Institution: Aberystwyth University

Unit of Assessment: 11

a. Overview

The research of the Department of Computer Science is organised within four groups. All four groups investigate and develop techniques and applications of intelligent systems and there is significant inter-group working, giving a high degree of coherence to the Department's research:

The Advanced Reasoning Group (ARG) is well known for its ground-breaking work on automated diagnosis and failure analysis, and its invention of approximate reasoning techniques for knowledge model formulation and simplification. Group members: Diao, He, Jansen, Jensen, MacParthalain, Price, Shen, Snooke.

The Bioinformatics and Computational Biology Group (BCBG) conducts leading research in areas such as data analysis of large scale biological data, formalisation of biological data and systems biology. Group members: Aubrey, Clare, Gkoutos, Hardy, Hoehndorf, Lu.

The Intelligent Robotics Group (IRG) is one of the best-known robotics groups in the UK, and is involved in both national and international research consortia from novel computational models to space missions to Mars. It focuses on both software and hardware issues that are key to unconstrained environments. Group members: Barnes, Labrosse, Lee, Neal, Shang, Shaw, Tuci, Wilson.

The Vision, Graphics and Visualisation Group (VGVG) carries out research in image analysis and geometrical and topological understanding of visual information, with applications concentrated on medical/psychology analysis, environmental/heritage data analysis, vision for robotics, facial analysis and 3D data analysis. Group members: Dee, Labrosse (joint appointment with IRG), Liu, MacParthalain (joint appointment with ARG), Tiddeman, Zwiggelaar.

b. Research strategy

Our aim is to: (i) focus our resources on research of high scientific quality and significant impact, delivering methodological solutions to current key issues relevant to intelligent systems; (ii) provide the right environment to stimulate and drive progress in our research, investing in collaborations in the UK and across the world, and expanding the funding streams for research; and (iii) develop the experts of tomorrow and attract researchers from across the globe, enhancing the development of staff career and research student potential with clear performance standards and high-quality support.

Our research strategy is designed to assist the Department, research groups and individual researchers, to develop research capacity and quality. The strategy is frequently reviewed and refined as an integral part of the Department's overall planning process, under the direction of the Departmental Research Committee (RC), and is regularly scrutinised by the University Research Committee. We view research into intelligent systems, which underpins the work of all four of our research groups, as a long-term scientific endeavour. We aim to consistently refine the quality and impact of our research, building on the research profile that we achieved in RAE 2008 (25% 4*, 45% 3* and 30% 2*), while continuing to significantly expand our volume and sustainability.

The RC, chaired by the Director of Research, promotes and manages research, advising the HoD on the distribution of resources, including research leave, research support staff, equipment and space, travel funding, and research studentships and prizes. It also supports researchers in the preparation of publications and grant proposals, and reviews research group structure and activities. The University Research Committee also offers strategic advice on our forward-looking research aims.

Other mechanisms for managing and promoting research include: external evaluations by both academics and end-users, departmental away-days on future directions and research impact, and maintaining web-accessible databases for publications, seminars and research student status. Day-to-day co-ordination of the research groups is the responsibility of the group heads. An administrator supports the RC and the grant application and management processes, and also research student administration. The University's dedicated Research Office provides further additional support on all our research activities and oversees research ethics and integrity aspects.

We combine long-term ambition with current realism in our research planning and actively seek to increase the proportion of research that is of world-leading and international excellence (which is reflected in our publication profile), by benchmarking our work against relevant international comparators and providing focussed support for areas in which internationally recognised research is being produced. In setting our targets, we try to address the strategic priorities of the Research Councils and other funding bodies (e.g. digital data and clinical related research), by appropriately emphasising academic, social and economic impacts of the research. We also increase the external income to support our research by developing an excellent portfolio of third mission activities (above £1M for the REF2014 period).

We identify and refine key indicators on a regular basis to monitor the performance of individuals and groups, following consultations with all research active members of the Department. These include research outputs, grant income and research student supervision, paying particular attention to both quantity and quality of such indicators. The Department fosters and encourages the culture that all research active staff members are expected to seek relevant external funding in supporting their work. We regularly refine the policy on research grant application and management, with dedicated administrative support for such activities, which helps to improve our profile of grant application successes. We encourage maximal production of world-leading research outputs with limited input due to the generally difficult external funding environment over the assessment period.

