

## Curriculum Vitae

**Name:** Andrew William Garrard

**Address:** Available on request

**Electronic mail:** fluppeteer@hotmail.com

**Date of Birth:** 20<sup>th</sup> February 1974

### Education (since age 11)

King's College, London	September 2000 - September 2001
Downing College, Cambridge	October 1992 - July 1995
King Edward VI's School, Norwich	September 1985 - July 1992

### Examination results and qualifications

<b>Degree results:</b>	MSc	Distinction	2001
	Graduated BA (hons) Computer Science 1995 / MA 1999		
	Part II Computer Science Tripos	3 <sup>rd</sup>	1995
	Part IB Computer Science Tripos	2:2	1994
	Part IA Computer Science Tripos	2:2	1993
<b>S-levels:</b>	Physics	1	1992
<b>A-levels:</b>	Physics	A	1992
	Chemistry	A	1992
	Mathematics	A	1992
	Further Mathematics	C	1992
<b>A.E.B. Basic test:</b>	Electronics	Distinction	1991
	Computer Awareness	Distinction	1991
<b>G.C.S.E.:</b>	Computer Studies	A	1991
	Five subjects	A	1990
	Three subjects	B	1990
	One subject	C	1990

**Projects:** MSc: a program conditioner (a program comprehension tool)  
BA: a simple compiler with a pre-emptive run-time environment

#### The MSc course component options taken were:

'Data structures and their implementation in C++',  
'Algorithm design and analysis', 'Geometric algorithms with applications',  
'Scientific parallel and distributed computing', 'Parallel algorithms',  
'Text searching and processing', 'Advanced research topics' and  
'Cryptography and information security'.

I also attended, but was not examined on:

'Numerical analysis', 'Multimedia compression methods and systems'  
'Group project' and 'Algorithmic issues in the world wide web'.

**References** Available on request

## Previous Employment

- Software Engineer, Advanced Rendering Technology Ltd, July 1996-September 2000  
 Writing a shading language compiler for a custom architecture, writing shaders in assembler, test suite development, implementing a reference software version of the architecture, hardware assembly, working on a chip simulator, debugging and developing a revision of the ASIC in VHDL, plug-in development for Windows NT applications
- Programmer, Perihelion Distributed Software, August 1995-July 1996  
 Testing the Helios-ARM embedded real-time operating system, working on the Pardi distributed computing library, developing a multi-platform user interface with Zinc, developing an embedded graphics library
- Programmer, LOOKSystems, August-September 1994  
 Implementing routines for printer drivers and font manipulation (on the Acorn platform)
- Programmer, Norwich Computer Services, June-August 1994  
 Designing and implementing the Archive magazine bulletin-board system and supporting software

## Computing skills

- Operating systems:** Substantial experience developing under (x86/Alpha) Linux and RISC OS. Some exposure to development under Windows NT (Visual C++), DOS, AIX, DEC UNIX, SunOS, Solaris, IRIX, NetBSD (RiscBSD), AmigaDOS, BeOS, MVS and Helios-ARM.
- Languages:** Fluent in C++, ISO C, ARM assembler, RenderMan shading language, PERL 4 (BBC) BASIC, UNIX shells (bash), (X)Emacs LISP and HTML. Varying limited experience in OpenGL, PERL 5, ADA95/83, Modula-3, FORTRAN77, ML, Logo, Java, FORTH, VHDL, NESL, tcl and assembly language for Alpha, x86, 6805, 68K and MIPS. Also substantial development with Flex/Bison, CVS/RCS, Expect/DejaGNU, PVM.

## Interests

- Computer-related:** Graphics (rendering, animation and user-interfaces), compilers, operating systems, hardware developments, security, artificial intelligence, DTP, robotics
- Others:** Tiddlywinks, role-playing games, tennis, squash, swimming, fantasy and science fiction, zoology

## Positions of Responsibility

- Marking undergraduate coursework at King's College London (2001):  
 'Operating systems' (second year),  
 'Computer graphics systems' (second year),  
 'Human computer interaction' (first year – including lab session supervision),  
 'Systems architecture and assembly language programming' (first year)
- Publicity officer to Cambridge University Tiddlywinks Club 1998-2001 and to the English Tiddlywinks Association 1998-2001, 2002-  
 Head of Computer Society, Norwich School, 1992  
 Head of Robotics Society, Norwich School, 1990-1992  
 Member of Computer Club Committee, Norwich School, 1990-1992  
 Secretary, Young Enterprise company, 1991

## Non-academic Achievements

- Young Enterprise Scheme (Examination passed: Merit, 1991)  
 Clean Driving Licence, normal road vehicles (Test passed: July 1991)