Jeff Manke

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EDUCATION

University of Victoria **Victoria, BC**
Bachelor of Science, Double Major in Computer Science and Economics (GPA: 3.7/4.0) *Dec 2019*

SUMMARY

- Developed multi-threaded applications using .NET and Unity.
- Skilled in C# and competent in C++.
- Built C++ plugins for use in Unity.
- Solid 3D math skills with linear algebra and trig.
- Competent with version control software such as Perforce and Git.
- Experience optimizing, testing, debugging, refactoring and extending existing code bases.
- Experience working in a Agile/Scrum environment using Jira.
- Excellent verbal and written communication skills.

EXPERIENCE

LlamaZOO Interactive Inc. **Victoria BC, Canada**
Software Developer *Jan 2018 - Jan 2019*

- Designed and implemented core systems/features using C# and .NET that became essential parts of the framework.
- Built a GIS data processing tool that converted GeoJSON into 3D meshes which reduced time spent on data integration by more than 50%.
- Optimized single-threaded code with multi-threading to ensure smooth frame rate.
- Ownership of client and internal projects using Agile development methods and Jira.

LlamaZOO Interactive Inc. **Victoria BC, Canada**
Software Development Intern *Sep 2017 - Jan 2018*

- Researched and developed a low-latency networking prototype for VR applications in Unity.
- Implemented a VR menu system with touchpad support.

Canada Revenue Agency **Victoria BC, Canada**
Junior IT Analyst *Apr 2016 - Dec 2016*

- Implemented a database that manages workstation information using PowerShell and Microsoft Access.
- Resolved hundreds of tickets ranging from administration updates to major system failures.

PROJECTS

- **Voxel Engine**: Marching cubes implementation done in C++ and C# with modifications for LOD support.
- **Physical Interaction In VR**: Computer vision research project that uses a single camera to track and project the pose of objects into a virtual environment.
- **Sudoku Solver**: Implementation using C++ and a reduction from Sudoku to the exact cover problem.
- **Galactic Map VR**: VR app made in Unity 3D that visualizes the closest 100,000 stars.

Programming Skills

- C#, C++, Python, C, Java, SQL, HTML5, JavaScript, React.js