Inquisitive and detail-oriented, with over a decade of game development experience across the domains of technical art, environment art, programming, scripting, and design. Passionate about games, 3D art, real-time simulation, software development, and related areas of interest such as photography and architecture. Interested in opportunities to contribute to gaming, simulation, computer visualization, or other interactive/multimedia projects in a creative and collaborative working environment.

**Skills**

* Languages and technologies:
  + Experience with **Java**, **C#** and **.NET** Framework, **Python**, **PHP**, **HTML**
  + Beginner-level experience with **C**, **C++**, **Javascript**, **SQL**
* Game development with **Unreal Engine** (4 and 5), **Unity**, and **Source** engines:
  + **Level construction**, **environment art**, **2D/3D asset creation** workflows
  + **Gameplay prototyping** and **design fundamentals**
  + **Blueprint** scriptingand **C++** for Unreal Engine modules, **C#** scripting in Unity
  + **Node-based shader construction** in Unreal Engine and Unity
* **3D modeling** (low/high-poly, UV, baking, retopology) using **3ds Max**, **Blender**, and **ZBrush**
* **Texturing** using **Photoshop** and **Substance** tools
* Version control using **Perforce**, **SVN**, **Git**, and **Plastic SCM**
* **Data-driven** and **iterative** approaches to development and decision making
* Technical knowledge and experience spanning multiple areas of development, including:
  + **Optimization**, **performance management**, and **analytics**
  + **Physically-based rendering** concepts and techniques
  + **Asset management** and approaches to **project organization**
  + Principles of **software engineering** and **quality management**

**Education**

**BSc Creative Technologies (First Class Honours)**, Bangor University (Gwynedd, UK) – 2013 to 2016

* Program development in C, Java, C#, and Python
* Web development with HTML5, CSS, Java, JavaScript, and SQL
* Practical software, web, and game development exercises
* Final project/dissertation, titled *Modular Analytics for Unity Games*. Developed a prototype plugin which enables designers to treat arbitrary functions as analytics capture triggers, in addition to specifying the data items which are captured and transmitted to Unity’s analytics service.

**Professional Experience**

**Level designer, environment artist, technical artist**

*Self-Employed*, March 2015 – Present (Remote Contract)

* Providing independent design, art, and scripting services on a contractual or commissioned basis.

**Technology lead, principal artist**

*Crowbar Collective*, October 2017 – September 2022 (Remote)

* Responsible for initial stages of development of a new project/IP built with Unreal Engine.
* Created prototype gameplay systems, class designs, and framework code using Blueprint and C++.
* Contributed to the project’s look/style by creating scenes, meshes, textures, and material assets.
* Built tools, wrote documentation, and created training resources to assist with the team’s workflows, internal test procedures, and skill development.
* Provided guidance to management in regards to operational practices and strategic challenges.

**Technical artist, support representative** for NeoFur (Plugin for Unity and Unreal 4)

*Neoglyphic Entertainment*, November 2016 – May 2017 (Campbell, CA/Remote Contract)

* Contributed to development of the *NeoFur* plugin for Unity and Unreal 4, providing real-time simulation of furry objects and surfaces.
* Implemented bug fixes and user workflow improvements in the Unity plugin, and contributed to experimental feature development in the Unreal plugin.
* Created and managed documentation for customers/end users.
* Created and produced video tutorials and training materials for customers/end users.
* Handled technical and customer support inquiries during a companywide transition.

**Level designer, world builder, technical artist** for Insurgency (PC game)

*New World Interactive*, August 2011 – March 2013 (Denver, CO)

* Collected concept materials and references for environment design.
* Created prototype/blocking environments for gameplay testing and development.
* Assisted with creating 2D/3D assets, effects, and scripts.
* Contributed to decision making regarding gameplay designs and project direction.

**Level designer, world builder** for Nuclear Dawn (PC game)

*InterWave Studios*, April 2010 – March 2011 (Remote Contract)

* Drafted 2D layouts and created prototype levels for testing.
* Responsible for visual style and design direction of one level in the shipped game, collaborating with the design lead, in addition to contributing art implementation for a second level.
* Assisted with gameplay analysis and testing, wrote level scripts, and created 2D/3D assets.

**Level designer, world builder, level artist** for Black Mesa (PC game)

*Crowbar Collective*, April 2005 – March 2020 (Remote)

* Worked remotely with a worldwide team of over 40 developers, initially on a volunteer basis.
* Created style guides/art standards for specific levels or parts of levels.
* Collaboratively constructed and optimized detailed environments in the Source engine.
* Created 2D/3D assets and performed art passes on blockout levels created by other designers.