

Donovan Ian Hutchence

donovan.hutchence@gmail.com

London, U.K

+44(0)78 40681094

Software Engineer with over 20 years experience designing and implementing performance-sensitive systems in the financial sector, simulation industry and games.

Experience

2019-Present	Snap Inc.	London, UK
Software Engineer , PlayCanvas		

I am currently developing the PlayCanvas engine and tools for games in Snapchat.

2011-2019	Bloomberg LP	London, UK
Senior Software Engineer , Fixed Income		

- Lead a small team who designed and developed Bloomberg's reporting system for Fixed Income trading
- Worked closely with the business stakeholders to establish feature requirements and schedule development and release efforts
- Required full stack development using JavaScript front-end, C++ report processing and Postgres/SQL for the highly parallel database backend
- Implemented most core components, including a novel syntax-tree for safe generation of complex SQL logic and an in-memory C++ evaluator for data generation, aggregation and filtering

The project was a success and resulted in substantial man-year savings for the internal sales team. The client-facing functionality was more stable, ran quicker and offered a much richer feature set than before.

The framework and infrastructure was later adopted by other teams within Bloomberg resulting in substantial development savings overall. This was as a result of solid software design and architecture.

2004-2011	Sony Computer Entertainment	London, UK
Principle Programmer and Graphics Lead , PlayStation Home		

- Lead a small team of people who designed, implemented and maintained the graphics engine and tools for Sony's PlayStation Home, an online social gaming platform
- Developed a highly multi-threaded, memory sensitive engine which ran on the PS3 GPU, PPU and CELL processors and was implemented using a combination of C++, Cg and assembly language
- Implemented various C++ and CLR based tools in support the art pipeline, including volumetric spherical harmonic lighting, model viewers and various other pipeline tools

2000-2004	Fifth Dimension Technologies	Pretoria, South Africa
Software Developer and Project Lead		

- Co-developed and designed the company-wide simulation SDK
- Was responsible for implementing the core graphics engine, animation system, terrain technology, scene intersection testing, simple scripting system and custom collision detection system
- Implemented infra-red and night vision sensor displays for defence applications
- Was project lead on the 5DT Driving Simulator, including project specific sound and network code, interfaces to custom hardware and motion base support, vehicle physics and custom rendering systems

1997-2000	Fifth Dimension Technologies	Pretoria, South Africa
Part time Software Developer		

- Gained experience in C++, DirectX, MFC, WIN32, 3dsMAX and Photoshop
- Developed various applications, including a 2d pre-training application for continuous miners and a power grid visualisation editor

Education

1996-2000	University of Pretoria	Pretoria, South Africa
BSc Computer Science		

- Was sole developer on the team which won the final year project competition with the game "Shrinquito"

Other interests

- Android game development
- Photography
- Computer animation and rendering
- Playing guitar, drums