

JACOB WILSON

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EDUCATION

CARNEGIE MELLON UNIVERSITY, ENTERTAINMENT TECHNOLOGY CENTER

MASTER OF ENTERTAINMENT TECHNOLOGY

Aug 2017 - May 2019

Courses: Computer Graphics • Pitch
Project

GPA: 3.7 / 4.0

COLORADO SCHOOL OF MINES BS IN ENGINEERING PHYSICS

Aug 2013 - Dec 2016

Minors: Computer Science •

Space & Planetary Science

Dean's List (All Semesters)

Courses: Computer Graphics • Computer
Simulation • Algorithms • AI

GPA: 3.9 / 4.0

SKILLS

PROGRAMMING

Experienced

C# • C++ • Bash • MySQL

Familiar:

C • Lua • Swift • Python • Javascript •

Objective-C

TOOLS

Git • Perforce • Apache • Amazon Web
Services (AWS) • Vim • Visual Studio

APIS/LIBRARIES

WPF • OpenGL

GAME ENGINES

Unity • Amazon Lumberyard

ACHIEVEMENTS

Faculty Distinguished Graduate

Eagle Scout - Boy Scouts

SIGGRAPH Student Volunteer 2018

PERSONAL PROJECTS

Galactic Commander AR

Partner Project

May 2018 - Present

Unity Neon Challenge

Team Animation Competition

Dec 2017 - Jan 2018

TenBukTu Mobile Game

One-Week Partner Project | Jul 2017

EXPERIENCE

APPLE | SOFTWARE ENGINEER INTERN

May 2018 – Aug 2018 | Cupertino, CA

- AR/VR software prototyping
- Worked with Swift, Objective-C, C++, GLSL, Bash, C#, and Matlab
- Extended features and fixed bugs with internal-production codebase

THE ALICE PROJECT | STUDENT DEVELOPER

Jan 2018 – May 2018 | Pittsburgh, PA

- Developed a Unity application to import Alice type projects at runtime (code, meshes, etc) to act as a game executable
- Ported Java based virtual machine into a C# virtual machine with unit testing

WOODRIDGE SOFTWARE | FULL STACK DEVELOPER

Jan 2017 – Aug 2017 | Wheat Ridge, CO

- Leveraged AWS services to create servers and performed system admin role (Laravel/AngularJS/JQuery)
- Refactored codebase to improve maintainability and security

ACADEMIC PROJECTS

ISETTA ENGINE | GAME ENGINE DEVELOPMENT

(In Progress) Fall 2018 | Semester-Long Team Project

- Developing game engine in C++ for the twin-stick shooter genre
- Designed engine architecture and documented decisions why
- Interviewed professionals about game engines

AMAZON LUMBERYARD | PROJECT WORKBENCH

Spring 2018 | Semester-Long Team Project

- Developed core gameplay for game in Amazon's Lumberyard engine with Twitch integration
- Worked with artists on importing assets and translating LY error messages
- Created documentation about Lumberyard game engine features including bugs

BUILDING VIRTUAL WORLDS

Fall 2017 | Rapid Team Prototyping

- 5 2-week rounds with changing multi-disciplinary teams
- Rapid iterations on non-traditional inputs using faculty and peer feedback
- Platforms: Microsoft HoloLens, HTC Vive (Trackers), Makey Makey

OPENGL SOLAR SYSTEM

Fall 2016 | Team Project

- Programmed a real-time visualization of the solar system with user interaction
- Vertex and fragment shaders used to enhance the solar system's detail