Timothée "Tim" Pillard

Senior Front-End Engineer

tim+job@tpillard.fr   timtech.blog   github.com/ziir   twitter.com/tpillard

I'm a Front-end Engineer with 10 years of professional experience building business-critical & public-facing web applications and websites in various environments.

Passionate about the Web, I am proficient with JavaScript, Web technologies, the modern Front-end ecosystem and related tooling, with a strong focus on performance and security.

Employment History

Dashlane, Paris

[Dashlane](https://www.dashlane.com) is a full-featured password manager for both individuals & businesses.
The Dashlane Browser Extensions count 1M+ active users.

November 2021 - June 2022, Senior Front-End Engineer (CI & DX Expert / Freelance)

Realized two missions within the Web Platform Squad, for a duration of 2-3 months, 3 days per week:

1. Following reports Mozilla Addons of Firefox Extensions policies violations, and subsequent blocking of new releases of the Dashlane Firefox Extension (200K+ active users), I have worked on two axes which led to the Dashlane Firefox Extension releases being unblocked in May 2022:
   a. I specified necessary changes related to security & privacy, then implemented or followed up implementation with Dashlane engineers across multiple teams.
   b. I designed, implemented & integrated to production release pipelines, a fully offline reproducible build for the Dashlane Firefox Extension, for use by Mozilla Addons Reviewers.
2. Within the Web Platform Squad, I was championing the "Build It Right" Team, composed of myself & two Dashlane Engineers, aimed at improving DX & CI performance, by dramatically simplifying & modernizing build processes within the Dashlane Extensions Monorepo, as well as documenting key expectations, requirements & technical details of said processes.
   Also contributed to & coordinated tooling related efforts across multiple teams for the implementation of a package generator within the Dashlane Extensions monorepo; in particular involving tailored shared configurations for common tools (Babel, Browserslist, Jest, TypeScript, …), to be used by all Web Platform packages & projects, according to their specific needs.
   My intervention resulted in the unblocking of high priority roadmap items, highly impactful DX & CI improvements in terms of performance or reliability, and increased expertise within the Web Platform Squad, allowing Dashlane Engineers to further develop their vision for CI & DX at Dashlane.

November 2020 - May 2021, *Senior Front-End Engineer (Technical Lead)*

Technical Lead within the "Desktop No More" mission team, leading & mentoring 4 junior to intermediate level Front-end engineers, through the implementation of existing Dashlane features of the Dashlane Desktop App to the Dashlane Webapps & Web Extensions (management of Bank Accounts & Identity Documents vault data types).
I have defined, advocated for & enforced various web development best practices with React, Redux, UI components library, web performance, security; a public version of some of these presentations are available on my blog:

- [Forms handling with React: Giving Up Control.](#)
- [Cross-Origin Resource Sharing For The Web (Extension).](#)

Upon completion of the mission of the "Desktop No More" team, I joined the "Web Platform Squad" in quality of Technical Lead.
While mentoring 2 Junior Engineers, we provided support to dozens of Dashlane Engineers across multiple teams, in a large-scale organizational & tooling migration from a codebase scattered in many repositories, to a unified "Dashlane Extensions monorepo" powered by Yarnv2 Workspaces.

During these seven months as a Dashlane employee, I also made significant improvements to the Dashlane Webapps & Browser Extension CI & DX, made various contributions, either directly to Dashlane's product, or related to security, privacy, performance, accessibility, guidelines & documentation, etc...

GANDI, Paris

[GANDI](#) is the "No Bullshit" ™ domain registrar, cloud hosting and related services provider.

GANDI manages over 2.5 million domain names for a varied panel of customers and use-cases, in 4 business units (Paris, Luxembourg, San Francisco, Taipei) over the world.

September - October 2021, *Senior Front-End Engineer (Web Developer / Free-lance)*

Short free-lance mission where I was hired to assist the "WWW Squad" in the redesign of [GANDI's public website: www.gandi.net](#) (also including integration of Wagtail headless CMS) to meet their deadline.
Various web development work in a Python/Pyramid codebase, such as:

- New Button component & variants in CSS with Sass ([Codepen](#))
- Animated native image lazy-loading in JavaScript
- Custom Discounts Back-Office in Wagtail CMS with JavaScript & Python (https://www.gandi.net/discounts)
- Web performance recommendations

2019 - August 2020, *Senior Front-End Engineer (Lead Front-End Engineer)*

Growth of [GANDI's shop app](#) sales by 1.3x.

Reporting directly to the CTO, making recommendations to apply across feature teams.

Member of the Technical Committee, discussions, decisions and follow-up on technical matters.

Bearer of the Front-End vision for the product.

Leading and coordinating Front-End engineering efforts.

Increased focus on previously acquired responsibilities.

Internship supervisor and mentor of a Junior Web Developer intern.

Spearheaded several projects, such as:

- Recruitment of two Senior Front-End Developers for the Domain Squad.
- Designed and successfully submitted Front-End architectures for new or revamped websites, Front-End components.
- Technical Project Management for externalized projects.
- Serving ES2017 bundles for modern browsers and ES5 for legacy browsers in our SPAs, resulting in a significant reduction of the amount of JavaScript imposed to users.
- Implemented bundle-splitting to improve the HTTP Caching efficiency of JavaScript assets in our SPAs
- Improved HTTP Caching strategy used in our SPAs, in particular [GANDI's shop app](#)
- Upgrading dozens of our internal JavaScript libraries build system to Babel7, outputting both ESM and CJS modules for improved reliability and performance
- Various improvements to the Front-End CI Pipelines, including speeding it by up to 40%, as well as additional analysis and recommendations for further improvements.

