

WORK EXPERIENCE

**Meta**

2019 - 2023

SOFTWARE ENGINEERING MANAGER

Grew and supported multiple teams of 10+ engineers responsible for building tools and infra to ensure high performance and reliability of Web & JavaScript applications across Meta including *Facebook.com*, *Instagram.com*, *VSCode@Meta*, *Workplace*, & *Ads Manager*.

- Formed the first dedicated *Web Reliability team* at Meta & implemented standardized user centric reliability metrics across all of Meta's Web Apps. Worked with dozens of product teams to drive down %SAD users from 30+% in some cases to <5%.
- Built automated performance instrumentation for *JavaScript* and *React* applications that enabled the successful rollout of the new Facebook.com frontend stack in 2020.
- Developed *MemLab* the worlds first JavaScript Memory leak detection framework for diagnosing leaks at scale. This reduced OOM crashes on Facebook.com by over 50%, delivered 10's of \$millions in additional ad revenue, & was open sourced in 2022 where it has received 3k+ stars on Github and gets ~25k weekly downloads on NPM. (<https://engineering.fb.com/2022/09/12/open-source/memlab>)
- Developed alerting and integrated tooling systems used daily by thousands of Meta engineers to quickly detect & mitigate application health regressions.

**Instagram**

2016 - 2019

STAFF SOFTWARE ENGINEER/TECH LEAD MANAGER

Tech Lead & Manager of the Instagram Web infrastructure team responsible for *JavaScript* & *Python* build & developer tooling for ensuring efficient, reliable, and performant delivery of Instagram.com.

- Scaled the team from myself to a team of 5 engineers.
- improved build times 40x by adapting React Natives Metro build system for web usage & built infrastructure allowing front end deploys to move from ad-hoc to continuous.
- Improved the performance of the Instagram.com feed by more than 50%. (<https://instagram-engineering.com/making-instagram-com-faster-part-1-62cc0c327538>)

Brocade

2015 - 2016

STAFF SOFTWARE ENGINEER

Full stack engineer using *Python* and *JavaScript*. Technical lead for the Brocades Services Director product web UI. Architect and technical lead for a next generation web UI framework adopted across all Brocade software products based on *Node.js*, *React.js* & *Redux*.

Riverbed

2011 - 2015

SENIOR SOFTWARE ENGINEER

Responsible for building technology acquired from *Aptimize* into the Riverbed product portfolio. Wrote reliable, high performance server code in C++ that transformed and optimized large volumes of web traffic. Co-authored a US patent related to optimizing delivery of JavaScript web assets. Built a distributed test automation system using *Node.js*, *Python*, *LXC*, and *Vagrant*.

Aptimize

2009 - 2011

SOFTWARE DEVELOPMENT ENGINEER


First employee at Aptimize, a startup that created some of the worlds first automated runtime web performance optimization technology. I was involved in the design and development of the initial prototypes through to the final market ready products using C++ and C#. Aptimize was successfully acquired by *Riverbed Technologies* in 2011.

EDUCATION

Massey University**BACHELOR OF ENGINEERING WITH HONORS**

Majored in Software engineering. Graduated in top 5% of college of sciences at Massey University, awarded Massey Scholarship.

PUBLICATIONS AND PERSONAL PROJECTS

 Github	github.com/mrsharpoblunto
US Patents	Conner G. et al. Transparently intercepting and optimizing resource requests. US-9825812-B2, Issued 2017 Nov 21. https://image-pubs.uspto.gov/dirsearch-public/print/downloadPdf/9825812
3D Graphics	Junkship - A game that utilizes procedural algorithms to automatically generate detailed 3D solar systems using GPU processing. Written in C++, HLSL, & JavaScript in a custom 3D engine I developed. www.junkship.net
IoT	A Raspberry Pi controlled Garden sprinkler system that can be controlled via a built in web UI or by HomeKit compatible Apps. https://github.com/mrsharpoblunto/it-gets-the-hose-again
Bioinformatics	Holland B., Conner G., Huber K., Moulton V. <i>Imputing supertrees and supernetworks from quartets</i> . Systematic biology, 2007 Feb;56(1):57-67

LANGUAGES AND TECHNOLOGIES

Proficient in *C++*, *JavaScript/TypeScript* (Client & Server side, + React), *C#*, *HTML/CSS*. Previous experience with *Python*, *Java*, *Swift*, *Objective-C*, *PHP*, *Lua*, *SQL*, *AWS*, *HLSL*.