

PROFILE

- Strong engineering generalist and technical lead with a background in mobile applications (Android and iOS), compilers, and runtimes
- 10+ years of iOS experience; built some of the first apps in the App Store, modern Swift-based applications, and everything in between
- Passionate about functional programming, programming language theory, and computational approaches to music and visual art

EXPERIENCE

Meta | New York, NY | 2019–Present

- Presently focused on the open-source CG/SQL compiler and the client-side messaging infrastructure for Facebook, Instagram, and Messenger
- Previously an iOS performance, reliability, and efficiency specialist
- Designed and implemented new language features for CG/SQL that simplified programming and greatly reduced programming errors
- Built code coverage tooling from the ground up for an internal domain-specific programming language and its associated virtual machine
- Made improvements to iOS application stability by improving the detection of errors in Messenger's Objective-C code at compile-time
- Reduced the size of Messenger's iOS app via various optimizations
- Led multi-team and multi-office efforts to improve code ownership
- Mentored engineers across various organizations including Instagram, Messenger, and machine learning infrastructure

The New York Public Library | New York, NY | 2014–2019

- Architected and developed a best-in-class open-source ebook reader and catalog browsing app which was selected by the Obama administration's Office of Science and Technology Policy as their application of choice for a national initiative to provide ebooks to underprivileged students
- Harnessed features of the iOS platform to make NYPL's existing ebook collection accessible to visually impaired users for the very first time through the use of Swift, Objective-C, and TypeScript
- Contributed to development of the Android version in both Kotlin and Java and guided user interface and interaction design for both platforms
- Mentored junior developers and helped them grow within the organization
- Worked with companies such as 3M, Adobe, OverDrive, and Sony to seamlessly integrate publisher-mandated content protection technologies
- Joined the Radium initiative to build open-source ebook rendering technologies and collaborated with developers around the world

Ingage | New York, NY | 2009–2011

- Led a local development team and managed several remote development teams to produce dozens of custom iOS applications
- Produced rigorous specifications for RESTful APIs, JavaScript APIs, and proprietary ebook formats
- Helped develop an ebook production system that transformed content from publishers, built applications, and abstracted away interaction with Apple's App Store infrastructure
- Interacted with high-profile clients including ESPN, Esquire, Houghton Mifflin Harcourt, and Kaplan to gather requirements and deliver results

OTHER

- Empathetic mentor who enjoys helping others grow their careers
- Excels at bridging gaps between management, design, and engineering
- Computer-based composition, generative art, and physical computing background; has used Max/MSP, Processing, Reaktor, SuperCollider, and other tools to produce music, visual art, and interactive installations

EDUCATION

Parsons School of Design | New York, NY | 2005–2008

- Bachelor of Fine Arts in Design & Technology
- Emphasis on computational approaches to design including interaction design, game design, and building tools for designers and artists
- Graduated with honors