

Bianca Danforth

✉ biancadanforth@gmail.com |  [biancadanforth](https://github.com/biancadanforth) |  biancadanforth.com |  Pittsburgh, PA

EXPERIENCE

Staff Software Engineer

Mozilla | 2022 - Present

Staff Engineer on the central payments and billing infrastructure for Mozilla's premium service products, written in TypeScript and Node using the Hapi framework and running on GCP

- Led audit and update of in-app product metrics in collaboration with product management, data engineering and data science to create the team's first ever all-product dashboard.
- Led integration of Apple In-App Purchases including [thorough technical documentation](#).
- Supported migration of existing users from the VPN product's legacy system with no increased customer churn.
- Regularly updated stakeholders on progress, timelines and breaking changes.
- Mentored multiple junior engineers, pairing with them extensively.
- Developed all code in a fully open and publicly visible [repository](#).

Senior Software Engineer

Mozilla | 2020 - 2022

- Completed 20% of all PayPal integration work on a team of eight engineers, which in part enabled the VPN team to hit their goal of 100,000 subscribers by the end of the year.
- Led the development of our team's technical interview and onboarding process, including a Staff level coding exercise.
- Grew the engineering team, including my manager, from 3 to 8 people by interviewing all five people and onboarding the first senior engineer hire and the only staff engineer hire.
- Identified a missed legal requirement four days before a major product launch and implemented the necessary changes.
- Performed regular release and triage owner duties, including identifying and resolving two incidents.
- Led a multi-day workshop on the Analytical Hierarchy Process (a framework for making complex decisions), which I later presented to the entire Firefox organization.
- Gave a one-hour [presentation](#) to the Firefox Privacy and Security Engineering team on front end performance and profiling.
- Named a Firefox Password Manager [module peer](#).

Software Engineer

Mozilla | 2017 - 2020

- Added a [machine learning powered model](#) to Firefox to improve new password field classification for Firefox's Autofill feature, resulting in a 14% increase in conversion rate for password generation.

- Named a Firefox Web Extension Experiments [module peer](#).
- Hand-picked for a C-level visible, machine learning powered [shopping assistant](#) that began and launched in 6 months, two weeks ahead of the Cyber Monday deadline.

Software Development Intern

Mozilla (via [Outreachy](#)) | 2017 - 2017

- Rewrote the legacy privacy add-on [Lightbeam](#) (D3/Local Storage) as a modern Web Extension. Lightbeam visualizes third party tracking requests while browsing the web.
- Led a digital privacy workshop at MozFest in London.
- Authored a [Mozilla Hacks blog post](#) about remaking Lightbeam and developing Web Extensions.

Mechanical Design Engineer

Exploratorium | 2014 - 2016

- Collaborated with a multidisciplinary team to design, prototype and build ten science exhibits for clients all over the world using CAD.
- Created engineering specifications, technical drawings and other documentation, working directly with vendors to make custom parts.

EDUCATION

M.S. Mechanical Engineering

Stanford University | 2010 - 2012

B.S. Mechanical Engineering

Stanford University | 2006 - 2010

TECHNOLOGIES

Proficient: TypeScript/Node/JavaScript, Stripe, CircleCI, Sentry, Git

Experienced: GCP (Firestore and BigQuery), SQL, Grafana, browser extensions, [LogSeq](#)

Familiar: Web browser internals, web app performance and profiling, MySQL, Looker, Redis, Docker