**JOB DESCRIPTION**

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| Post title: | **New Frontiers Fellow** | | |
| Standard Occupation Code: (UKVI SOC CODE) | 2311- Higher education teaching professionals | | |
| Academic Unit/Service: | Electronics and Computer Science | | |
| Faculty: | Faculty of Engineering and Physical Sciences | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Balanced portfolio | | |
| Posts responsible to: | Prof Tim Norman, Head of ECS | | |
| Posts responsible for: | Research staff and students | | |
| Post base: | Office-based/flexible working possible | | |

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| Job purpose |
| To develop your academic profile and leadership in Electrical and Electronic Engineering. To contribute to the international research profile of the University of Southampton through undertaking research within or across traditional disciplines, developing funding bids, contributing to the impact agenda, and supporting more junior colleagues in developing their careers. To contribute to the development and delivery of high-quality research-led education. To contribute to and support the inclusive and collaborative culture of the School. |

| Key accountabilities/primary responsibilities | | % Time |
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|  | To develop the vision for, plan and lead an area of research as a self-sustaining academic. | 70% |
|  | To disseminate findings in peer-reviewed conferences and journals, present results at academic conferences or exhibit work at appropriate events. |
|  | To lead the writing of bids for research funding as principal investigator, and to collaborate with other academics in the development of bids as co-investigator to bring their own unique expertise to the work. |
|  | Carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control. |
|  | Support the teaching goals of the School by delivering teaching to students at undergraduate and/or postgraduate level, through allocated lectures, tutorials, practicals and seminars. Set and mark coursework and exams, providing constructive feedback to students. | 20% |
|  | Directly supervise students, providing advice on study skills and helping with learning problems. Identify the learning needs of students and define learning goals. |
|  | Use expert knowledge to develop own teaching materials, methods and approaches, with guidance. Obtain and reflect on feedback on own teaching design and delivery to facilitate this. |
|  | Contribute to the development of new teaching approaches and course proposals, and to the design of curricula which are academically excellent, coherent and academically testing. |
|  | Contribute to the efficient management and administration of the School by performing personal administrative duties as allocated by the Head, e.g. library representative, year tutor, exchange-programme coordinator, etc. | 10% |
|  | Any other duties as allocated by the line manager following consultation with the post holder. |

| Internal and external relationships |
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| Collaborate with colleagues in ECS and other schools and institutions on original research and the development of bids for research funding.  Work with other New Frontier Fellows as peers and a senior colleague as mentor to develop their academic standing.  Member of the School Board, Examination Board and of such School committees relevant to their administrative duties.  Teaching and administrative duties will be allocated by the Head of School, within the context of the teaching programmes agreed by the School Learning and Teaching Committee. |

| Special Requirements |
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| n/a |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | PhD or equivalent professional qualifications and experience in Electrical and Electronic Engineering  Detailed understanding and knowledge of Electrical and Electronic Engineering and an interest in applications for a sustainable future  A desire to develop educational skills and deliver teaching at undergraduate and/or postgraduate level | Publications in high quality conferences and/or journals  Teaching at undergraduate and/or postgraduate level | Application, references, and interview |
| Planning and organising | Able to develop and deliver a self-sustaining vision for novel research  Able to organise own research activities to deadline and quality standards  Able to plan, manage, organise, and assess own teaching contributions | Able to contribute to the design of course units, curriculum development and new teaching approaches in the School | Application, references, and interview |
| Problem solving and initiative | Able to develop understanding of complex problems and apply in-depth knowledge to address them  Able to develop original techniques/methods | Ability to take the initiative in developing new research directions | Application, references, and interview |
| Management and teamwork | Able to manage and deliver own course units and contribute to team-taught course units  Able to directly supervise work of students  Able to contribute to School management and administrative processes  Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development | Able to supervise work of junior research staff, delegating effectively | Application, references, and interview |
| Communicating and influencing | Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience  Track record of presenting research results at group meetings and conferences  Able to write up research results for publication in high quality peer-viewed conferences and journals  Able to deliver lectures and seminars in courses relating to different aspects of Computer Science  Able to engage counselling skills and pastoral care, where appropriate  Able to persuade and influence at all levels in order to foster and maintain relationships, resolving tensions/difficulties as they arise | Able to provide expert guidance to colleagues in own team, other work areas and institutions to develop understanding and resolve complex problems  Track record of delivering lectures and seminars in courses relating to different aspects of Computer Science  Able to engage with the wider publics in outreach and engagement activities related to Computer Science research | Application, references, and interview |
| Other skills and behaviours | Positive attitude to colleagues and students |  | Application, references, and interview |
| Special requirements | n/a | n/a | n/a |

**JOB HAZARD ASSESSMENT**

**Is this an office-based post?**

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| Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the assessment below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all staff, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work |  |  |  |
| Extremes of temperature (eg: fridge/ furnace) |  |  |  |
| ## Potential for exposure to body fluids |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: |  |  |  |
| Frequent hand washing |  |  |  |
| Ionising radiation |  |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) |  |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling |  |  |  |
| Repetitive crouching/kneeling/stooping |  |  |  |
| Repetitive pulling/pushing |  |  |  |
| Repetitive lifting |  |  |  |
| Standing for prolonged periods |  |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) |  |  |  |
| Fine motor grips (eg: pipetting) |  |  |  |
| Gross motor grips |  |  |  |
| Repetitive reaching below shoulder height |  |  |  |
| Repetitive reaching at shoulder height |  |  |  |
| Repetitive reaching above shoulder height |  |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public |  |  |  |
| Lone working |  |  |  |
| ## Shift work/night work/on call duties |  |  |  |