dispatch's incident panel: caution codes, special-situation indicators and critical alerts from query results.
- Built a text-highlighting engine that handles word boundaries, special characters, and text inside encoded PDFs and images; rebuilt the core results grid with search, filtering, sorting and highlighting.
- Led the move from an AngularJS foundation to a shared React library built in CI; help build and extend a large shared library (Nx, Rollup) that drives front-end development across products.
- Maintain the add-on framework that ships add-on products and loads them into the main product at runtime; built authentication and permission checks for a product delivered as an add-on, and a generative dialog system configured on a row/column grid.
- Tech lead: plan features with stakeholders, mentor developers, own code quality and best practices.

Leidos

Jul 2018 – Dec 2021

Software Engineer · public sites for the Federal Trade Commission

- Lead front-end developer and contributing back-end developer of ReportFraud.ftc.gov.
- Led the front-end framework upgrade and rewrite of IdentityTheft.gov.
- Built an ETL process aggregating IdentityTheft.gov data with C#, AWS and SQL.
- Security analysis and bug tracking in Splunk, turned into actionable work.

Orbital Engineering, Inc.

Mar 2017 – Jul 2018 · Hammond, IN

Web Developer · an engineering firm serving the region's steel, energy and utility companies

- Built a risk assessment matrix application integrated with inspection data; improved and maintained a form builder and processor used by inspectors in the field.
- Built PHP APIs generating PDF and Excel reports; managed MySQL databases.
- Worked directly with clients and gave live support; helped with IT and trained the inspection team.

SKILLS

Expertise	TypeScript, React, front-end architecture; system design and implementation
Build	Vite, Webpack, Nx, Rollup
Full stack	C# and .NET, Node.js, SQL, websockets; work that spans repos
AI-assisted	Claude Code, GitHub Copilot, behind requirements-first, test-first, human-reviewed gates

EDUCATION

Purdue University Northwest

B.S., Computer and Information Technology

VOLUNTEER

- Indiana DNR · Indiana Dunes State Park
- Plastics Reduction Alliance: microplastics cleanup and research
- Other environmental organizations