



# Christopher Williams

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## EXPERIENCE

### Photon7 as a Visual Production Engineer

*Jan 2024*

Produced visual effects for Jungle Experience party in Ko Pha-ngan, Thailand.

Prepared, transported, and installed laser and video projector hardware.

Calibrated and VJed six laser units with Pangolin software.

### Google as a Software Engineer in Drive for iOS

*May 2020 – Nov 2022*

Designed, developed, and deployed features for sharing and counter-abuse in Google Drive for iOS.

Incorporated accessibility interfaces within features by including dark mode, high contrast, voice over, and swipe navigation.

Conducted weekly interviews for prospective software engineer candidates to join Google.

Wrote code in Objective-C, C++, Swift, and other in-house languages.

Collaborated with the Web and Android Drive engineers to align UI design along with specs provided by UX engineers.

Wrote design documents for upcoming features in Google Drive for iOS.

Planned development with atomic tasks in weekly sprints.

### Apple as a Quality Engineer in Reality Kit

*Apr 2019 – Mar 2020*

Supported RealityKit with automated pre-submission and daily API testing.

Reported bugs to software engineers with regression information, reproducible recordings, and pertinent code paths.

Conducted interviews for prospective QA engineers.

Developed a Swift application to run in a lab of various machines daily.

Designed and ran testing for SwiftStrike: an AR application shown at WWDC 2019.

Attended WWDC 2019 to provide technical support to third-party developers utilizing RealityKit.

Specialized in animation and networking API frameworks for RealityKit.

Collaborated with other QA engineers on my team and cross-functionally with software engineers, project managers, and technical managers.

Provided status updates to my manager and team in daily stand-up and weekly one-on-one meetings.

Drove weekly team meetings by presenting the agenda and ensuring effective use of our time.

### Apple as a Quality Engineer in IMG Graphics & Imaging

*Jul 2016 – Mar 2019*

Developed a tool and network for storage and retrieval to support automated image testing.

Wrote the tool with Python and network with PostgreSQL and REST API.

Utilized ExifTool, CoreGraphics, Image I/O, and other in-house technologies to parse image metadata.

Supported several QA teams by enhancing the tool to fit automated testing requirements.

Reported regressions in Image I/O, CoreGraphics, and CoreAnimation through manual UI and automated API pre-submission and weekly testing.

Designed and ran feature testing for dark mode introduced in macOS Mojave.

Collaborated with other QA engineers on my team and cross-functionally with software engineers, project managers, and technical managers.

Provided written daily reports and met in-person weekly with my manager.

Treasure as a Full Stack Developer	<i>Oct 2015 – Jun 2016</i>
Developed an ecommerce iOS app with Swift.	
Developed a web crawler written in Ruby utilizing Ruby on Rails to parse metadata from various ecommerce website vendors.	
Collaborated with two software engineers.	
Worked part-time during school both in-person and remotely.	
Apple as a Quality Engineer Intern in IMG Graphics & Imaging	<i>Jun – Sep 2015</i>
Automated video playback quality assurance by analyzing dropped frames with a custom-built tool.	
Wrote code in Python and Objective-C.	
Deployed the tool in a lab of several devices running macOS and iOS.	
Presented the tool and testing results to a board of technical managers and Craig Federighi.	
Salesforce (Tempo AI) as a Full Stack Engineer	<i>Feb 2014 – May 2015</i>
Developed an Android application to support the pre-existing iOS application.	
Wrote code in Java.	
Collaborated with eight software engineers.	
Worked part-time during school and full-time during summer break.	
Tempo AI was acquired by Salesforce in May 2015.	
Tapestry Solutions as a Front End Engineer	<i>Nov 2012 – Feb 2014</i>
Developed desktop software for managing cargo shipments.	
Utilized Adobe Flex front end and PostgreSQL databases.	
Gin	<i>Oct 2017</i>
Created a cross-platform app to keep track of the score for two players in the card game Gin Rummy.	
Wrote code in Swift.	
Utilized SwiftUI.	
Micronaut	<i>Jan – Jun 2016</i>
Created a platformer video game written in Swift for Apple TV.	
Submitted to the Apple TV app store and was accepted within one week.	
Manipulated sprites and parallax background images provided by a collaborating artist.	
Wrote a dissertation analyzing the development process.	
Submitted as my senior project for Cal Poly Computer Science bachelors degree.	
Baaaaalrog	<i>Jan 2016</i>
Created a cross-platform sprite-based top-down goat yeeting video game.	
Wrote code in Java.	
Utilized libgdx.	
Won first place for our location in the annual Global Game Jam hack-a-thon event.	
Personal Website	<i>May 2015 – Present</i>
Wrote code in Markdown, HTML, and CSS.	
Utilized GitHub Pages.	
Designed user interface for both desktop and mobile environments.	
Ensured compatibility with iOS Safari Reader mode.	
Programmed for best image preview and navigational capabilities.	

## PROJECTS

- Japanese Festival *Apr – Jun 2015*  
Created a real-time interactive 3D video game with an overworld and several minigames.  
Wrote code in C++.  
Utilized OpenGL.  
Initialized source code versioning control for four developers with Git.  
Submitted as my final project for Real-time 3D Graphics course at Cal Poly.
- Deep Beat *Mar 2015*  
Created a rhythmic rail shooter game for web written in JavaScript.  
Wrote code in JavaScript.  
Utilized CreateJS.  
Submitted as my final project for Interactive Entertainment course at Cal Poly.
- Bunny Shrine *Jan – Mar 2015*  
Created an interactive 3D scene of the first-ever 3D scanned object.  
Wrote code in C++.  
Utilized OpenGL.  
Submitted as my final project for Intro to 3D graphics course at Cal Poly.
- Attack Vector *Jan 2015*  
Created an infinite maze runner game written in C++.  
Utilized SFML.  
Participated in the annual Global Game Jam hack-a-thon event.
- Stikit *Oct 2014*  
Created an Android application.  
Utilized Chromecast API and JSON data transfer.  
Participated in the annual Cal Hacks hack-a-thon event.

## EDUCATION

- California Polytechnic San Luis Obispo *Sep 2012 – Jun 2016*  
Graduated Computer Science BS with a GPA of 3.2.  
Electives: Real-Time 3D Graphics, User Design, Security, HCI, OS, Networks, etc.

## HOBBIES

- Skiing, Climbing, Triathlon, Flow Arts, Backpacking, Dancing, Clarinet, Massage.