

Mr Matt Oates



7 The Avenue, Flat 3
Keynsham, Avon, England.
BS31 2BU

☎ Mobile: +44 (0)7963 096 805

✉ E-mail: Matt.Oates@bristol.ac.uk

🌐 Website: <http://www.mattoates.co.uk>



PROFILE:

A Complexity Sciences PhD student, who is eager to attain a research or teaching career in the field of Evolutionary Computation, Swarm Robotics, Programming or Complex Systems. Reliable, literate and dedicated to learning I am able to work on my own initiative, or as a member of a team.

EDUCATION:

Jan 2010 – Present
EPSRC Grant

University of Bristol

PhD *Evolutionary Swarm Robotics*

Please see <http://www.cs.bris.ac.uk/home/oates/> for further information.

Oct 2008 – Jan 2010
EPSRC Grant

Bristol Centre for Complexity Sciences, University of Bristol

MRes *Complexity Sciences* [with **Merit**]

- Received a distinction for my thesis looking at the evolution of Calcium cell signalling. The work involved preparing and analysing a unique dataset of annotated proteins across all genomes that have some common lineage with those involved in Calcium mediated cell signalling. http://bccs.bristol.ac.uk/toProgramme/_project/2009/Matt_Oates_S09/
- Participated in two group projects: the first looked at protecting an individual's information from published group SNP-genome data. The second looked at the possible ways to combat fast fading in wireless networks.
- Taught courses include: Probability and Graph Theory, Nonlinear Dynamics, Nonlinear Control Theory, Information Theory, Exabyte Informatics, Chemistry, Biology, Protein Science, Neuroscience, Nanoscale Complexity, Global Climate Change, Communications Theory, Time & Space Series Analysis.

Sep 2003 – July 2007

University of Wales, Aberystwyth

BSc *Computer Science and Artificial Intelligence* [**1st Class Honours**]

- Final year dissertation investigated the effect of symbiogenesis on a human-centric Genetic Algorithm. The project aimed to produce effective videogame playing in a population of computer agents within a human time scale of play, with some success. Further details about this work are available from my personal website.
- Some specific module titles include: Space/Intelligent Robotics, Data Visualisation, Interactive Graphics, Operating Systems and Concurrency, Program Design, Data Structures and Algorithms, Agile Methodologies, Formal Methods, Human Computer Interaction and many others.

Sep 1996 – Jun 2003

Cleeve School, Bishops Cleeve (Cheltenham)

A2 Levels: Computing [A], Physics [C], Mathematics [D]

AS Levels: Biology [C], General Studies [B]

GCSE's: 10 higher passes (A*-C) including: Information Technology [A*], Triple-award Higher Science [A,A,B] & English Language/Literature [B,B]

REFEREES:

References are available on request.

Mr Matt Oates

WORK HISTORY:

Oct 2007 – Oct 2008

Centre for Catchment & Coastal Research (CCCR)

An 18 month full time contract in the Institute of Geography and Earth Science at Aberystwyth University as a Research Assistant. For further information see: <http://www.cccr.ac.uk/>

Jul 2005 – Jul 2006

Plymouth Marine Laboratory (PML)

A “sandwich year” with the Remote Sensing Group at PML, undertaken in partial completion of my undergraduate degree. Responsibilities and achievements included:

- Created a distributed web based batch data ordering/serving system, which tied in with existing data processing frameworks.
- Developing and maintaining several database driven websites using PHP/Perl. All complied with W3C standards and used XHTML and CSS.
- Wrote tools for tape archiving, and facilitating batch image processing.
- Processed satellite raster data, fulfilling requests from the scientific community.
- Gained knowledge of various map-projections and other geodetic information.

For further information see: <http://rsg.pml.ac.uk/>

Jun 2004 – Dec 2004

Oxford, Swindon & Gloucester Co-Op {Part time work as a Sales Assistant.}

Jul 2002 – Dec 2003

Argos Retail, Cheltenham Store {Part time work, as a Sales Assistant/Stock Picker.}

2000

GR Lane Health Products Ltd. Gloucester {A week’s work experience in a Quality Control lab.}

2000 – 2002

Forbuoys Ltd. Wymans Brook Store {Weekend Paperboy and Shop Assistant.}

COMPUTING SKILLS:

- **Operating Systems:** Competent under: GNU/Linux or any UNIX with BASH, Mac OSX, and Windows 98SE - Windows 7 inclusive. I have also installed, configured and maintained various distributions of Linux, and Windows.
- **Programming:** Have a professional understanding of Java, Perl, PHP, C, SQL and a good grasp of C++, Python and JavaScript (using jQuery). Some limited experience with R, MATLAB, VBA, Turbo Pascal, PROLOG, and some very basic Intel and Motorola assembly. Comfortable with the use of CVS, SVN and BZR version control systems, and related project management software. Am productive using both an IDE such as Eclipse, or just plain text editing.
- **Hardware:** A practical knowledge of modern PC hardware, developed through the construction of my own machines, and maintenance of rack based servers in the workplace. Familiar with the use of large-scale storage (NAS) and archive systems (DLT/LTO tape). Some experience with programming for embedded devices specific to robotics research.
- **Web Design:** Comfortable producing bespoke web applications with PHP and Perl using XHTML and CSS, or customizing a Content Management System such as Drupal.
- **Databases:** Use of SQL to create relational database schemas. Familiar with PostgreSQL and MySQL admin under Linux.
- **Office Productivity:** Word-processing: use of styles, and templates. Spreadsheets: knowledge of basic features such as SUM, AVG, IF etc. Presentations: Advanced use of timing and animation as well as poster production. Software package agnostic, experienced with MSOffice, OO.org and iWork09 covering all major operating systems.
- **Graphic Design:** Use of Adobe Photoshop or GIMP to tailor stock photography for use in corporate web-art.

INTERESTS:

Academic

Involved interest in topics that combine biology and computing. Specifically evolutionary computation and robotics involving concepts borrowed from cell biology.

Hobbies

Away from work, I enjoy cross-country mountain biking, digital photography, reading, listening to a wide range of music, and contributing to Wikipedia [[User:MattOates]].