2018 - August 2020, *Senior Front-End Engineer, Billing Squad*

Growth of [GANDI's shop app](#) sales by 2x.

I was the technical referent of a 9-14 Front-end engineers team (Front-end chapter) across 4 product teams (squads).

Code reviews, technical directions, specifications, documentation, best practices, mentorship, various recommendations.

In charge of technical assessment during interviews and vetting applications in Front-end developers recruitment process.

Initiated and completed several projects, such as:

- PDF Invoice & other legal documents using Puppeteer over a Node.js HTTP API
- Refactoring the domain name search suggestions UI powered by a SSE HTTP API using JavaScript (ES2015+), React, Redux
- Reworked HTTP caching strategy of the marketing website, resulting in dramatic performance improvements using Python with Pyramid

New features implementations, billing business logic front-end packages, maintenance, production monitoring.

2016 - 2018, *Front-End Engineer, Billing Squad*

Growth of [GANDI's shop app](#) sales by 10x.

I've since been a key individual contributor with a strong ownership of:

- Billing-related features of the business (buying processes, pricing, shopping cart, invoicing, saved credit cards, up-sell/cross-sell)
- Performance of React/Redux web applications and HTTP APIs
- JavaScript cross-browser compatibility (polyfills, babel / babel-preset-env / babel-transform-runtime)
- Web applications security (SRI, Same-Site cookies, unified password strength estimation and requirements as a Node.js HTTP API leveraging zxcvbn)
- Internationalization (such as numbers / prices formatting using Intl.js / CLDR)

Also initiated and implemented various production-related tooling:

- Logging strategy for the front-end apps
- Production and performance monitoring using Kibana dashboards (ELK stack)
- Runtime Exceptions Monitoring with Sentry

Various features implementation, maintenance.

December 2014 - 2016, *Apprentice Web Developer, various squads*

In late 2014, GANDI started legacy systems migration (v4 -> v5 "beta"), notably:

- from a PERL/Catalyst monolithic website to multiple Python/Pyramid and React/Redux/SSR websites
- from an XML-RPC API to HTTP RESTful API microservices
- numerous functional improvements (usernames, organizations, teams, permissions)

During my apprenticeship, I have contributed to various new projects, including the building blocks of GANDI's current production landscape:

- initial version of www.gandi.net using Jinja templates and Python / Pyramid for the back-end, HTML5 / CSS3 with Sass / JavaScript for the front-end and a build system based on Gulp.
- initial version of the ecosystem and architecture powering GANDI's apps using notably:
  - React / Redux
  - Node.js / Express / SSR / node-client-sessions
  - Webpack / Babel

I also had the opportunity to offer some minor open-source contributions to GANDI CLI and Caliopen.

Tapastreet, Dublin / Remote

Tapastreet was an early-stage startup that aimed at extracting value out of social media feeds.

2013 - 2014, *Web Developer / Junior Product Manager*

Prototyping web applications leveraging social networks public APIs using HTML5 / CSS3 / JavaScript (ES5) with or without Backbone.js, jQuery in an extremely fast-paced startup environment or hackathons.

Conception & Development of a SaaS product: easily embedding curated social media galleries (photos & videos) into any website, app or digital magazine using iframes or embeddable JavaScript widgets.

Joshfire, Paris

Joshfire was a web agency, specialized in hybrid native applications for smartphones and smart TVs and experimenting in the field of IoT.

There, I worked full-time on the resumption of a client's startup project named Jnuine which enabled users to create and share stories in a virtual photo album, and eventually printing it into a physical one.

March - August 2013, *Web Developer Intern*

JavaScript web application development for the modern web and mobile (iOS & Android with Apache Cordova).

Development of the backend, including a REST API, using Node.js with Express.js & MongoDB.

Computer Skills

Technologies

- JavaScript (ES5+), DOM , HTML, CSS
- Service Worker, IndexedDB, Web Audio, Canvas
- Node.js, HTTP
- React, HyperHTML, Redux, jQuery
- TypeScript, Flow, npm, Webpack, Babel, Sass, PostCSS, CSS Modules …
- Python
- Git

Operating systems

Familiar with Mac OS X, GNU/Linux, Windows, recently used Ubuntu Linux / Linux Mint / Manjaro as work environments.

Experience debugging applications running on Debian servers.

Personal

Languages

1. French: fluent, mother tongue
2. English: fluent, written & spoken (used daily for work)
3. Spanish: notions

Contributions

I publish open-source utilities on GitHub & npm on occasion, regularly contribute to open-source projects, mostly on GitHub. Notably, in 2021/2022, I have analyzed the JavaScript bundles & Babel configuration of two important Mozilla projects, and contributed to bringing their JavaScript build to the then current state of the art, leading to modest bundle size & runtime performance improvements:

- firefox-devtools / profiler - Babel improvements #3195
- mozilla / addons-frontend - Babel improvements: reloaded #11593

In 2019/2020, I published soundcut / decode-audio-data-fast, a small JavaScript utility allowing to decode mp3 audio file data in the browser consistently faster than the native method.

I use my personal Twitter account to help and gather feedback from my users, as well as sharing tips on my Web Developer experience and animating discussions (mostly on Web Performance).

Since 2020, I seldom write articles on my personal tech blog, I also wrote an article titled "Reflecting on our JavaScript Footprint" on Gandi's blog.

Education

IN'TECH (ESIEA Group)

2012 - 2016

Studied Software Engineering cursus.

Initiated and developed web projects in teams of 4.