

ABOUT:

Game developer with a passion for creating immersive and artistic environments paired with unique player experiences. Over five years of team and solo experience in various aspects of game development with a focus in programming.

SKILLS:

Programming

- **C++** - prototypes using SDL2 and OpenGL frameworks
- **C#** - games ranging from prototypes to fully released
- **Python** - applications and games using Pygame and PyQt5 frameworks
- Experience in object-oriented programming

Software and Technical

Unity, Unreal, Blueprints visual scripting, Photoshop, Illustrator, Blender, SVN, Perforce, Git, GitHub, JIRA, Visual Studio, PyCharm

Miscellaneous

Agile/Scrum, 3D modelling, Web development, Graphic design, Fluent in French

EDUCATION:

Falmouth University - Cornwall, UK BSc in Computing for Games

First Class Honours

September 2017 - June 2020

Key subjects included version control, graphics engineering, AI, networking and a focus on developing games in teams.

College Green - Bristol, UK

BTEC in Interactive Media

Triple Distinction* (D*D*D*)

September 2014 - June 2016

Key subjects included web development, 2D & 3D animation, graphics design, concept art and game development.

EXPERIENCE:

Junior Software Engineer on Sonic Forces: Speed Battles

SEGA HARDlight, England — August 2022 - Current

- Collaborated with artists and designers on the development of multiple new characters for Sonic Forces
- Developed a character editing and implementation tool for designers and artists to use when creating new characters for Sonic Forces
- Fixed and improved key areas within the Sonic Forces codebase

Gameplay Programmer on Multiple Projects

Spelkollektivet, Sweden — April 2021 - July 2022

- Led a team to develop a game prototype in 4 months that was demonstrated at a convention in Poland: Poznań Games Arena
- Developed solutions for rendering bottlenecks in Unity to improve frame rate
- Designed and executed unique visual art styles for projects by coordinating closely with artists and developing shaders using HLSL and shader graph
- Created a procedural bipedal animation system in Unity for characters that I designed, modelled, textured and rigged with Blender

Gameplay Programmer on Ruff 'N' Tumble: Mayhem

Psycho Hound, Remote contract work — March 2021 - April 2021

- Collaborated with the lead programmer to add core gameplay features such as the pickup system and the use of weapons
- Optimised and improved existing gameplay features and systems
- Worked with colleagues to test and troubleshoot gameplay features

PROJECTS:

Planetary Pest Control — Danger Zone (award winning game)

Unity | Team of 14 | September 2019 - June 2020

Local 2 player twin stick shooter game awarded "Most Polished", "Best Game Voted by Industry Members" and "3rd Year Most Voted" at the Falmouth GA Expo, and draft selected for the 2020 Rookies Awards

- Rapidly prototyped initial gameplay ideas in order to playtest and select the most engaging concept
- Ideated enemy behaviors that best fit the gameplay and game flow with the lead designer
- Independently designed and implemented enemy AI systems, including spawning and behavior trees

Zephyr: The Cloud Odyssey — End Cloud Digital

Unity | Team of 9 | September 2018 - June 2019

First-person 3D platformer speed running game, downloaded over 700 times in the first 2 weeks of release on itch.io

- Directed project planning, development milestones and deadlines
- Implemented core game loop and game systems such as the score-board and level managers
- Designed and iteratively improved the final level's boss chase sequence to find the right balance of challenge, thrill, and a sense of reward
- Developed a responsive first-person character controller to create a precise user experience for skill-based gameplay