Johan Lajili

FULL STACK SOFTWARE ENGINEER
TYPESCRIPT · NODE.JS · REACT

EMAIL	johan.lajili@gmail.com	PHONE	+44 (0) 7492 558 533
LINKEDIN	linkedin.com/in/johanlajili		
LOCATION	Greenwich, London · Not open to relocate		
LANGUAGES	English (Fluent) · French (Native) · Japanese (Conversational) · Italian (Beginner)		

PROFILE

With 14 years of experience as a Software Engineer specialising in web technologies, I have held many roles including Senior Staff Software Engineer, Head of Technology, and Tech Lead—from startups to organisations with 200+ engineers.

As a seasoned problem solver, I am deeply familiar with the TypeScript/JavaScript ecosystem and excel in adapting my strategies to align with varying requirements, budgets, and expectations. But I'm also constantly learning and open to other backend languages, such as Rust, Elixir, Python, Go…

Having just completed a short-term contract as an AI consultant, I am now looking for my next permanent position as Staff Engineer, Principal Engineer, Tech Lead or Founding Engineer in London. The ideal company will strive for technical excellence whilst offering an innovative product, ideally in the fields of AI, Robotics, Climate, Health or Education.

SKILLS

FRONT-END & BACK-END TECHNOLOGIES

TypeScript, JavaScript, CSS (including CSS modules, various CSS-in-JS frameworks etc.), HTML5, NodeJS, Express, Bun, Deno

FRAMEWORKS & LIBRARIES

React, NextJS, GraphQL, RxJS, xState, Lexical, TurboRepo, Babylon, PixiJS…

BUILD TOOLS

Webpack, Vite, Esbuild, Bash, Git etc.

DEVOPS

Docker, Kubernetes, AWS Services, GitOps, Github Actions and others

AI & LLMS

OpenAI APIs, Anthropic Claude, Google Gemini, LangChain, LangGraph, Agentic workflows, Prompt engineering, RAG, Image generation (Nano Banana), TTS, Speech-to-Text (Whisper)

FAMILIAR WITH

Swift, Kotlin, Rust, Go, Python, Google Cloud APIs

EXPERIENCE

AI Software Engineering Consultant

Oct – Nov 2025

YLookup · London, UK

Short-term contract helping YLookup bootstrap after acquiring the Rowan AI codebase. YLookup is an Excel add-in that operates on spreadsheets using LLMs—similar to Microsoft Copilot but specialised for accountancy, with tools like reconciliation and document import.

- Brought the acquired codebase back to life: recreated infrastructure (AWS, GCP, Vercel, Auth0), reconnected services, updated branding, and onboarded the founding engineering team.
- Created "Spreadsheet Vision": a cell style extraction engine using DFS to identify connected styled cells, then greedy rectangle formation to compress them into optimal ranges—essentially generating CSS-like styles for spreadsheets, enabling AI agents to understand formatting in a token-efficient way.
- Improved the PDF-to-spreadsheet pipeline: an AI agent workflow parsing digital and scanned financial documents (bank statements, invoices, payroll, etc.) into structured data. Built a document factory generating reproducible test fixtures across 6 document types, with 38 test scenarios driving schema simplification and prompt optimization to production-ready reliability.

Software Engineer

2024 – 2025

Pactio → Rowan AI · London, UK

Full Stack engineer at a lean startup (~$50M valuation). Pivoted from Pactio—a SaaS platform for Big 4 firms (PwC, etc.) to generate tax memorandum documents from a single source of truth—to Rowan AI (Excel AI plugin).

Rowan AI

- Refined the "one-shot" approach into a complex agentic flow, reducing latency 5× while improving reliability through prompt engineering.
- Spearheaded a scientific approach to LLM development: built an automated test harness using headless XLSX that runs deterministic Excel tasks n times, producing reliability/latency graphs instead of binary pass/fail.
- Implemented an industry-leading reconciliation system mixing traditional algorithms with multiple AI streams, achieving 99% reliability on complex examples with 1000s of items.
- Built a document extraction pipeline combining traditional OCR with LLM nodes to reliably process documents with hundreds of pages of transactions.

