

**Faculty of Technology**

**School of Computing**

**Computing Research Group in collaboration with Xim Ltd, Southampton**

**Software Engineer – Knowledge Transfer Partnership (KTP) Associate**

**ZZ003777**

**Information for Candidates**

# THE POST

Please see the attached job description and person specification.

**TERMS OF APPOINTMENT**

**Fixed term for 2 years**

Salary of £27,000 per annum, plus a £4,000 training budget, paid into a bank or building society monthly in arrears.

Although an employee of the University of Portsmouth’s, you will be working at Xim’s offices in Chilworth, Southampton, Hampshire, SO16 7NP.

The Appointee will be entitled to join the Local Government Pension Scheme. The scheme's provisions include an index-linked pension with an option to exchange some pension for a lump sum on retirement together with dependants’ benefits. Contributions by the employee are subject to tax relief.

There is a probationary period of six months during which new staff are expected to demonstrate their suitability for the post.

There is a comprehensive sickness and maternity benefits scheme.

**All interview applicants will be required to bring their passport or full birth certificate and any other 'Right to Work' information to interview where it will be copied and verified.** The successful applicant will not be able to start work until their right to work documentation has been verified.

Under the University’s Insurance Policy we will take up references for candidates called for interview. Your current employer reference must be your current line manager. It is also a requirement of this policy that we take up references to cover the previous three years of your employment or study.

The successful candidate will need to bring documentary evidence of their qualifications to Human Resources on taking up their appointment.

To comply with UKVI legislation, non-EEA candidates are only eligible to apply for this post if it has been advertised for a total of 28 days.

If the position has a requirement for Disclosure and Barring Service check (DBS), this will be stated in the advert. The DBS Application Form will be provided once the selection process has been completed.

All applications must be submitted by Midnight (GMT) on the closing date published.

**UNIVERSITY OF PORTSMOUTH – RECRUITMENT PAPERWORK**

# JOB DESCRIPTION

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| **Job Title:** | KTP Associate (Xim Ltd) |
| **Faculty/Centre:** | Faculty of Technology |
| **Department/Service:**  **Location:** | School of Computing  Based at Xim Ltd premises in Southampton |
| **Position Reference No:** | ZZ003777 |
| **Responsible to:** | Director, Centre for Healthcare Modelling and Informatics (Knowledge Base Supervisor)  Creative Director, Xim Ltd (Company Supervisor) |
| **Responsible for:** | N/A |
| **Effective date of job description:** | January 2017 |

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| **Purpose of Job**: |
| Working in collaboration with Xim Ltd to develop a system to measure patients' vital signs and provide early warning of deterioration in their health.  The Associate will drive a series of innovations to establish development processes and identify markets in a project to develop an early warning system for patients.  Working autonomously with instruction from the research leader ultimately responsible for the project (or group of studies) to carry out research analysing data, enhancing algorithms to collect data, developing new evaluation methods and implementing them in a software system. Responsible for regularly managing elements of the project in line with the project terms of reference.  The research project involves the analysis of clinical data, via the innovative capture of patient data through lab tests and clinical trials, the development of models using signal processing, statistical, data mining or other techniques. The work involves the design and development of computer implementations of models and algorithms, their quantitative and qualitative evaluation and improvement.  The Associate will leverage support from researchers from the University's Centre for Healthcare Modelling and Informatics (<http://www.chmi.port.ac.uk/>). |

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| **Key Responsibilities:** |
| 1. Develop clinical outcome models. 2. Develop and optimise software systems incorporating those models. 3. Safeguard the data and computer software used by the project. 4. Present research project findings to a variety of stakeholders. 5. Document the project.   **Additional expectations of the role holder**   1. In line with the project aims and objectives, the role holder is required to plan, prioritise and organise their own workload, regularly managing the progress of elements of the project. 2. To communicate with team members and liaise and network with relevant others, ensuring effective working relations. 3. To attend team meetings when required providing relevant and timely information, in order to aid decision-making. 4. To solve problems that may occur during the length of the project using guidelines or a set of procedures. 5. To research and review the relevant state of the art and to propose and test new methods of collection and analysis where applicable. 6. To analyse research data and develop new evaluation methods. 7. Can assist with supervising other team members. 8. To participate in and contribute to a performance & development review (PDR), ensuring that work produced is in line with the University's policies and the Company's objectives. 9. To comply with the Company's Health and Safety Policy and pay due care to own safety and the safety of others. Report all accidents, near misses and unsafe circumstances to line management. 10. Any other duties as required by the Academic Supervisor or Company Supervisor. |

