

## 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
- ▶ Designed and implemented enterprise-capable GDPR tracking tool which surfaces compliance status to management
- ▶ Currently building systems with Python / Django / PostgreSQL and Node.js

*Advisory Software Engineer*, 2016 - 2017

- ▶ I advised teams and wrote code for the IBM Marketplace
- ▶ Software stack was largely node.js, React, NoSQL
- ▶ 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 in 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/1IOQVno>

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

*Software Engineer*, 2007 - 2008

- ▶ ILM training department. Built Python / Django / ffmpeg-based tools for training artists, software engineers and other technical staff at ILM, LucasArts, Lucas Animation and Lucasfilm with a userbase of 1000

## 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>

## TALKS / WRITING / TEACHING

- Defcon 23: Crypto Village: **Anti-social Networking**
  - Presentation on the Kloak 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>
- Kloak 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>

## LINKS

- Website
  - <https://txt.ist>
- Github
  - <https://github.com/daviddahl/>
- Latest Résumé
  - [https://txt.ist/David\\_Dahl\\_resume.pdf](https://txt.ist/David_Dahl_resume.pdf)