While maximising synergy of research themes within the Department, we strongly encourage inter-group, collaborative, and multidisciplinary research. For example, 11% of the returned outputs for this round involve authors from more than one research group, 49% involve collaboration with those outside of AU, and 41% involve collaboration with an area outside computer science and informatics.

Since the last RAE, we have substantially invested in expanding our research activities, with REF-returned volume increased from an FTE figure of 15.53 in 2008 to 24.80 today. In particular, as planned, we have established the new VGVG group which now consists of 1 Professor, 2 Senior Lecturers, 2 Lecturers and 1 Research Fellow, including three appointments made after last round (Dee, MacParthalain and Tiddeman). For the three staff members who were then on 5-year fellowships, two have been employed on open-ended contracts (including one promoted to Senior Lecturer, and both having won significant RCUK grants), and the other has moved to a permanent position within another University.

In addition to the above three new appointments strengthening our new VGVG (and other internal promotions), we have made a further 9 strategic appointments during the REF period, including 1 Reader, 1 Senior Lecturer, 4 Lecturers and 3 Research Fellows. The resulting distribution of academic staff reflects our successful research sustainability plan, as these colleagues have been appointed with respect to the key research priorities that were identified for development in RAE 2008 (including the establishment of VGVG as stated above). The staff and research groups concerned are: Jansen and Diao in ARG; Aubrey, Gkoutos, Hoehndorf and Lu in BCBG; Shang, Shaw and Tuci in IRG.

During the REF period, many more staff members have held research grants as PI (a 55% increase as compared to the RAE 2008 period), and an extensive range of staff have produced high quality publications. Each year, we have had a number of internally funded PhD students joining us, with a clear increase in this number over the last few years. With significant expansion

in our early career researchers (ECR) number we have invested heavily in our future research, making room to improve our income per FTE in order to ensure sustainability of our research. The range of funding sources has also been largely extended, with a significant amount coming from third missions and industrial partners, demonstrating the growing impact of our research.

From August 2013, the Department will work more closely with the Department of Mathematics and Physics in the newly formed Institute of Mathematics, Physics, and Computer Science (IMPACS), with even greater possibilities for collaboration in research, for example in visualisation of scientific data and space robotics.

c. People, including:

i. Staffing strategy and staff development

The Department has comprehensive arrangements for developing and supporting staff in research, including: mentoring and support for ECRs, research development at all career stages, load balancing, research leave of six months per four year cycle (for all core-funded researchers), research team building and cross-team work.

Support for ECRs begins with the nurturing of postgraduate students, and continues with career support and guidance for research associates, who receive the same research mentoring and support as other research active staff. They also benefit from the development programme offered by the University Postdoctoral Skills coordinator. PDRAs (and research students) are provided with maximal opportunity of producing first-authored publications and of being in continued employment (with 3 having been made lecturers and another 3 research fellows, all returned for REF). They are encouraged to develop independent research, have been named co-investigators on 8 recent grants (e.g. with Barnes, Shang won a prestigious two-year research fellowship sponsored by Royal Academy of Engineering), and have been supported in preparing their own proposals for funded research (e.g. MacParthlain won a NISCHR grant of £170K, supporting him as a Research Fellow for 2 years). A number of our former PDRAs employed during the assessment period are now making significant contributions to the international development of the discipline (e.g. Chao: associate professor at Xiamen, Liakata: lecturer at Warwick, Zhao: professor at Tianjin, Boongoen: associate professor at Royal Thai Air Force Academy).

New entrants to lectureships are supported to balance the demands of teaching, administration and research, and to plan their research activities in a strategic way. Progress is reviewed annually. A senior departmental colleague is appointed as a mentor, advising on research and career development. New lecturers receive supervisor training and are then given higher priority for departmentally/University funded PhD studentship to support their research. All our ECRs are returned with quality outputs. For the four ECRs who joined the Department prior to 2013, all have won grants: MacParthalain's fellowship has already been mentioned: Tuci has won a grant funded by the Royal Society, one by EADS and another by HPC-Wales and Fujitsu; Lu has won a grant by Australian Health Service; and Dee has been the PI on computer science in a collaborative multidisciplinary project (Dee also won one of the three teaching excellence prizes that are awarded by the University in 2012).

