

## **JAMES BROADHEAD**

*Electronic and Computer Engineer*

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+44 741 342 0400 (UTC)

I am interested in working on challenging problems in Software Engineering in the UK. I have experience working in industry, academia and open-source. I am efficient and motivated, and perform well in team environments. I contribute to **Gentoo Linux**, my preferred languages are **Python** and **C++**. I adapt well and am eager to learn new technologies and platforms.

### **Third Level Qualifications:**

**2007**            *Baccalaureus in Arte Ingeniaria* (B.A.I) Hons.  
Bachelor of Computer and Electronic Engineering  
Trinity College Dublin

### **Experience:**

**2011 – pres.**   **BSB International**   *Software Developer*

International Software Development team, developing Life Insurance / Financial software in Java.

Involved in bug-fixing, feature development and code review  
Server-client model with object persistence.

**Key Technologies:** *Java, Spring, Maven, Jboss, Junit, Oracle, SQL, svn, hg*

**2007 - 2010**   **Telecommunications Research Group (TCD)**  
*Postgraduate Researcher*

Developed Distributed Simulation Framework for Monte-Carlo Simulation and Statistical Analysis of Frequency Rendezvous using Python and C library calls (PyObject).

Profiling and Optimisation of Simulator as project developed and research needs changed. Distributed processing, and employed multi-processing, Replaced Python API calls with C modules and SciPy calls based on profiling.

Project management / Bug Tracking / VCS - TRAC, Subversion

Attended International Conferences and Workshops, Involved in Peer Review of submitted papers

Taught First-Year Engineering class for Digital Design project

**Key Technologies:** *Python, C (PyObject), SciPy, Numpy, multiprocessing.*



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### Experience (cont.):

**2007 (4mo.) Cisco Systems**      *Software Development Engineering Intern*

Software Development Internship in San Jose with individual tasks and deadlines on two projects.

Programming VOIP client in C++ using Windows API and MFC.

**Key Technologies:** *Visual C++, MFC, Windows API, C++test, SIP, Clearcase*

**2006 (3mo.) Xilinx**      *Customer Applications Engineering Intern*

Debugging customer logic-design issues using VHDL, Verilog.

Attended digital design courses, minor original design work.

Experience dealing with remote team and customers over telephone, instant-message and remote-desktop

**Key Technologies:** *VHDL, Verilog, Circuitry-level Optimisation*

**2005 – pres. Gentoo Linux**      *User / Contributor*

Active member of community; submitting bug reports, patches, and install scripts. I contribute to documentation and help in the user support channel.

Maintain personal systems each with custom compiler optimisations and hand-configured kernels. Minor kernel patching.

Build-system and System administration experience, debugging failed builds and failing applications with gdb, strace.

Maintain minor forks of two projects with patches that have not yet been merged upstream.

**Key Technologies:** *gcc, gdb, strace, Bugzilla, Mercurial, VirtualBox*

### Preferred Languages and Environments:

Python, C++, C, Erlang, Shell Scripting (bash) in Linux

**Secondary Education:** St. Andrew's College, Booterstown, Co. Dublin

Leaving Certificate – All subjects at Higher Level (2003)

A2 – Maths, English, Music, French      B2 – Irish

B3 – Physics, Classical Studies.

Highly Commended in Young Scientist Competition

### Other Experience:

**2002 - 2010 Reserve Defence Force:** *Infantry Platoon Sergeant (Part-time)*

Leadership/Training/Administration role for 30 soldiers.

Languages: English, French, Irish

Interests: Music; Grade 8 Oboe, Reading, Sailing, Skiing, Hiking, Reading.