MICHAEL REITER

(650) 785-0740   michaelreiter@live.ca   github.com/michaelreiter

San Francisco, CA   michaelreiter.github.io   linkedin.com/in/michaelalexanderreiter

EXPERIENCE

APPLE, *Senior AR/VR Software Engineer* — Since June 2022

∞ META (REALITY LABS), *Senior Software Engineer* — June 2018 – May 2022

AR / Computer Graphics Engineer on the **Holograms** team

- Implemented a multi-platform **real-time renderer** using **C++** and **GLSL** shaders
- Designed a shader cross-compilation system to target **OpenGL**, **Vulkan** and **Metal** graphics APIs
- Developed a highly parallelized image processing pipeline. Leveraged **GPGPU** technologies to perform novel computer vision techniques for **Augmented Reality** use-cases.

VR Engineer on the **Oculus System Interfaces** team

- Developed system UIs for an Android-based **Virtual Reality** operating system
- Served as **Tech Lead** for the Universal Menu (taskbar) on **Oculus Quest VR headsets**. Coordinated development across a dozen engineers in multiple orgs. Performed memory profiling and optimizations to meet a strict budget.
- Introduced **Kotlin** to Oculus, empowering hundreds of engineers to use modern Android technologies. De-risked memory utilization, app performance and internal tooling support, then deployed experimentally. Resulted in a statistically significant reduction in crashes. Delivered instructional presentation and onboarded other teams.
- Led system UI/UX development for **Horizon Home** (VR social hub). Integrated with party chat and co-present multiplayer APIs. Advocated Android best practices, such as **MVVM architecture** and **Jetpack Components**.
- Built VR Settings app with a strict least privilege security model using **React Native** and **Java**
- Managed an **intern**. Developed a project plan, reviewed all code, and hosted regular 1:1s. Resulted in unanimous full-time hiring recommendations.
- Conducted technical interviews, evaluating candidates on programming and behavioral axes

■ MICROSOFT, *Software Engineer Intern* — Summer 2017

Developed a 3D model viewer app for **HoloLens AR headsets** and **Windows 10** using **Unity** and **C#**

⬤ FACEBOOK, *Software Engineer Intern* — Winter 2017

Implemented picture-in-picture video playback for the Facebook **iOS** app using **Objective-C**

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY — Since January 2020

Master of Science, Computer Science

UNIVERSITY OF VICTORIA, *3.9 / 4.0 GPA* — September 2014 – May 2018

Bachelor of Science, Computer Science

PROJECTS

COBALT

A toy game-engine written in C++ and Metal Shading Language. Features physically based rendering using single-pass deferred lighting. Leverages the tile-based rendering architecture of Apple Silicon GPUs.

SKILLS

C, C++, OpenGL, Metal, GLSL, Java, Kotlin, Android, JavaScript, React, React Native, GraphQL, Node.js, Git, Mercurial, C#, Unity, Python, Go, SQL, Objective-C, Docker, gRPC, Elm, HTML, CSS