Research performance of all research active staff is regularly monitored by the RC, and guidance is provided. All applications for external research funding are vetted by the RC, before being submitted for the HoD's approval; applicants receive feedback to improve the quality of the proposal. Further support is provided by the University's Research Office.

The University provides staff development and training through the implementation of the Concordat to Support the Career Development of Researchers with the Researcher Development Programme. Such training includes sessions on preparing papers and proposals, project and financial planning, research supervision, staff management, team building and team working, and media relationships. These are supplemented by departmental training in supervising research students and bespoke training for research groups (e.g. a course on the concepts of artificial

immune systems). The University Conference Fund supports attendance at conferences or workshops, as does the Department. Researchers winning grants are also allocated 25% of the grant overheads, which many choose to use for conference attendance, visiting academic and industrial partners, and open access publication (for non RCUK-funded research outputs).

The pattern and distribution of teaching is organised to support research, and the Department's forward-looking research leave programme provides all research active lecturers with six months research leave every four years. This rolling programme enables staff to plan well ahead to make the best use of their research leave. Six months before the planned research leave, staff members submit a research plan for approval by the RC. At the end of the period they produce a report on the outcomes, which is evaluated by the RC with feedback provided.

We appoint staff from a wide range of nations, including Britain, China, France, Germany, Greece, Ireland, Italy, Netherlands, and USA. The position distribution of the 24.8 FTE staff is: 16.1% being Research Fellows, 43.4% being Lecturers, 19.6% being Senior Lecturers, 4% being Reader, and 16.9% being Professors, of which 23.4% are female and 24.2% are of non-white ethnic origin. The Department operates on robust appointment, probation and promotion procedures, which take research achievement and potential into account, while taking into account individual circumstances with respect to equality and diversity. Over the assessment period, 12 new academic staff have been appointed (with four being female), 5 promoted (two of ethnic minorities), and 3 have departed (including 1 retirement). As stated previously, the new appointments have strengthened all four of the research groups and these appointments have been guided by the Department's research strategy that has been continually developed since RAE 2008.

ii. Research students

To enrich the Department's research community and culture, we actively seek to increase the number of postgraduate research (PGR) students. We acknowledge the fact that there are limited funding opportunities for UK/EU PGR students and that the need for diversity in recruitment is of paramount importance to our research sustainability. The Department therefore offers postgraduate scholarships to attract outstanding international students, in addition to the full Doctoral Career Development Scholarships jointly offered by the University and the Department to home-fee-paying students.

To increase PGR recruitment, we have established partnerships with a number of reputable overseas Universities (e.g. Northeastern, Northwest Polytechnical, and Xiamen Universities, all these being in the top 30 universities in China). These focus on a specifically designed scheme offering systematic training in research, starting with carefully selected students undertaking a final-year project in AU under one-to-one supervision, with the successful students moving on to our Masters course, with a prospect of continuing onto PhD study afterwards. The first two cohorts of students under this scheme have now enrolled with our PhD programmes. Such cooperation will provide us with a significant number of PGR students in the medium and long term. This will help consolidate our research environment in light of the rapid expansion of the Department's research capacity.

We treat a research studentship as a period of training, both in the conceptual and technical aspects of computer science and in professional and personal skills. Prior to offering a PhD place, all applicants shortlisted have to pass interviews conducted by potential supervisors. All PGR students receive centrally provided core transferable skills training, and are encouraged to attend other research training modules (including those with a strong emphasis on the interaction between research and impact), writing schools, and also relevant events organised by research councils. The Department offers common foundational courses and provides further research training in both semesters each year, covering such issues as: defining research topics and research problems; research methodologies and research management; document and viva voce preparation. The Departmental Research Student Tutor provides pastoral support and organises all monitoring and training programmes, with another dedicated International Tutor offering additional assistance to overseas research students.

