

SUMMARY

Long time HTML superfan, python *nerd* and node.js *enthusiast*, I have worked as a developer, engineering manager, researcher and fundraiser - at micro and macro scales. I am a pragmatic engineer with many years of experience working with the best and brightest in the software industry

WORK EXPERIENCE

IBM <https://ibm.com> (Durham, NC)

Software Engineering Researcher, 2017 - present

- ▶ As a member of the Web Platform team, I design and implement scalable tools to help IBM with web security, privacy, internal tooling and web standards
- ▶ Actively working with IPFS decentralized P2P filesystem & related technology
- ▶ See IPFS Social Proof: <https://bit.ly/2Pc7GkB>
- ▶ Designed and implemented enterprise-capable GDPR tracking tool which surfaces compliance status to management
- ▶ Working intensely with node.js, Lighthouse & browser User Timing API to understand and rectify web page performance issues
- ▶ Currently building systems with Python / Django / PostgreSQL and Node.js

Advisory Software Engineer, 2016 - 2017

- ▶ I advised teams and wrote code (node.js, CSS, CouchDB) for the IBM Marketplace
- ▶ Helped build IBM.com search UI with SearchKit, TypeScript and React

SpiderOak <https://spideroak.com> (Chicago, IL)

Director, Crypton project, 2013 - 2016

- ▶ Directed an engineering team building a privacy framework for mobile devices
- ▶ Source code: <https://bit.ly/2JdzsGW>
- ▶ Helped raise a round of funding (\$2 MM) to continue the Crypton project
- ▶ Wrote code for the Crypton framework (Node.js, PostgreSQL)
- ▶ Built *Klook* private social network application for iOS and Android

Mozilla Corporation <https://mozilla.org> (Mountain View, CA)

Senior Software Engineer, Privacy, 2012 - 2013

- ▶ Worked on new and existing browser features and WebAPIs to increase user privacy
- ▶ Engineer on Firefox OS user privileges code
- ▶ Worked on implementing DOMCrypt in Gecko/Firefox, which was an initial strawman proposal for the W3C Web Cryptography Working Group, <https://bit.ly/2JcCS0M> <https://mzl.la/2JhUzb2>
- ▶ Implemented `window.crypto.getRandomValues` in Firefox, <https://mzl.la/2JhP0JO> <https://mzl.la/2HkvQRR>

Firefox Engineer, 2009 - 2012

- ▶ Created front-end browser features, developer tools, identity APIs
- ▶ Implemented the original Web Console developer tool, <https://mzl.la/2JrzPBg>
- ▶ Wrote Web Console frontend and backend code, <https://mzl.la/1lOQVno>

Industrial Light + Magic <https://ilm.com> (San Francisco, CA)

Software Engineer, 2007 - 2008

- ▶ Built Python / Django / ffmpeg-based tools for training artists, software engineers and other technical staff at ILM, LucasArts, Lucas Animation and Lucasfilm

EDUCATION

Self-taught engineer

I have many mentors at ILM, Mozilla, Google, Facebook and IBM to be thankful for

SKILLS

Expert with Linux, Python, JavaScript, CSS, HTML, SQL, automated testing
Node, Express, npm & yarn, webpack, TypeScript, React, Django
Postgresql (including replication), MySQL, SQLite, Redis
PhoneGap / Cordova, CouchDB / Cloudant
Evaluation and recommendations for technology, teams, business processes
Very Experienced with:
C, C++, make, Android toolchain, iOS toolchain, build process
Hobby programming with:
Raspberry Pi, hardware sensors, etc. <https://github.com/daviddahl/radar>
Tinkering with:
Bitcoin, Ethereum, IPFS and related tools / frameworks

TALKS / WRITING / TEACHING

- Defcon 23: Crypto Village: **Anti-social Networking**
 - Presentation on the Klokak application I implemented that functions like Twitter but is **end to end encrypted**
 - <https://bit.ly/2JoSNbu>
- Future Insights Live: **Privacy is a UX Problem**
 - Privacy is not simply a technical issue. More designers are needed to solve privacy application issues
 - <https://bit.ly/2Jr80Jd>
- Hack in the Box Malaysia: **Crypton Workshop**
 - <https://bit.ly/2JaB2JC>
 - Live-coding workshop on **Crypton**
- Crypton Whitepaper**
 - Crypton paper produced for Hack In The Box conference
 - <https://bit.ly/2Jbubjg>
- Klokak Private Social Networking Application: Slides
 - Produced for Investors and Management
 - <https://bit.ly/2sorG6P>
- Cato Institute: "NSA Surveillance: What We Know; What to Do About It"
 - Sat on the technology panel
 - <https://bit.ly/2xO8IAS>

AWARDS

2018 IBM: Eminence and Excellence in Engineering Award

LINKS

- Website
 - <https://txt.ist>
- Latest Résumé
 - https://txt.ist/David_Dahl_resume.pdf