

Curriculum Vitae

Joseph Bain

16th October 1985

3, Wordsworth Road,
Worthing,
West Sussex
BN11 3NH

07708 413 751
mrjoebain@gmail.com

<http://adam-a.co.uk/>

About Me

I am an intelligent and enthusiastic software engineer with solid programming experience and a strong passion for video games. My particular areas of interest are 3D graphics and audio, but I have a wide skillset and am a strong team member and inventive problem solver.

Employment

07/10 – Present **Openbet Ltd.**, London
Software Developer

Working on the company's casino games server. Written in Java as a Tomcat plugin, the server processes and responds to Flash front-end games using XML requests. The games use an IBM Informix database.

09/09 – 06/10 **Realtime Worlds Ltd.**, Dundee
Jnr. Software Engineer in Test

In this position my initial role was to guide and assist members of my team in writing unit tests for production code. I also created and maintained high level automated quality and load tests for the project.

Alongside this I worked heavily on an artist tool for adjusting lighting and, in the game, a system to vary lighting for a time-of-day effect. Using WinForms and C# for development, I had to work closely with the artists to make sure it met their requirements and was bug-free.

10/08 – 12/08 **Intrelate Ltd.**, Edinburgh
Software developer
(Part-time)

I researched and developed a prototype telephone interface to the company's existing CRM system. I worked alongside permanent employees to gather specifications for the system and presented my recommendations to the CEO. I installed and configured an open-source VoIP telephony system and wrote a set of scripts in the Lua language to demonstrate the system for the company's clients.

06/08 – 09/08 **The Hydrogen Office Ltd.**, Edinburgh
System developer

(Summer placement) I designed and implemented a real-time energy monitoring system to take automated readings from electricity, heat and other energy meters. The program included a GUI for set up and administration, stored energy readings, calculated carbon savings and posted live information to the organisation's web site. The system was written in Java and Swing and used a PostgreSQL database.

Education

- 09/05
– 07/09 **University of Edinburgh**
BSc (Hons), Artificial Intelligence and Computer Science (First class)
With courses including Computer Graphics (A), Computer Animation and Visualisation (A), Advances in Programming Languages (A), Computer Communications & Networking (B), Software Engineering (B), Operating Systems (B), Human Computer Interaction (A).
- 09/02
– 07/04 **BHASVIC**, Hove, East Sussex
A levels: Maths (B), English Literature (A), Philosophy (B)
AS levels: Media Studies (B)
- 09/98
– 07/02 **King's Manor C.C.**, Shoreham-by-Sea, West Sussex
GCSE's: 2 A*'s, 3 A's, 4 B's

Other Experience

TIGSource Competition – Summer 09

<http://adam-a.co.uk/?p=zoobabies>

For one and a half months in this Summer I worked with a small group of friends to make a game for an online competition. The game we made was a 3D puzzle/exploration game, written in C++ and Lua and using OpenGL and SDL.

I wrote the majority of the game engine in C++ and used the open-source library Luabind to provide bindings for Lua scripts. The actual game was entirely written using the Lua bindings, of which I wrote around half.

This project taught me a great deal about C++ and OpenGL and also many important lessons about working in a small team and effective use of version control.

More information, screenshots and the game itself are available on my website.

Personal Projects

<http://adam-a.co.uk/?p=code>

I have worked on several personal projects, full details and links to code can be found on my website:

- A music sampling and playback program for realtime musical performance, written in C++ with a gui in GTK and OpenGL.
<http://adam-a.co.uk/?p=sampler>
- A networked multiplayer platform game written in C# using OpenGL.
<http://adam-a.co.uk/?p=magnum>

Skills

I have a good working knowledge of:

- Object oriented languages and design (C++, C#, Java)
- Test engineering, unit testing and TDD (using NUnit, JUnit, RhinoMocks)
- Version control systems (P4, SVN, git, CVS)
- 3D graphics, particularly OpenGL and GLSL

I have an intermediate knowledge and experience of:

- Web development (HTML, CSS, Javascript, JQuery, PHP, TCL)
- C and low-level embedded / robotics programming
- Database design in SQL (MySQL, PostgreSQL, Informix)
- Functional languages (Haskell, Ruby, Python)
- Other languages (Prolog, Lua, bash, make)
- Agile development practices
- Development on Windows (Visual Studio) and Linux

Activities and Interests

I play keyboard and bass guitar and write songs, I also listen to a lot of music and love seeing live acts in Edinburgh and Glasgow. I am an avid reader, some of my favourite authors include Kurt Vonnegut Jr. and Arthur C. Clarke, and I read a range of different genres and styles. I love video games – racing games particularly, but I am hopeless at FPS's. I am always interested in improving my programming and have worked on several open source projects in my own time, links are available on my website.

References

Available on request.