Each research student has a principal and second supervisor (with bi-annual supervisor training). Progress is monitored via annual report submitted to a review committee and also via interview by an independent panel of experienced supervisors. All PGR students attend the departmental research seminar programme as well as seminars within their research group. The Department also organises a one-day workshop each year for all research students to present their work to fellow students and staff, with a prize for outstanding presentations in years 2 and 3. We also have an annual prize competition for the best first-year report. The Department, where relevant, pays for PGR students to attend specialist training courses, and encourages them to present peer-refereed papers at conferences. Since 2008, our research students have won 4 best paper awards at international conferences (WCCI 2012, ISPA 2011, WCCI 2010, ITAB 2010) and received 12 IEEE Outstanding Student Paper Travel Grants (winning the most such IEEE CIS awards in the UK, with at least one PhD student receiving an award each year).

PGR students also have opportunities to contribute towards teaching, with training provided. This helps not only to improve their employability but also to enrich our teaching that is informed by research and scholarship. In 2012 when the University first introduced the highly competitive Outstanding Graduate Teaching Assistant Awards, two of our PhD students received them (out of only 8 across the University).

d. Income, infrastructure and facilities

Over the assessment period, the main research income streams for our research are RCUK, the EU and industry (£7.5M), supplemented by access to central facilities for planetary robotics (£1.4M). This income is further supplemented by consultancies and contracts with industrial partners. The research expertise of staff is available in the University's directory of expertise (and also on various other websites), leading to a range of consultancy and commercialisation services provided by our staff members (totally, £1.1M).

The University has made substantial investment in the Department's research during the REF period, including £191K capital funding, and a new £0.5M workshop supporting our robotics work. A high-performance computing cluster is accessible to our staff and students for data and systems modelling and simulation, paralleling the provision by HPC Wales. In addition, the Department has received 7 University research studentships and as a result of our strategic decision to invest in departmental scholarships for outstanding international PhD students, we have attracted 16 highly motivated research students over the period under this scheme.

The Department has regular research seminars given by internal and prominent external speakers (e.g. Sir Anthony Hoare, Andy Hopper CBE FRS, Ian Horrocks FRS, and a good number of FREngs and FIEEEs). Conferences hosted include International Summer Research Camp on Autonomous Intelligent Robots 2009, BMVC 2010, First International IM-CLeVeR Summer School 2011, ThRaSH 2013, and the annual iOSDevUK events.

All important journals in our subject area are available in a specialist library dedicated to Mathematics, Physics and Computer Science, with online access to an even wider set of periodicals. Further publications are available in the National Library of Wales, a legal deposit library adjacent to the campus. Also, a £7M visualisation centre supports our visualisation and robotics work.

As indicated previously, a priority for our investment in research is to grow and develop our PGR body. This has strong support by the University which has planned over the next few years to develop a central space where PG students will have offices and meeting facilities across all disciplines, allowing students to work together and foster an interdisciplinary community of new researchers. The first stage of this part of the Graduate School has been opened and is adjacent to the Department. In addition, the University is further developing its studentship provision by making significantly more scholarships available to international students.

We also expand and increase the strategic funding sources to support our research, investing in work that seeks solutions to global issues and pursuing collaboration locally, nationally and internationally. We aim to achieve an uplift of 30% on our annual research grants awarded, with a majority of our staff engaged with RCUK-funded projects within the next 5 years. Besides RCUK-funded research there is a strong emphasis on high impact research for which links with industry are exploited. In addition, continuing our success in attracting major EC grants, we expect that Horizon 2020 will play a major role in our funding stream during the next REF period.

e. Collaboration or contribution to the discipline or research base

All four groups make significant contributions to the development and application of intelligent systems research.

