

Ian Bicking

Product Engineer

Experience

Ian Bicking

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Meta / Input Explorations

Research Engineer

December 2020 - November 2022

Developing and evaluating novel interaction methods using multimodal inputs including EMG (electromyography) gesture recognition, IMU (accelerometer/gyro), and voice. Engineering prototypes and user studies in TypeScript and Unity.

Mozilla / Emerging Technologies / Consumer Voice

Staff Prototyping & Research Engineer

August 2019 - August 2020

Developing new voice-enabled product experiences in a small team of researchers. Development of Firefox Voice, a voice assistant for the browser.

Mozilla / Test Pilot & Screenshots

Tech Lead

August 2016 - August 2019

Initiated the Firefox Screenshots project and acted as tech lead to launch it to millions of active users. Screenshots was the first: project to graduate from the Test Pilot experiment incubator; WebExtension to ship in Firefox; fully-instrumented feature in Firefox; project to ship with live error tracking; shareable cloud service hosted by Mozilla. Followed on to ship several more experiments before the Test Pilot program was closed.

Mozilla / Cloud Services & Firefox

Engineering Manager

April 2014 - August 2016

Engineering manager for the WebPush, Firefox Hello, and other teams. WebPush shipped a service to support millions of concurrent open connections to Firefox with a very small (3-4 person) team. Partnered with Telefónica to build Firefox Hello, a video conferencing tool built into Firefox. Managed both Mozilla and Telefónica engineers through the latter stages of the project, up until its cancellation and graceful removal from the product.

Mozilla / Mozilla Labs
Senior Software Engineer

March 2010 - April 2014

Among other projects, created and shipped TogetherJS together with one collaborator: a plug-in library to add live collaboration features to any website.

The Open Planning Project
Senior Software Engineer

July 2006 - January 2010

Senior developer in a civic-engagement- and government-focused nonprofit, developing collaboration software for citizen activists.

Selected Projects

pip & virtualenv

My most popular projects, these have become the foundation of Python package management. Nearly a billion downloads from PyPI.

TogetherJS & Hotdish

TogetherJS made collaboration features drop-in on any website. Though it ultimately didn't have a fit at Mozilla, it received over 6k stars on GitHub and remains a unique library for adding collaboration to websites. Hotdish carried that idea into the entire browser session.

WebOb, Paste, and others

Though I have not been active in Python recently, many open source libraries I've created have helped the Python web ecosystem mature.

Firefox Screenshots & PageShot

PageShot was an experiment in creating static copies of any live or personalized web page. While it became more conservative when shipping as Firefox Screenshots, it also became a widely used and popular Firefox feature.

Firefox Voice

A voice assistant for the browser. I've been the primary developer and architect for the extension, integrating and analyzing voice services, implementing intent parsing and management.

Personal History Archive / Browserlab

A system for collecting highly granular browser interaction data for machine learning analysis.

Education

BA, CS & Mathematics, Earlham College, Indiana. 1995-1999

AI Nanodegree, Udacity, 2017

