Kalidou Diagne

Senior Product Engineer | TypeScript, React, Node.js, LLM Integrations

Italy | EU citizen | Open to relocation

kld.diagne@gmail.com | kalidou.dev | linkedin.com/in/kalidou-diagne | github.com/kalidiagne

Summary

Senior product engineer with 10+ years shipping production web and mobile apps in TypeScript, React, and Node.js, across web3, healthcare, and fintech. Ships AI agents and automations to production with LLM APIs, tool calling, and MCP servers. Currently building FerryFetch, a real-time ferry app I founded, end to end: product, web, mobile, and the live vessel-data pipeline behind it. Previously led frontend at the Ethereum Foundation for five zero-knowledge and digital identity protocols. Alongside that role, built the Starknet staking interface for Staking Rewards, which drew ~$58M in staked STRK in its first 7 days.

Skills

- **Languages:** TypeScript, JavaScript, HTML, CSS
- **AI & LLMs:** LLM integration (Anthropic Claude, OpenAI, Z.ai GLM), AI agents and tool calling, Model Context Protocol (MCP) servers, prompt evals and testing, AI workflow automation, Claude Code
- **Frontend & mobile:** React, Next.js, React Native, Expo, Tailwind CSS, Storybook
- **Backend & data:** Node.js, Hono, PostgreSQL, Prisma, Redis, WebSockets, REST, GraphQL, tRPC
- **State & testing:** TanStack Query, Redux, Zustand, Jest, Vitest, React Testing Library, Cypress
- **Product & quality:** Accessibility (WCAG 2.1 AA, ARIA), design systems, Figma handoff, monorepos (Turborepo), Git
- **Web3:** ethers.js, EVM wallet integrations, multi-chain apps, The Graph

Experience

FerryFetch | Founder & Product Engineer

Remote | Jan 2026 – Present | ferryfetch.com

- Designed and built a real-time ferry tracker, live for 5 operators across British Columbia and Washington State, with New York, Italy, Greece, and New Zealand coming next.
- Shipped the web app with live vessel positions, departures and arrivals, check-in status, and schedules across operators; iOS and Android apps with delay alerts and iOS Live Activities are in development.
- Built the AIS data pipeline (WebSockets, PostgreSQL, Redis) that validates vessel positions and derives confidence-based ETAs, so the app flags uncertain positions instead of guessing.
- Set up a TypeScript monorepo spanning the Next.js web app, API, AIS worker, and Expo/React Native mobile app; lead product and engineering with a designer and a developer.

Ethereum Foundation, Privacy & Scaling Explorations (PSE) | Frontend Engineer

Remote | Aug 2023 – Dec 2025

- Joined through two consecutive Ecosystem Support Program grants (Q3 and Q4 2023), then was hired full-time.
- Led frontend in a cross-functional team (PM, two designers, backend/Solidity engineer), turning research from several PSE teams into shipped websites and demos.
- Delivered web frontends for five ZK and digital identity protocols: Semaphore, ZK-Kit, Bandada, AnonAadhaar, and Self.
- Owned pse.dev, the team's project hub and blog, and authored the Privacy section of ethereum.org.
- Built a shared component library (React, Tailwind CSS, Storybook) from designers' Figma specs, adopted across 4+ projects and cutting new-project setup from days to hours.
- Shipped jubmoji.quest for Devconnect and ETHDenver in under six weeks, including a mobile NFC quest and live leaderboards.

Staking Rewards | Frontend Engineer (Contract, part-time)

Remote | Jul 2024 – Feb 2025

- Built the Starknet staking interface, which drew ~$58M in STRK from 34,600 wallets in its first 7 days.
- Built the staking interface for Lava Network's Stake App, which became the platform's 2nd most staked asset after launch.
- Turned patterns from these integrations into reusable components that fed into the platform-wide redesign.

Unlock Protocol | Frontend Engineer

Remote | Feb 2022 – Aug 2023

- Hired after selection for the first UDT grantee class (2021); led frontend for an 8–9 person product team from design to release.
- Shipped five major features: the no-code Checkout Builder, advanced withdrawals, event pages, certifications, and transaction receipts.
- Led the JavaScript-to-TypeScript migration and introduced unit and module testing across the app.
- Built multi-chain purchase and verification flows covering failed transactions, gas estimation, and wallet edge cases; redesigned the dashboard and settings.

Gruppo Ospedaliero San Donato | Frontend Developer

Milan, Italy | Jun 2020 – Mar 2022 | Italy's largest private hospital group, 4.7M+ patients a year

- Built features for the group's main website and online appointment booking system, used by patients to schedule and manage visits.
- Extended booking to iOS and Android with an Expo/React Native app.
- Owned WCAG 2.1 AA compliance across patient-facing apps: keyboard navigation, screen-reader support, semantic HTML, and cross-browser support, with a focus on visually impaired users.

Facile.it | Frontend Developer

Milan, Italy | Jul 2018 – Jun 2020 | Italy's leading price-comparison platform for insurance, loans, and utilities

- Led delivery of a new internal tool for the 700-person call center, from provider meetings to release, and co-led the tech migration.
- Spotted duplicated form logic across the insurance, loans, and utilities teams; proposed and built a shared validation library adopted across 5+ apps.

Earlier experience (2015–2018): JavaScript and web developer roles at LinkMe, dealalala.com, and two web agencies in northern Italy.

Recognition

- Winner, ApeCoin Best Contribution Prize and Lens Protocol Integration Award, ETHSanFrancisco 2022
- Speaker, SpaghettETH 2022 and Frontenders Verona 2018
- Podcast guest, OPIT: working at the Ethereum Foundation and breaking into web3 (2026)
- Tech Ambassador, 1 of 4 selected from 300+, Sisal x Talent Garden (2019)

Education

Technical Diploma in Information Technology (Diploma di ITIS, Informatica, EQF Level 4), IIS "Giacomo Perlasca", Italy, 2015

Languages

Italian (native), Wolof (native), English (full professional proficiency), French (intermediate)