ARG plays a leading role in the international community of computational intelligence research, especially in: feature selection (Jensen1-4; Diao1; Snooke4; MacParthalain1), interpolative reasoning (Shen1,3; Diao2), imprecise data modelling and analysis (Price1; Shen2,4), and theoretical properties of evolutionary computation (Jansen1-4; He1-4). Supported by EPSRC (He, Shen) and substantial third mission income (Price, Snooke), we have developed a number of novel techniques tailored to tackling current challenging real-world problems, e.g. serious crime analysis (Price2-3), academic performance analysis (Price4), systems monitoring and diagnosis (Snooke1-3). Our extensive links with international partners include both academic and non-academic institutions worldwide: Australia (Adelaide, He, Jansen); Belgium (Ghent, Jensen); Canada (Regina, Jensen); China (Wuhan, He; South China Technology, He; USTC, He; Northeastern, Price; Tianjin, Shen; Xiamen, Shen); Denmark (DTU, He); France (Palaiseau and Paris, Jansen); Germany (Max-Planck-Informatics, Saarlandes, He); Malaysia (Malaysia, Shen); Poland (Warsaw, Jensen); Singapore (Nanyang Technological, Shen); Spain (Granada, Jensen; Murcia, Shen); Thailand (Royal Air Force Academy, Price and Shen); and USA (California-Irvine, He; Central Florida, Jansen; Yahoo, Shen).

BCBG is an interdisciplinary group working at the interface between computing, biology and medical applications. We have our own wet laboratory, access to several university computer clusters and close ties (and common research projects) to IBERS (Institute of Biological, Environmental and Rural Sciences at Aberystwyth). Our research is in the areas of laboratory automation (Aubrey1, Clare3), analysis of large scale biological data (Hardy2, Gkoutos4, Lu3), comparative phenomics (Gkoutos3), formalisation of biological/chemical data (Clare2,4, Hardy1,3, Gkoutos1), systems biology (Lu2), biomedical informatics(Hoehndorf1, Lu1), genomics (Clare1), gene disease association (with an emphasis on rare and orphan diseases (Gkoutos2) and pharmacogenomics (NigelBioinormatics). This research has been supported by BBSRC (Clare), RAEng/EPSRC (Clare), EU (Hardy, Gkoutos, Lu), NIH (Gkoutos and SRIF for laboratory equipment. The group's interdisciplinary necessitates extensive (inter)national collaborations: UK (Cambridge, Sanger, EMBL-EBI, Manchester, Oxford, Edinburgh, London (Imperial, UCL, Natural History Museum), MRC, Rothamsted Research), USA (Berkeley, Oregon, South Dakota, Washington, Stanford, JAX), Germany (Charité-Universitätsmedizin Berlin, Uni Leipzig, MPI-EVA, Aachen University), Norway (NTNU), Netherlands (Vrije Universiteit, Wageningen), Chile (Universidad Catolica de Valparaiso), France (INRA), South Africa (Stellenbosch), Sydney (Neapean Hospital), Belgium (KUL), Italy (ITT, EMBL Monterotondo), Greece (UOA, Evangelismos hospital), Cyprus (UCY).

IRG has an international reputation, especially with respect to field, space and cognitive robotics, covering: autonomous survey and unmanned surface craft (Neal2), long term autonomy and power management (Neal1), design of neuro-controllers for autonomous robots (Tuci1), planetary exploration and image processing (Barnes2,4, Shang3), evolutionary robotics (Tuci2, Wilson1-3) and cognitive robotics (Lee1-4, Shaw1), robot visual navigation (Labrosse4), and robotic platforms (Barnes1, Labrosse2). Supported by EPSRC (Lee, Neal, Wilson), EU-FP7 (Barnes, Lee, Shaw), TSB (Neal), STFC (Barnes) and funded commercial collaboration: DSTL (Neal), EADS (Neal, Tuci), Costain (Labrosse), Fujitsu-HPC Wales (Tuci), we have developed the following areas: explosive and chemical agent detection (Neal), power management for hybrid power systems

(Neal), automated asset recognition in laser scans of roads (Labrosse), bio-inspired developmental robotics (Lee, Shaw), mobile ad-hoc network (Tuci), design of control systems for autonomous robots (Tuci). The research within the group is supported by a range of national/international collaborations, which include France (Ensieta, Neal); Germany (Frankfurt, Lee, Shaw; Lubeck, Lee); Italy (Rome, Lee, Shaw; Genoa, Lee, Shaw; Parma, Lee); Sweden (Skovde, Lee); Switzerland (Lugano, Lee, Shaw); Turkey (Ankara, Lee); UK (Shefield, Lee, Shaw; Ulster, Lee, Shaw; Manchester, Lee; Bristol, Lee; Cambridge, Lee); and USA (UMASS, Lee, Shaw; Naval Academy, Neal).

