Bojan Lovrovic

Last update on November 3, 2018

Summary

Starting my 'career' at the age of ten when I wrote my first program in Logo I moved, driven by the burning desire to make a video game, to C#. After I made a couple of game engines, I switched to C++ which remains my primary language to this day. Over the years, I completed my MS, worked as a software engineer in game development industry, media production industry, low level graphics programming and driver optimization.

Looking to secure a position in a software company, where I can hit the ground running, but still develop my current skill set further.

Experience

Samsung Electronics — London, United Kingdom

Software engineer, Graphics — *Sep '18 – present*

Low-level graphics programming for Samsung's Android based devices.

The Future Group — Oslo, Norway

Software engineer, Graphics — *Sep '17 – Sep '18*

Was tasked with the implementation of the low-latency GPU-based pipe-lining tool to be used alongside UE4 to enable our researchers in creating various frame processing techniques, such as chroma-keying.

Little Green Men — Zagreb, Croatia

Software engineer, part time — *Feb '16 – Jul '17*

Worked closely with artists and QA team. Implemented path-finding for AI, added additional game states and wrote various shaders. Provided debugging, profiling and optimizing of the proprietary engine's C++ code.

Croteam — Zagreb, Croatia

Software engineer, intern — *Apr '15 – Jun '15*

Internship offered the opportunity to debug and refactor Croteam's Serious Engine, The Talos Principle and the Serious Sam games written in C++.

Education

University of Zagreb — Zagreb, Croatia

Masters degree in Computer Science — *2015 – 2017*

Completing this degree was balanced with employment at Little Green Men Games. Although playing with neural networks was part of the curriculum, main field of study was computer graphics.

Bachelors degree in Computer Science — *2012 – 2015*

Despite the broader approach, a lot of work was done in the field of computer graphics and physics simulation, in both, personal and university projects.

Publications

Rigid Body Joints in Real-Time Unified Particle Physics — *2018*

Proceedings of the Eurographics 2018 conference in Delft, Netherlands.

Projects

Starpoint Gemini Warlords — *2017*

A space simulation game developed by Little Green Men (multidisciplinary team made of more than 20 people) and released for Windows PC. *(DirectX 11, C++11)*

Virtual body ownership system — *2017*

System that supplements a skeletal model of a user in a virtual reality environment with animation, inverse and forward kinematics. *(C++, UE4, HTC Vive)*

Compiler — *2015*

From a C-like language into a mnemonic language. It had lexical, syntax and semantic analyzer. *(Java)*

Game engine — *2013*

Implemented features like cloth simulation, rigid body dynamics, traditional and procedural skeletal animation. This was combined with competitive graphics and Lua integration. *(C++, DirectX 11, Lua)*

Skills

Technical expertise: First language is C++, but also high familiarity with C, HLSL, Python, Lua, C# and Java. Techologies used through career include: DirectX APIs, OpenGL, Unreal Engine 4, Unity and TensorFlow. Version control system experience includes working with SVN, Git, Perforce and TFS. Favourite project management tool is Trello and favourite IDE is Visual Studio.

Traits: Tenacious problem solver. Ability to perform well under pressure. Works well in a team (pleasant and communicative). Curious.

Natural languages: English *(full professional proficiency)*, Croatian *(native proficiency)*.