

Thomas Dias-Santos

Founder of FKN and freelance software engineer

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Full-stack software engineer building browser platforms, media systems, and developer tools with TypeScript, Rust, and WebAssembly. Experienced in browser networking, cross-context RPC, media processing, and extension architecture.

EXPERIENCE

Software Engineer at Freelance

July 2013 to Present

- Builds web products and browser software with TypeScript, React, Node.js, GraphQL, and Rust.
- Develops WebAssembly media tooling, browser extensions, and cross-context RPC systems.

Founder at FKN

January 2020 to Present

- Founded a browser platform for networking, storage, and permission-based page automation.
- Built public JavaScript APIs alongside Rust networking and proxy services.

Lead Software Engineer at Liqwid Labs

August 2022 to July 2025

- Led web engineering for Cardano lending and governance interfaces.
- Integrated on-chain and off-chain data, CIP-30 wallets, real-time updates, and partner APIs.

Lead Software Engineer at Speechify

October 2020 to September 2022

- Led engineering across text-to-speech web products, a browser extension, and backend APIs.
- Worked on the audiobook ingestion pipeline and shared TTS platform capabilities.

Software Engineer at Hakkei Keyboards

March 2021 to August 2021

- Built a browser application for configuring and remapping keyboard firmware.

Lead Front End Web Developer at TMDS Total Marketing Digital Solutions

January 2020 to December 2020

- Led React and GraphQL frontend work for a TotalEnergies fuel marketplace integrated with Go services.

Lead Web Developer at ABMI

January 2019 to December 2019

- Built internal web tools and software integrations for industrial teams.

SELECTED PROJECTS

FKN

My current focus is FKN, a privacy oriented platform offering in-browser networking, storage, and more.

[Website](#) / [App](#) / [Docs](#) / [npm](#)

osra

A zero-dependency TypeScript RPC library for Workers, iframes, extension contexts, WebSockets, and other JavaScript runtimes.

[Source](#) / [npm](#)

Stub

A browser media catalog that merges metadata from multiple sources into a single searchable experience.

[Live](#) / [Source](#)

Ripple

A full torrent client in the browser, combining native libtorrent compiled to WebAssembly with OPFS persistence and real-time video remuxing.

[Live](#) / [Source](#)

LibAV WASM

FFmpeg and libav compiled to WebAssembly for browser-side remuxing and media inspection.

[Source](#) / [npm](#)

EDUCATION

3W Academy

Associate's Degree, EQF Level 5 equivalent | Computer Software Engineering, web development and integration

SKILLS

Languages: TypeScript, JavaScript, Rust, WebAssembly

Web platform: React, Preact, Node.js, GraphQL, Browser extensions, Web Workers

Systems and media: WebTransport, WebSockets, TCP/UDP, FFmpeg/libav, MediaSource, OPFS and more...