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| **Working Relationships:** |
| The KTP Associate will be employed by the University of Portsmouth (School of Computing) but will be based at the premises of Xim Ltd. The KTP Associate will work closely with the academic team and Xim throughout the project.  Key relationships:   * Academic supervisor (Professor Jim Briggs) * Lead academic (Dr Wendy Powell) * Company supervisor (Bruce Stanley) * Managing director (Laurence Pearce) * KTP advisor (Stephen Woodhouse)   The project will be overseen by a Local Management Committee, which will include the Academic Team and the Company Team |

1. **PERSON SPECIFICATION**

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| **No** | **Attributes** | **Rating** | **Source** |
| **1.** | **Specific Knowledge & Experience** |  |  |
|  | High degree of numeracy | E | AF, S |
|  | Programming competence to an advanced level in Java/Python or a similar language | E | AF, S |
|  | Knowledge and experience of MATLAB / R / SciPy desirable | D | AF, S |
|  | Experience in any numerate scientific or engineering domain, preferably data analytics, signal processing or computer vision | E | AF, S |
|  | Experience in commercial software development including version control and cloud deployment | D | AF, S |
|  | Experience in any health-related field | D | AF, S |
| **2.** | **Skills & Abilities** |  |  |
|  | Highly numerate and confident working with data | E | AF, S |
|  | Ability to apply logic to solve problems when they occur, and to challenge and test the team’s hypotheses | E | AF, S |
|  | Ability to research and apply state of the art solutions to solve problems | E | AF, S |
|  | Good software architecture skills, confidence with selecting and integrating open source components to build prototypes | D | AF, S |
|  | Ability to plan, organise and prioritise workloads | E | AF, S |
|  | Good report writing skills | E | AF, S |
|  | Statistical data analysis skills | E | AF, S |
|  | Presentation skills | D | AF, S |
|  | Project management skills | D | AF, S |
| **3.** | **Qualifications, Education & Training** |  |  |
|  | Good first degree or higher degree in a computing, numerate science or engineering subject | E | AF |
| **4.** | **Other Requirements** |  |  |
|  | Ability to work with minimum supervision | E | AF, S |
|  | Ability to work on own initiative and as part of a team | E | AF, S |
|  | Creative, highly motivated and committed to undertaking research | E | AF, S |
|  | Commitment to producing high quality work | E | AF, S |
|  | Ability to work to tight deadlines | E | AF, S |

**Legend**

Rating of attribute: E = essential; D = desirable

Source of evidence: AF = Application Form; S = Selection Programme (including Test, Presentation, References)

**JOB HAZARD IDENTIFICATION FORM**

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| **Please tick box(s) if any of the below are likely to be encountered by the applicant. This is in order to identify potential job related hazards and minimise associated health effects as far as possible. Please use** [**this link**](http://www.port.ac.uk/departments/services/humanresources/occupationalhealthservice/JobHazardInformation/) **for further information which should be considered by managers, employees and job applicants.** | | | |
| 1. International travel/Fieldwork |  | 13. Substances to which COSHH regulations apply (including microorganisms, animal allergens, wood dust, chemicals, skin sensitizers and irritants) |  |
| 1. Manual Handling (of loads/people) |  | 14. Working at height |  |
| 1. Human tissue/body fluids (e.g. Healthcare workers, First Aiders, Nursery workers, Laboratory workers) |  | 15. Working with sewage, drains, river or canal water |  |
| 1. Genetically Modified Organisms |  | 16. Confined spaces |  |
| 1. Noise > 80 DbA |  | 17. Vibrating tools |  |
| 1. Night Working   (between 2200 hrs and 0600 hrs) |  | 18. Diving |  |
| 1. Display screen equipment | X | 19. Compressed gases |  |
| 1. Repetitive tasks (e.g. pipette use, book sensitization etc) |  | 20. Small print/colour coding |  |
| 1. Ionising radiation/ non-ionising radiation/lasers/UV radiation | | 21. Contaminated soil/bio-aerosols |  |
| 10. Asbestos and lead | | 22. Nano-materials | |
| 11. Driving on University business (mini-bus, van, bus, forklift truck etc) | | 23. Stress Workplace Stressors (e.g. workplace demands, role clarification, relationships etc) | |
| 12. Food handling | | 24. Other (please specify)  Working from boats in tidal and non-tidal waters. | |

**Completed by Line Manager/Supervisor:**

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| **Name (block capitals)** | Prof Jim Briggs |
| **Date** | January 2017 |
| **Extension number** | x6438 |

Managers should use this form and the information contained in it during induction of new staff to identify any training needs or requirement for referral to Occupational Health (OH).

Should any of this associated information be unavailable please contact OH (Tel: 023 9284 3187) so that appropriate advice can be given.