BEGINNING METAL

Part 1: Introduction

Thanks To...

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What is Metal?

- ▶ Introduced at WWDC 2014

- ▶ Low-level access to the GPU
  - ▶ Graphics rendering
  - ▶ Parallel computation

Why learn Metal?

- Metal is not Unity
- What to choose?
  - 2D SpriteKit
  - 3D SceneKit, Unity, Unreal Engine
- Understand graphics concepts
- Customize
- GPU programming

Course Requirements

- Swift 3
- Xcode 8
- iOS device with A7 chip running iOS 9

~~OpenGL~~

- Math genius not required

Course Overview

GPU & Pipeline

Triangles

Shader Functions
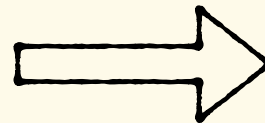
Textures

Transforms, Matrices

Model I/O

Lighting

Once

Import Model —— Texture

Each Frame

Position (animate)

Light

→ Render

Course Overview