

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