Pactio

- Implemented Tracked Changes (Red Lining) on Lexical from scratch—intercepting every user keystroke to detect additions/deletions on rich text, with full support for multi-user collaboration, tables, nested lists, and custom nodes. Required extensive tree traversal optimizations to diff complex document structures performantly.
- Built an auto page-break engine for the PowerPoint-like editor—a computationally intensive problem requiring real-time recalculation of page boundaries across rich text while preserving nested list structure, numbering continuity, and repeating table headers. Optimized to provide live preview even during bulk operations like large paste events.
- Implemented Auto Layout for diagrams using pathfinding algorithms to route connections between nodes while avoiding collisions.

Senior Staff Software Engineer

2023 – 2024

IMG Arena · London, UK

A hands-on senior engineering role focused on solving complex technical problems across multiple departments.

- Creation of a multimodal LLM based tool to automatically monitor our streaming product, using OpenAI's GPT-4 vision model. I took this project from problem statement (We are spending too much on manually vetting the streaming video we receive from our partners) to production, through identifying low-hanging fruit.
- Took our interactive streaming product from a vague idea that had been constantly postponed for two years as it was ill defined, into a POC actively delivering value. I did so by identifying the parts of the idea that were actually doable in a realistic timeframe, using clever tricks to deliver value with much less effort than initially thought. This POC was then handed over to a different team who took it to production, with this product hitting live customers as we speak.
- Post-acquisition of another company, I surveyed and rewrote the codebase of a complementary product, transitioning its backend from PHP to NodeJS + TypeScript. Subsequently, I integrated the backend and frontend within our DevOps environment (Kubernetes, GitOps, Github Actions, etc.).
- Took ownership of Swift (iOS) and Kotlin (Android) libraries developed for us by a third-party, mastered their functionality, and disseminated this knowledge internally to reduce dependency on external resources.

Head of Technology (Web Applications)

2021 – 2023

IMG Arena · London, UK

As the head of technology, I led a department of 25 people, organising the department's processes, ensuring our technical delivery met the highest standards, and facilitating effective interdepartmental communication. I collaborated closely with the product team to ensure prompt delivery and provided technical assistance to my team as needed.

Full-Stack Tech Lead

2019 – 2021

IMG Arena · London, UK

In this role, combining hands-on development and managerial responsibilities, I led a team of 5, overseeing the delivery of products we were working on: a series of widgets displaying live sports statistics for UFC, Tennis, and Golf. These widgets are now live and used by millions of users monthly.

- Building the team and product portfolio from scratch. Upon joining IMG Arena, there were only 2 other developers; we've now grown to hundreds.
- Writing the backend in NodeJS / TypeScript / GraphQL / RxJS / WebSocket: The backend application receives hundreds of WebSocket feeds of live data, converting them into a singular GraphQL endpoint with subscriptions.
- Writing the front-end in React / TypeScript, as well as initiating and subsequently owning the integration with our 3D team using BabylonJS.
- Developing several tools to assist us, such as a NextJS application that enabled easy testing of our product in various configurations.

Contract Software Engineer

2018 – 2019

lajili.com LTD (for CMC Markets) · London, UK

CMC Markets is a leading global provider of financial services, renowned for its award-winning trading platform which utilizes web technologies.

- Transition from Angular to React: Leveraged my expertise in JavaScript to assist the company in transitioning from Angular to React, ensuring adherence to best practices throughout the process.
- "Welcome Experience" Development: Designed and implemented the user's initial experience within the demo application, anticipated to significantly boost user conversion rates.
- Performance Enhancement and Stability Improvements: Enhanced the application's performance and stability by identifying and resolving memory leaks, including some core issues that had lingered in the codebase for over three years.

Senior Games Developer

2016 – 2018

Gamesys · London, UK

In the capacity of a Games Developer, I contributed to the development of HTML5 games using PixiJS to render games in WebGL. As part of a 10-person team, we successfully delivered around 10 unique slot games.

- Creating the Game Engine used by our team, which utilised Reactive programming patterns and functional programming to enhance the stability, reusability, testability, and extensibility of our codebase.
- Collaborating closely with the design team to pioneer the use of Spline, an animation toolkit, which was subsequently adopted company-wide.
- Implementing a method for QA to write automated end-to-end tests easily using a purpose-made scripting language.

