Fabien Penso

Professional Experience

2022–2024 **Principal Engineer**, *Stargaze*, Remote, www.stargaze.zone

NFT marketplace and L1 blockchain. Released Constellations, a high-performance and real-time Rust Cosmos blockchain indexer. Initially a side-project, Stargaze acquired a license before the public release. It quickly evolved into a critical component and is now an integral part of displaying content on the main website. IP is both owned by me and Stargaze.

— Fastest Cosmos chain indexer (indexes Osmosis in less than 6h, for >15TB of data).
— 80k Rust lines written.
— API handles >15 million requests per day with 0.99 apdex and <10ms P75 over 90 days.
— Gave a talk at Nebular (Paris, 2023) about Constellations (slides, youtube).
— Gave a talk at DEVMOS (NYC, 2024) about Constellations (slides, youtube).

2020–2022 **Principal Engineer**, *Beam*, Paris, beamapp.co

Web browser that completely rethinks the way you start a web session and browse the web. $9.5 million Series A round from Spark Capital (Twitter, Tumblr) and Alven Capital.

— Wrote server-side components for a E2EE sync API to synchronize passwords, history and any critical user generated data on all the user devices. Initially in Ruby, I then moved it to Rust for performance reason (read my blog post).
— Wrote the client side E2EE sync API in Swift to let anyone in the team enable data synchronization within his code.
— Wrote a wasm (web) version to let users use our website to view their encrypted data.

2018–2020 **CTO-CPO, Co-founder**, *Kard*, Paris, kard.eu

Neobank focusing on GenZ. Released in September 2019, 50k card holders by February 2020, 200k family accounts in 2024. €2.8 million seed round, 30 employees, including 13 engineers.

2017–2018 **CTO-CPO**, *Accor*, Paris, www.accorlocal.com

Accorlocal allows customers to order services from Accor hotels (breakfast, lunch, diner, pool, spa, gym, etc) without sleeping overnight. Recruited under the direction of the Accor CEO (Sébastien Bazin). Team consists of 10 employees, including 5 engineers.

2015–2017 **CTO**, *Stuart*, Paris and Barcelona, www.stuart.com

Stuart is an on-demand service for business, to order drivers through a mobile app, a web app, and API calls. Went from 40 to 120 employees and from 400 to 4k deliveries a day. €22 million investment pre-launch, acquired by La Poste in 2017.

2013–2014 **Senior Software Engineer**, *ProcessOne*, Paris and London

ProcessOne is a messaging company, with a focus on real-time messaging. They released ejabberd used by Whatsapp for their messenging platform. The CEO called me once they won the contract with the BBC, and I was in charge of the development of the push notification platform. I left the company after the project was completed.
— Development of a new platform to deliver push notifications for the BBC mobile applications (Android and iOS).
— Went from 0 to 20 million devices within months.
— 500 million push delivered per day and 15 billion push total.

2010–2011 **Senior Software Engineer**, *Causes*, San Francisco

Causes was founded in 2007 by Sean Parker and Joe Green as a social advocacy platform on Facebook. It enabled users to organize grassroots and public-awareness campaigns, creating a space for people to support various causes, donate money, and take social action. I was personally recruited by Joe Green after meeting the team at the first Facebook conference (F8).
— Wrote the first worldwide implementation to the Facebook opengraph, allowing Causes to automatically have users liked the causes they joined. Generated >10M requests per day, leading to a massive increase of traffic.
— Improved the internal mail architecture, lowering spam filtering for >80M emails a month.
— Improved the testing framework using parallel runs and went from 45mn to 3mn.
— 160 million total users.

Side Projects

2008–2012 **iOS application**

Development of the first iOS application allowing you to receive push notifications for your Twitter feed, Facebook feed, RSS feeds, emails and twitter keywords. 50% of RSS feeds were fetched realtime (using PubSubHubbub), Twitter was realtime (using early access to Twitter firehose). The app was used by anyone needing to be updated live about specific events, journalists, or ebay/craigslist buyers for example. Peaked to 100k users, and over 300k RSS feeds.

1999 – 2006 **LinuxFr**, *Founder*, linuxfr.org

LinuxFr was the first French Linux community website (similar to Slashdot or Reddit), with its code released under a free software license. It quickly joined the top50 French website based on traffic and still receives >300 million hits per year.

Education

2004–2005 **Master degree of Computer Science**, *IFSIC, Université de Rennes 1*, France

Completed in 6 months following several years of running my own company and with only a high school diploma. Graduated with honors, Cum Laude.

1995–1996 **Senior Year**, *Richmond Community High School*, Michigan, U.S.A

Language

English Bilingual

French Native