BERTIE TAYLOR

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A Versatile, Detail Oriented and Passionate Video Games Programmer proficient in C++, with experience in AAA game development. Thrives within teamwork-driven environments with excellent time management skills enabling reaching deadlines with exemplary levels of work. Commended for creativity, tenacity and adaptability within current role aiding the development of vehicle simulation and gameplay on the announced upcoming Rockstar Games project.

Skills

Engine Programming • C++ (4 years) • OpenGL • GLSL • Version Control (Perforce/ Git) • Gameplay Programming • Unity • C# (4 years) • Android Development • Java • Machine Learning Fundamentals • Team Projects • User-Centric Design • Agile Development • HCl Methodologies • Trello • Visual Studio

Experience

Associate Physics Programmer – Rockstar Games (2022 – Present)

- Improved, expanded and debugged the complex systems of the current game project- making use of creative problem-solving skills and iterating in response to critique and peer review to develop maintainable compatible performant code making use of sensible abstractions to ensure code is future-proof for other developers in the future.
- Collaborated within the physics team as well as across the studio, with Design, Art and Production, to devise innovative solutions to issues from the base-level custom C++ physics engine, through vehicle simulation systems up to native creation for use by C# scripts.
- Adapted to a hybrid working environment, taking ownership of deliverables and communicating the
 concepts behind their purpose to develop timescales and deadlines for tasks aiding in completing the
 team's collective work in a timely and efficient manner.

Education

First Class Integrated Masters in Computer Science (Game Engineering) (MComp) - Newcastle University (2017 – 2022)

- Developed a custom game engine from the ground up in C++, across taught modules in Graphics and Physics. Made use of this work to create high-fidelity scenes and a mini-game, implementing state-based A* pathfinding AI.
- Led a team of eight on a two-month project to build a multiplayer paint-shooting game with a custom-built ECS-based game engine. Took responsibility for the networking solution, managed the team, ran code reviews, and implemented core features including the paint shader and player controller.
- Produced two dissertations over my final two years; The first focused on integrating modern HCI methodologies with designing video game tutorials, making use of Unity to prototype and conduct primary research. The second focused on spatial acceleration structures to improve the performance of the flocking algorithm in three dimensions, built in a dedicated custom C++ environment.
- Completed additional modules including: Video Game Development (Unity/C#), Advanced Game Technologies (C++), Advanced Interaction Design, Biologically Inspired Computing, and Creativity, Innovation, and Market Research in Engineering.

Miscellaneous

Volunteering: Spent 2 months working as a camp counsellor for special needs children at Camp Sno-Mo, New Hampshire, USA. Trained to get first aid qualifications and worked in an international team of 20 to provide care and support for differently-abled children of all ages.

Hobbies & Interests: I have a deep love for video games, with favourites including Celeste, Skyrim, Spore, Farcry and It Takes Two. I also spend time playing Football, Tennis and Board Games to relax.