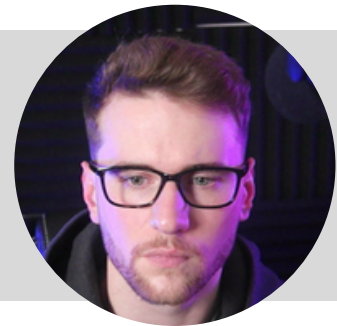# SAM FEBVRE

VIDEO GAME PROGRAMMER

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SUMMARY

I am a passionate, multi-disciplinary game developer striving to create highly enjoyable user experiences. I bring a thoroughly analytical, organized and logical approach to the development of games, specialising in satisfying and high feedback gameplay features. I love learning new tools, working with like-minded people, and improving workflows for my team.

EDUCATION

MSC - MATHEMATICS
University of Sheffield - 2:1
2015-2019

MSC - VIDEO GAME DEVELOPMENT
University of Lincoln - 2:1
2019-2020

EMPLOYMENT

VIDEO GAME PROGRAMMER
Stainless Games
Apr 2020 - Aug 2022

CONSOLE PROGRAMMER
Bithell Games
Sep 2022 - Current

PROFESSIONAL TITLES

TRON CATALYST - BITHELL GAMES   https://store.steampowered.com/app/3025590/TRON_Catalyst/

A top down action RPG with roguelike elements made in Unity. I worked extensively to bring gameplay features to full realisation, spanning player movement, combat, AI (humanoid and vehicular), interaction systems, and the signature light cycle movement/light walls.

- Proposed and implemented key "juice" features, prominently showcased in the game's trailer.
- Developed a humanoid position solver to predict and reproject high-magnitude movement across complex 3D scenes, including wall and ledge traversal.
- Built internal debugging and iteration tools — custom scene handles, a filtering tool for logging and scene drawing, and an input playback tool— significantly improving team productivity.
- Optimized performance from 5 FPS to a stable 30 FPS on the Nintendo Switch.
- Refactored significant amounts of game code, including rewriting raycasting logic to leverage Unity's Jobs/multithreading system while preserving existing gameplay behaviour.

TRON IDENTITY - BITHELL GAMES   https://store.steampowered.com/app/2109430/Tron_Identity/

A visual novel for the switch and PC/Mac set in the Tron universe made in Unity. My time on the project was spent optimising the game for the Switch, fixing bugs, and developing core gameplay systems.

MISSILE COMMAND - STAINLESS GAMES   https://www.youtube.com/watch?v=isB5F86SpKI

A missile command clone made for the Amico Intellivision with Unity. I helped the team across the project fixing bugs, tuning UI, and generally polishing the project for release.

ONLINE MULTIPLAYER UNREAL ENGINE GAME (CANCELLED) - STAINLESS GAMES

For about 2 years I worked alongside Amazon Game Studios on multiplayer network code in Unreal Engine C++, and helped maintain builds for multiple modern consoles and mobile platforms.

SKILLS

- 5 years professional video game programming experience.
- Strong understanding of 3D maths and its application to game development.
- Tools development.
- Experience writing networked multiplayer code on large scale projects.
- Knowledge of standard graphical tools and workflows- Shadergraph, VFX graph, PBR rendering.
- Multi-platform development experience - Desktop, Consoles, Mobile, VR.
- UI systems/management.
- Proficiency with common third party tools - DOTween, Odin Inspector, Audio Toolkit, etc.
- Strong understanding of effective usage of C#/C++ for scalable, efficient gameplay systems.
- Experience programming AI systems for humanoids and vehicles.
- Hard surface modelling, and experience with industry standard third party tools in Hopscutter and MESHMachine
- Experience with various Version Control Systems - Github, Perforce, Plastic, TortoiseSVN
- Proficiency at designing effective code architecture.
- Excellent communication, ability to explain decisions clearly and concisely and absorb and incorporate new information quickly.
- Professional experience with both Unity and Unreal Engine.

PERSONAL PROJECTS

GAME JAMS
The following are small projects that were each produced over the course of a few days for various Game Jams - GGJ, Ludum Dare, etc.

MASHED CLONE PROTOTYPE - UNITY
https://febreve.itch.io/mashed-clone-prototype

A quick attempt to mimic a ps2 game that is a personal favourite of mine (https://en.wikipedia.org/wiki/Mashed_(video_game)), but increasing the number of vehicles from 4 to 8. Runs in a browser.

Source available at: https://github.com/samfebvre/MashedCloneProtoype

QUACK RUNNER - UNITY
https://grumpywrengames.itch.io/quack-runner

A stylised infinite runner for GGJ 2020. Playable in a browser.

OTHER

HARDSURFACE RENDERING - BLENDER
https://www.artstation.com/biggun2

Some examples of my hard surface 3D modelling/rendering practice.

TOPICS I LOVE TO CHAT ABOUT

- Data Oriented Design
- Vim Motions
- Custom/Split Keyboards
- 3D Modelling
- House plants