# JASON ALEXANDER GRAALUM

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I am a recent college graduate with a Bachelor's of Science in Applied Computer Science seeking career opportunities that would further improve my software development capabilities and provide me with practical industry experience. My programming experience is focused toward C/C++ with the use of standard graphics libraries such as OpenGL and GLSL.

#### SKILLS

Programming Languages:
Programming Tools:
Spoken/Written Languages:

C/C++, C#, OpenGL, GLSL, Java, HTML/CSS, Assembly Language, Python Unity, Unreal Engine 4, Linux/Unix, Git/Github, Visual Studio, Vim, LateX German (Intermediate)

#### Academic Projects

#### **VR** Construction Utility

Summer 2022

Unity/C#

Advisor: Dr. Raffaele de Amicis

CS 406 - Projects

• Developed an immersive Virtual Reality interactive building experience in Unity, designed to mimic the real-world interactions of plastic building blocks

Project Space

Fall 2021 - Spring 2022

C++ and OpenGL

Advisor: Dr. Mike Bailey

CS 462/463 – Software Engineering Project

- Developed a custom-made game engine using C++ and OpenGL with a small team
- Utilized AGILE and SCRUM during the software development lifecycle

Paper Toss Adventure •

Spring 2022

Unreal Engine 4

CS 499 – Virtual & Augmented Reality Topics

• Developed an interactive Virtual Reality game in Unreal Engine 4 using the Blueprint system

## **EDUCATION**

### Oregon State University

Graduated September 2022

Bachelor of Science in Applied Computer Science

Relevant Coursework:

• CS 444 - Operating Systems

Explored principles of computer operating systems. Topics included concurrent processes, memory management, job scheduling, multiprocessing, file systems, performance evaluation, and networking.

• CS 458 - Data Visualization

Explored visualization design principles that are beneficial to cognitive learning and natural to human perception. Topics included graphs, trees, text, time series, and multivariate data.

• CS 450/457 - Intro To Computer Graphics/Computer Graphics Shaders

Used OpenGL to render 3D computer graphics including geometric modeling, lighting, shading, texture-mapping, and animation; Programmed graphics algorithms in the form of shaders which utilized lighting, opacity, image manipulation, bump-mapping, and displacement.

• CS 491 - CS Simulation & Game Programming

Used advanced computing topics to study applications for simulations and video games, including parametric lines, ray-triangle intersections, forward-/inverse-kinematics, rigid-bodies, keyframe animations, and particle systems.

## Portland Community College

Graduated March 2019

Associate of Science

## WORK EXPERIENCE

### Lumen Learning

Intern

June 2017 - September 2017

Portland, OR

• Updated and composed support documentation in Zendesk, producing PDF files for use by online college services.

• Approved instructor accounts in OHM and approved faculty resources in Waymaker and Candela.