

Stephen Block

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An engineering and computer science master's degree level graduate looking for a permanent position in engineering in the UK. Significant experience in research, but also with experience in commercial and industrial work. Excited to work on cutting-edge technology applied to real-world problems with tangible results. Able to work well with a team, yet confident enough take the lead and use own initiative. Excellent problem-solving skills and competent with a variety of IT systems and software.

EDUCATION

Master of Science, Computer Science **September 2003 – February 2007** **Aeronautics and Astronautics Department, Massachusetts Institute of Technology (USA)**

Grade Point Average 4.9 / 5.0
Subjects studied Artificial intelligence, astrodynamics, spacecraft dynamics, non-linear systems
Skills gained Extensive C++ and MATLAB programming, project management, scientific paper writing

Master of Engineering with Distinction, Aeronautical Engineering **October 2002 – June 2003** **Cambridge University**

Subjects studied Aerodynamics, dynamics, controls, structures
Skills gained Management of design-and-build final-year project, PIC programming

Bachelor of Engineering with First Class Honours, Engineering **October 1999 – June 2002** **Cambridge University**

Exchange year Third year at the Massachusetts Institute of Technology on the Cambridge-MIT Institute Undergraduate Exchange with Grade Point Average 5.0 / 5.0.
Subjects studied Aerodynamics, dynamics, controls, structures, electronics, thermofluids, mathematics
Skills gained Experience of study abroad, introduction to a wide variety of engineering subjects

NEBSM Certificate in Business Management **September 1998 – June 1999** **Pershore and Hindlip Agricultural College**

Secondary and Higher Education **September 1991 – July 1998** **King Edward's School Birmingham**

Extensions STEP Physics at grade S and STEP Mathematics II at grade I
A-Levels Maths, Further Maths, Physics, Chemistry, General Studies, and AS-Level German at grade A
GCSEs 11 subjects at grade A*

EXPERIENCE

Model-Based Embedded and Robotic Systems Group **June 2004 – February 2007** **Massachusetts Institute of Technology (USA)**

Research Assistant working with Prof. Brian Williams.

The Model-Based Embedded and Robotics Systems group develops novel algorithms for the control of autonomous robots. My thesis work developed a distributed system for executing plans on groups of robots.

Skills and responsibilities - Design and implementation of formal planning algorithms.
 - Writing and maintaining complex software.
 - Software engineering practices, including defining module interfaces and ensuring compatibility with existing code.

- Providing deliverables to project sponsor Boeing in the form of software, technical papers, progress reports and presentations.
- Writing and maintaining low-level driver code for a variety of robotic hardware.
- Authoring scientific papers.

**Center for Sports Innovation
Massachusetts Institute of Technology (USA)**

September 2001 – December 2001

Student researcher through the Undergraduate Research Opportunities Project with Prof. Kim Blair.

The Center for Sports Innovation develops new technology to enhance performance in all areas of sport. My project analysed the structural response of bicycle frames.

- Skills and responsibilities
- Design and manufacture of electronic hardware interface.
 - Performing testing and data-logging using experimental rig.

**Sensors and Processing Group
Defence Evaluation and Research Agency**

September 1998 – September 1999

Gap year placement student through the Year In Industry Scheme.

Of the wide range of technical areas covered by the Sensors and Processing group, I worked in radar signatures. My project used computer simulations to predict the radar signature of a variety of aircraft targets.

- Skills and responsibilities
- Working as part of large team spread throughout the country.
 - Providing deliverables to project sponsor British Aerospace in the form of software and progress reports.
 - Design and implementation of simulation experiments.
 - Writing software analysis routines in C++ and IDL.
 - Competency with UNIX systems.

AWARDS

MIT Aeronautics and Astronautics Department Fellowship 2003-2004

Institute of Mechanical Engineers' Highest Flyers' Award

IT SKILLS

- Advanced C, C++
- Proficient Java, MATLAB, HTML, SolidWorks, word processing, spreadsheets, Windows and Linux systems

EXTRACURRICULAR

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|--------------------|--|-------------|
| Leadership | MIT Outing Club: Winter School Leader, Gear Manager, Desk Captain | 2005 - 2007 |
| | MIT Crew: Freshman Lightweight Team Captain | 2001 - 2002 |
| | Cambridge University Eton Fives Club: Treasurer | 2000 - 2001 |
| | Scout Association: Venture Scout Chairman, Assistant Scout Leader | 1996 - 1999 |
| Team Sport | MIT: Cycling Team, Lightweight Crew Team | |
| | Cambridge University: Lady Margaret Boat Club, Mountain Biking Team, Eton Fives Team | |
| Outdoor Activities | Avid cyclist, hiker, climber and beginner triathlete | |
| Engineering | Often working on electrical, software or mechanical projects in own time | |

REFERENCES

MIT : MERS Research Group

Paul Robertson (Research Scientist)
32-270, MIT Stata Center, 32 Vassar Street,
Cambridge, MA 02139, USA
+1 617 253 6807
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Cambridge University : St John's College

Helen Watson (Tutor)
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