VGVG is building up an international reputation in computer vision, especially in: 2D/3D data modelling/registration (Liu1-2, Labrosse1,4), dynamics processes (Dee1, Liu3-4), texture classification/modelling (Zwiggelaar1,3, Labrosse3), facial modelling (Dee2, Tiddeman1-3), and texture/shape based segmentation (Zwiggelaar2,4, Tiddeman4). Within VGVG we have developed novel approaches in close collaboration with end-users: medical image analysis (Tiddeman, Zwiggelaar), the National Plant Phenomics Centre investigating plant modelling (Dee, Liu, Zwiggelaar), vision for robotics (Dee, Labrosse), 3D heritage modelling (Dee, Labrosse, Liu), and art related research (Dee, Zwiggelaar). The research has been supported by EPSRC (Zwiggelaar), ESRC (Tiddeman), AHRC (Labrosse, Tiddeman), NISCHR (MacParthalain, Zwiggelaar), BBSRC (Dee, Zwiggelaar), HEFCW (Dee, Labrosse, Liu, Tiddeman, Zwiggelaar), Prostate Cancer Charity (Zwiggelaar). In addition, third mission income has included funding from Smart Light Devices (Liu), Royal Society of Engineering (Liu), CADScan (Liu), Costain (Labrosse), 3D Industries (Liu), Oncomorph Analysis (Zwiggelaar). The group is involved in extensive international collaborations: Africa (Benghazi and Pretoria,Tiddeman); Brazil (São Paulo and São Bernardo do Campo, Dee); Canada (British Columbia, Liu; McMaster, Tiddeman); China (Shenyang Jianzhu, Zwiggelaar; Zhejiang, Liu; Beijing, Liu); France (Cergy, Grenoble and Lyon, Dee); Italy (Italian National Agency, Liu); Iran (Sahand, Liu); Spain (Girona, Labrosse, Zwiggelaar); and USA (Texas, Liu; Adobe, Tiddeman; Pennsylvania, Zwiggelaar).

The Department has international collaborative projects within all four research groups. A large proportion of our publications during the REF period include collaborators from outside the Department, including those international collaborations mentioned above. A number of staff (e.g. Jensen, Lu, Shen, Tuci) have received travel grants or fellowships to specifically develop new and existing links, and such efforts are further supported by the Department via hosting inbound senior international visitors; examples include: Bai (Xidian University, China); Dumontier (Carleton University, Canada); Eckerdal (Uppsala University, Sweden); Freixenet (University of Girona, Spain); Hamer (University of Auckland, New Zealand); Hansen (University of Utah, USA); Marti (University of Girona, Spain); Miller (US Naval Academy, USA); Salvi (University of Girona, Spain); Stallman (President of Free Software Foundation Free Software Foundation); Wallraven (University of Korea, Korea, and Max Planck Institute for Biological Cybernetics, Germany); Wang (Beijing University of Aeronautics and Astronautics, China); Yamamoto (University of Tokyo, Japan).

Inter-disciplinary research is strongly encouraged by the Department and the University (e.g. to enjoy specific support for University PhD studentships, to fund small grants for invited seminar speakers and prompting such work). A significant aspect of research within the Department is inter-disciplinary: Neal and Labrosse have done collaborative work with the heritage sector, Dee, Liu, Neal and Zwiggelaar contribute to plant phenomics research, Dee and Zwiggelaar have both worked on art related projects, Tiddeman has made contributions to psychology and orthodontics, Zwiggelaar works on the interface between computer vision and medical imaging, Liu has made contribution to the development of low cost laser scanners and the industrial inspection of underwater oil and gas pipes, Price and Snooke have worked on automobile and aerospace engineering, The work of Lee and Shaw on developmental learning has involved close collaboration with several neuroscientists and many psychologists, Shen has worked on law enforcement and security, and members of BCBG all work on the interface between computer science and biology.

