Martin Grant

Computer Programmer

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C++

EXPERIENCE

Motorola Solutions, Glasgow — Application Developer

OCTOBER 2016 - SEPTEMBER 2017

Developed mobile data capture systems for the emergency services using Java, XSLT and in-house technology. Gained experience of the full software project lifecycle including meeting customers to capture requirements, design, implementation and testing.

MindMate, Glasgow — iOS Developer Intern

JUNE 2016 - AUGUST 2016

Worked on the MindMate iOS app to polish the game section to improve their playability and accessibility for users with Dementia and Alzheimer's. During my time here the app reached #2 in the Health category on the App Store.

Tick Tock Games, Wakefield — Junior Programmer Intern

JULY 2014 - AUGUST 2014

Assisted the senior programming team as well as working with my own tasks. Responsible for preparing a previously released game for launch on a new platform. Contributed to projects released across Android, iOS, OS X and PC.

Enable Scotland, Glasgow — Game Development Consultant

JULY 2013 - AUGUST 2013

Assisted running a summer workshop giving young people with learning disabilities a taster in game development. I developed a working implementation of their game design which was shown at a launch night where national charities attended. The project was featured in national press.

EDUCATION

Industrial Robotics PhD — University of Strathclyde

OCTOBER 2017 - Present

Researching autonomous robotic systems for efficient and effective manufacturing and inspection.

SKILLS

C

Java Swift Python

HTML Javascript CSS

Android iOS Monogame

C#

OpenGL SDL Unreal Engine 4

Django Git

AWARDS

UWS Court Medal Most Distinguished Student 2011–2012

Develop 30 Under 30 Honourable Mention

Game Jam Winner UWS Windows 8 Game Jam sponsored by Microsoft

Computing Science MSc — University of Glasgow

SEPTEMBER 2015 - SEPTEMBER 2016

Achieved a Master's degree in Computing Science to broaden my skills and knowledge. Took a selection of classes such as Computer Architecture, Internet Technology, Safety Critical Systems, Cyber Security and various others. Had many opportunities to work on both solo and group coursework, including a double credit group project.

Computer Games Technology BSc (Hons) 2.1 — University of the West of Scotland

SEPTEMBER 2011 - JULY 2015

In this degree course I learned to use various languages and technologies to design and build game systems like 2D and 3D graphics and physics. I had the role of team leader in many group projects to gain management and leadership experience. I also have experience of pitching and presenting projects. I founded the UWS Games Dev Society and ran it as the President for two years and organised events such as game jams and industry talks.

PROJECTS

Kanshi City — Unreal Engine 4 Game

A game about avoiding security patrols while escaping a dystopian, Tokyo-inspired city. Originally a prototype and continued to develop it as a hobby project after positive feedback. Took the game to a large games convention in Glasgow where lots of people tried it and the game was featured in a national newspaper.

Adding HSA Support to Vector Pascal — *MSc Project*

Extending the Glasgow Vector Pascal compiler to produce parallelised target code for execution on HSA hardware to compare performance of a shared memory system where CPU and GPU reside on the same chip against a traditional system where CPU and GPU are separate physical devices, and must transfer data between them.

MindMate iOS App — *Internship*

Responsible for making improvements to the range of games available in an iOS app aimed at improving the lives of people with Dementia and Alzheimer's.

Mobile Pressure Input — MSc Group Project

Worked in a team of four to use prototype pressure sensors to improve usability of smartphones. We designed a novel input system that let the user squeeze their phone to change the layout of the on-screen keyboard from normal letters, to capitalised letters and to numbers and symbols.

Burn Zombie Burn — *Internship*

An arena shooter where the player faces waves of zombie hordes. Contributed to porting this previously published game to iOS.

Unicorn Space Command — *Game Jam Winner*

2D space shooter that won the UWS Windows 8 game jam, sponsored by Microsoft. The game was published to the Windows Store and an Android version was developed and published to Google Play. The game received coverage on uBelly, MSDN and Scottishgames.net. It has over 2000 downloads worldwide, to date.

Dichotomy — BSc Group Project

Double semester group design and development project where I had the role of team leader. We produced a split-screen multiplayer dungeon game, with a focus more on the engine rather than game design as we were four technical programmers. The engine features a robust input system, physically based rendering, data driven asset and level loading, physics based movement, AI pathfinding and a base for networked play.

How To Rule The World In 3 Minutes — Global Game Jam 2014

Designer and programmer on a team of six where we developed a local multiplayer platformer game. Players capture towers and block others from doing so to gain points. The programmers had took on the challenge on learning a brand new language and game framework to build this game. I contributed to input, audio and game state management.