HTML Developer

2015 – 2016

Cinime · London, UK

As the only JavaScript developer, I single-handedly developed seven games that synchronised with videos played in the cinema using Cinime's proprietary technology. The games were created in Vanilla JavaScript / ES6, with rendering directly to the DOM.

Software Engineer

2014 – 2015

Innes · Rennes, France

At Innes, a B2B company offering information display solutions, my role was centered on enhancing their CMS, Plug'n Cast, with a particular emphasis on front-end development using JavaScript (KnockoutJS, IgniteUI) and CSS3. Orchestrated a successful transition from SVN to Git for version control.

Web Game Developer

2013 – 2014

Toxicode · Rennes, France

At Toxicode, a French web agency, I was involved in several service-based and experimental projects, including educational games and online board games. Mastered diverse languages and platforms, developing DOM-based games, canvas-based multiplayer games with SocketIO, and server-side programming with Ruby on Rails.

Serious Game Developer 2010 – 2013

Learnscaper · Paris, France

Joining Learnscaper, a small startup focused on developing "serious games" when it was a team of just three, I balanced between periods of study and work. Our projects aimed to teach skills such as navigating the French health industry, mastering English interviews, and learning negotiation techniques. Transformed the Silverlight product into an HTML5 format, enhancing compatibility across tablets and phones.

SIDE PROJECTS

Madeleine OS *2025*

A custom educational computer built for my 4-year-old daughter, running a bespoke web application in kiosk mode. The system applies behaviorist learning principles through tight game loops and gamification. The core app presents a gallery of her favourite characters; tapping one teaches her to write its name. A companion app unlocks printable colouring pages when she correctly types a character's name—encouraging her to either recall the spelling or "cheat" by writing it on paper first, which of course teaches handwriting. Successful tasks earn virtual coins redeemable for curated YouTube content (drawing tutorials, yoga for kids). Additional mini-games cover early mathematics and foreign languages. Results: daily engagement, full keyboard/mouse proficiency, reading and writing all letters in both cases, mental addition up to 15 without visual aids, and drawing skills well above her age level—all achieved before starting school.

ChartMyLife.ai *2024*

ChartMyLife.ai is a product I made from scratch, using NextJS, MongoDB, OpenAI's GPT-4 and GPT-3.5 used in conjunction. It offers users an augmented diary experience, allowing them to track any metric they care about (calories, time talked to Veronica from HR or anything else) using LLM. The app also offers a life coaching experience, where the user can set their life goals, and receive weekly micro-tasks to get them closer. For instance, someone trying to lose weight would receive weekly tasks such as limiting their takeaway, or doing 3 gym sessions this week. The app reached 300 users, including a handful of paid users, but I could not monetise it enough to compete with the opportunity cost of a full-time position.

Travelboard *2022*

A Trello-style application for planning holidays. Each column represents a day; cards are activities or locations to visit. The app was designed to be highly visual—each card automatically fetches an image via a search API and stores a geolocation, enabling full-trip or per-day map views. This makes it easy to cluster nearby activities and rearrange plans on the go as weather or mood changes. The project was eventually shelved—my first real lesson that "build it and they will come" doesn't work. The travel space is saturated, and customer acquisition proved difficult: people only plan holidays at specific moments, and by the time that moment returns, they've forgotten your product.

EDUCATION

Higher Diploma in Game Design & Programming *2013*

Isart Digital · Paris, France

A three-year program where I specialised in game development with a focus on mobile/web games and JavaScript. I also gained expertise in game design, the Adobe software suite, and other areas.

INTERESTS & HOBBIES

I hold a keen interest in LLM technologies like Claude 3.5 and Gemini 2.0, augmented reality tech such as Apple Vision, as well as how technology can make our lives more interesting. I truly believe we are in the beginning of a new era, with AI going into every aspects of our lives, for better and for worse.

Away from the screen, my passions lie in cooking, particularly French, Italian, and Japanese cuisine. From beautifully cut Nigiri sushi to homemade focaccia, this is really my daily moment of fun. I also enjoy boxing, and travelling whenever I get the chance.

I'm also a family man with a 4-year-old trilingual daughter, which is its own full time job, but is also incredibly rewarding.