A significant part of the research undertaking in the Department is driven by end-users needs,

which covers all research groups. For instance, the Department makes contributions to glaciology (Labrosse, Neal), radiology (Zwiggelaar), motor-industry (Price, Snooke), industrial inspection (Liu), psychology (Tiddeman) and health and medicine (Lu, Zwiggelaar). Our research strategy reflects the recognition of the significance of such work and the potential impact such research may lead to in terms of more direct benefits for the public.

Our research active staff have made significant contributions to leadership within the international research community. The following lists selected esteem indicators colleagues have held over the assessment period, where AE/EBM/GE stands for journal associate editorship/editorial board membership/guest editorship, with figures in the corresponding brackets showing the 2012 JCR journal impact factors; CM for major committee membership; CC for conference chairs/co-chairs, including programme/area/tutorial chairs at major international events; KL for keynote lectures at international conferences:

- Barnes: CM: STFC Particle Physics, Astronomy, Nuclear Physics Science Advisory Committee, UK Space Agency Aurora Advisory Committee
- Dee: CC: IAMPS12-13, Lovelace Colloquium
- Gkoutos: AE: Frontiers in Bioinformatics & Computational Biology, Scientific World Journal (1.73); CC: VPH12, RICORDO12; KL: OBML12
- Hardy: EBM: Metabolomics
- He: EBM: Advances in Artificial Intelligence, Applied Computational Intelligence & Soft Computing, J Optimization; GE: Theoretical Computer Science (0.489); CC: ThRaSH13
- Hoehndorf: AE: Biomedical Semantics (2.54), CC: ICBO13, OBML11-12; KL: Bio-Ontologies12
- Jansen: AE: Artificial Intelligence (2.194), Evolutionary Computation (2.109); CC: ThRaSH13, GECCO 2012, GECCO 2009, FOGA 2009
- Jensen: EBM: T Rough Sets, IJ Data Mining, Modelling & Management, IJ Fuzzy System Applications; GE: Advances in Fuzzy Systems; Advisory board member: International Rough Set Society; CC: IEEE/ACM-WI12, RSCTC10; Tutorial at RSFDGrC 2011
- Labrosse: GE: IJ Computer Vision (3.623); CC: BMVC10
- Lee: EBM: Advanced Engineering Informatics (1.593), IJ Advanced Robotic Systems (0.821); KL: IET 10, Neuroinformatics 11
- Liu: AE: Pattern Recognition Letters (1.266); GE: IJ Computer Vision (3.623), Advances in Signal Processing (0.810); CC: BMVC10
- Neal: Invitee for participation in 2013 Royal Society's UK-Russia Frontiers of Science Symposium
- Price: EBM: Engineering Applications of Artificial Intelligence (1.625); CC: iOSDevUK11-13
- Shang: AE: Human-centric Computing and Information Sciences
- Shen: REF 2014 Sub-panel 11 member; Fellow and Fellowship Scrutiny CM: Learned Society of Wales; AE: IEEE T Fuzzy Systems (5.484), IEEE T Cybernetics (formerly SMC-B, 3.236); EBM: Fuzzy Sets & Systems (1.749); CC: WCCI08, FUZZ-IEEE09, FUZZ-IEEE13; KL: IMSO13, IEEE-SSCI11, IEEE-ICIT10, RSFDGrC09, IHHMC09, IJCCI09, GCIS09, WCSE09
- Snooke: CC: DX12
- Tiddeman: GE: IJ Computer Vision (3.623), GE: Advances in Signal Processing (0.810); CC: BMVC10
- Tuci: EBM: IJ Advanced Robotics Systems (0.821)
- Wilson: GE: Adaptive Behaviour (1.113)
- Zwiggelaar: AE: IEEE J Biomedical & Health Informatics (formerly IEEE T IT in BioMedicine, 1.978); CC: BMVC10; KL: MIPOM09, IET 11; CM: NISCHR.

In addition, over the assessment period, members of staff have won 7 best paper prizes (Diao, Jansen, Jensen, Shang, Shen x2, Zwiggelaar), served on over 500 conference committees and have further contributed by serving as external PhD/MPhil examiners on more than 50 occasions. Five colleagues (Barnes, Lee, Shen, Zwiggelaar, Wilson) have served as members of EPSRC peer review college.