

Emre Dogan

Enfield, London | (+44) 7467 525 433 | contact@emredogan.co.uk | emredogan.co.uk

Employment

Software Developer

Computacenter

Summer 2020 – Fall 2021

- Communicated with high-profile clients to refine requirements for prototypes.
- Enhanced customer prototypes into 3D/VR demos using *Unity* and *AWS Sumerian* respectively.
- Identified and streamlined stress points in team's workflow with automation using *PowerShell* and additional Microsoft *Azure* services.
- Developed machine vision equipped cross-platform mobile application using *Flutter* to resolve long-running problems with warehouse inventory management.
- Maintained team's *DevOps/Cloud* infrastructure and customer portal using *Azure*, *Terraform*, and *NodeJS*.
- Used *Azure's* CI/CD pipeline to automate tests and build processes.

Projects

More projects available at: github.com/EmreDogann

Vulkan C++ Graphics Renderer

- Built renderer from ground up using base API calls.
- Designed *Forward* renderer supporting *Ray-Traced shadows, reflections, refractions*.
- *ImGui* used to present user interface.
- Mouse Picking built using stencil buffers allowing for transformation of objects.

Space Rider - OpenGL

- Made in a C++ OpenGL engine.
- Implements Omni-directional shadows, multi-texturing, environmental mapping, instanced rendering, advanced bloom, and vertex displacement animations.

VIGIL – Survival Horror Game

- Made in custom *C++ OpenGL* engine and adapted to fit project needs.
- Custom tools such as *camera volumes* were developed to aid in the development process.
- Implemented inventory system and UI.
- Developed *A** pathfinding AI for enemies along with visualizer for debugging.

Skills

Programming Languages C++, C#, HLSL, GLSL

Tools Vulkan, Unity, OpenGL

Education

BSc Computer Science w/ Games Technology (**First Class**) – City, University of London – June 2022

Year 1	Year 2	Year 3
Mathematics for Computing – 93.9%	Programming in C++ - 97.3%	Advanced Games Technology – 88%
Systems Architecture – 89%	Games Technology – 80%	Computer Graphics – 73.2%
Introduction to Algorithms – 88.6%	Data Structures & Algorithms - 92.2%	Individual Project – 78%