

WORK EXPERIENCE

**Meta**

2019 - 2023

SOFTWARE ENGINEERING MANAGER

Grew and supported teams of 15+ building tools and infra to ensure high performance and reliability of Web & JavaScript applications across Meta including *Facebook.com*, *Instagram.com*, *VSCoDe@Meta*, *Oculus*, *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* and *developer tooling* for JavaScript&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. MemLab was open sourced in 2022 (<https://engineering.fb.com/2022/09/12/open-source/memlab>) and has received 3k+ stars on Github and gets ~25k weekly downloads on NPM.
- Grew a portfolio of developer tools used daily by thousands of Meta engineers to quickly detect, root-cause, & mitigate application health regressions.

**Instagram**

2016 - 2019

STAFF SOFTWARE ENGINEER/TECH LEAD MANAGER

Tech Lead then 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 (and helping open source Metro along the way) & 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++ for an optimizer proxy that analyzed web traffic and transformed the content to improve front-end performance. Co-authored a US patent related to optimizing delivery of JavaScript web assets. Built a distributed cross-platform 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#. Sites including Microsofts Sharepoint.com saw performance improvements of over 2x without having to make any code-changes when using the Aptimize Web Accelerator. 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-ppubs.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. *Imputing supertrees and supernetworks from quartets*. 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.