# Timothée "Tim" Pillard

# Staff Software Engineer

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I'm a Software 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

<u>Dashlane</u> is a full-featured password manager for both individuals & businesses. The Dashlane Browser Extensions count 1M+ active users.

January 2025 - Present, Staff Software Engineer

Assuming the role of Tech Lead of the Web Platform Team, I have defined, lead & executed quarterly roadmaps of impactful initiatives.

I had the opportunity to design a new React-based hiring exercise for Web Software Engineers adapting to all seniority levels.

Sparked the conversation with browser vendors on Web Extensions & MV3 issues, attending WECG meetings, engaging in discussions on the Chromium bug tracker & Chromium Extensions Community Group.

July 2023 - December 2024, Senior Software Engineer

I assumed the lead role of a large scale multi-year architectural migration critical to the organization, enabled critical conversations with stakeholders, designed an approach of cross-team collaboration cycles allowing faster & meaningful progress, participated in the definition, prioritization, design & implementation of technical enablers.

I modernized Dashlane's complex monorepo architecture (100+ code packages), developed open source tooling <u>vite-plugin-swc-transform</u> & <u>viteup</u> leading to multiple improvements validated by metrics such as 40% CI build performance improvement.

Lead & contributed to multiple impactful initiatives in the scope of the Web Platform Team, mentoring other engineers of all levels.

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

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

- Following reports of Firefox Extensions policies violations from Mozilla Addons, 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.
  - 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 expectations, requirements & technical details.

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 configuration presets for common tools (Babel, Browserslist, Jest, TypeScript, ...), to be used by all Web Platform projects.

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, enabling Dashlane Engineers to further develop their vision for CI & DX.

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

Technical Lead within the "Desktop No More" mission team, leading & mentoring 3-4 junior to intermediate level Front-end engineers, through the implementation of existing Dashlane features of the Dashlane Desktop App to the Dashlane Web apps & 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, 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 / Freelance)

Short free-lance mission where I was hired to assist the "WWW Squad" in the redesign of <u>GANDI's public website: www.gandi.net</u> - also including integration of Wagtail headless CMS. Various web development work in a Python/Django codebase, such as:

- New Button component & variants in CSS with Sass (Codepen)
- Discounts Back-Office in Wagtail CMS with JavaScript & Python (www.gandi.net/discounts)
- Web performance recommendations

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

During this period, sales from <u>GANDI's shop app</u> increased by 30%, and I had been officially recognized as Lead Front-End Engineer, reporting directly to the CTO, making recommendations to apply across feature teams; and member of the Technical Committee.

Bearer of the Front-end vision for the product, I was leading and coordinating Front-end engineering efforts, while keeping an increased focus on previously acquired responsibilities. I also had the opportunity to supervise and mentor a Junior Web Developer intern.

Spearheaded several projects, such as:

- Recruitment of two Senior Front-end Developers for the Domain Squad.
- Technical Project Management for externalized projects.
- Designing Front-end architectures for new or revamped websites, components.
- Serving splitted ES2017 bundles for modern browsers and ES5 for legacy browsers.

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

During this period, sales from <u>GANDI's shop app</u> grew by 2x and I had become the technical referent of a 9-14 Front-end engineers team (Front-end chapter) across 4 product teams (squads), which implied code reviews, technical directions, specifications, documentation, best practices, mentorship, ...

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

I Initiated and completed several projects, such as:

- PDF Invoice & other legal documents using Puppeteer over a Node.js HTTP API
- Refactoring of the domain name search suggestions UI powered by a SSE HTTP API
- Rework of the HTTP caching strategy of www.gandi.net

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

During this period, sales from <u>GANDI's shop app</u> grew by 10x and I had become a key individual contributor with a strong ownership of:

- Billing-related features of the business (buying processes, shopping cart, invoices, ...)
- Performance of React/Redux web applications and HTTP APIs
- JavaScript cross-browser compatibility (polyfills, transpiling with Babel)
- Web applications security (SRI, Same-Site cookies, zxcvbn Node.js HTTP API, ...)
- Internationalization (such as numbers & prices formatting using Intl.js / CLDR)

Also initiated and implemented various production-related tooling:

- Logging strategy for the front-end, including runtime exceptions monitoring with Sentry
- Production and performance monitoring using Kibana dashboards (ELK stack)

December 2014 - 2016, Apprentice Web Developer, various squads

Contributed to the building blocks of GANDI's current production landscape:

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

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

#### **Tapastreet, Dublin**

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 in a fast-paced startup environment using HTML5 / CSS3 / JavaScript (ES5) / Backbone.js, ¡Query.

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

#### Joshfire, Paris

Joshfire was a web agency, specialized in hybrid mobile apps & experimenting in the field of IoT.

March - August 2013, Web Developer Intern

JavaScript web application development for the web and iOS / Android with Apache Cordova.

### **Computer Skills**

#### **Technologies**

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

#### **Operating systems**

Familiar with GNU/Linux, Mac OS X, Windows, using Ubuntu Linux / Manjaro 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 occasion, regularly contribute to open-source projects (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 <u>@soundcut/decode-audio-data-fast</u>, a small JavaScript utility allowing to decode mp3 audio file data in the browser consistently faster than the native method.

I use my <u>personal Twitter account</u> 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 publish articles on my <u>personal tech blog</u> such as "<u>React Server</u> <u>Components, without a framework?</u>" or "<u>React memo is good actually</u>" - I also wrote an article "<u>Reflecting on our JavaScript Footprint</u>" on <u>Gandi's blog</u>.

#### **Education**

#### **IN'TECH (ESIEA Group)**

2012 - 2016, Student

Studied Software Engineering cursus; initiated and developed web projects in teams of 4.