

THE UNIVERSITY OF MANCHESTER
PARTICULARS OF APPOINTMENT
FACULTY OF SCIENCE & ENGINEERING
SCHOOL OF NATURAL SCIENCES
COMPUTER SCIENCE
RESEARCH ASSOCIATE IN COMPUTER SCIENCE
VACANCY REF: S&E-016847

Salary: £32,816 to £40,322 per annum (depending on experience)

Hours: full time

Duration: Starting 1 July 2021 for 23 months

Location: Oxford Road, Manchester

Enquiries about the vacancy, shortlisting and interviews:

Name: Dr. Pierre Olivier

Email: pierre.olivier@manchester.ac.uk

BACKGROUND

A Postdoctoral researcher position is available in the Advanced Processor Technologies group at the University of Manchester in the UK. The postdoc will join a project in the domain of systems software, exploring the performance and security benefits of lightweight operating systems, unikernels, in the context of serverless computing/function as a service.

Overall Purpose of the Role

The work will involve a good amount of low-level (kernel/hypervisor) systems software development, and will be validated with submissions to top-tier systems or security conferences.

Key Responsibilities, Accountabilities or Duties:

The range of duties will include:

- Be involved in the assessment of student knowledge and supervision of projects.

- Assist in the development of student research skills.
- Develop research objectives and proposals for own or joint research, with the assistance of a mentor if required.
- Conduct individual and collaborative research projects.
- Write up research work for publication.
- Continually update knowledge and understanding in field or specialism.
- Translate knowledge of advances in the subject area into research activity.
- Deal with routine communication using a range of media.
- Communicate complex information, orally, in writing and electronically.
- Prepare proposals and applications to external bodies, e.g. for funding and contractual purposes.
- Communicate material of a specialist or highly technical nature.
- Liaise with colleagues and students.
- Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- Join external networks to share information and identify potential sources of funds.
- Manage own research and administrative activities, with guidance if required.
- Work with colleagues on joint projects, as required
- Collaborate with academic colleagues on areas of shared research interest.
- Attend and contribute to relevant meetings.
- Use initiative and creativity to identify areas for research, develop new research methods and extend the research portfolio.

PERSON SPECIFICATION

Essential Knowledge, Skills and Experience

- Have, or be about to obtain, a relevant PhD (or equivalent)
- Specialist knowledge in the discipline: low level systems software (OS/hypervisor) development
- Experience in research methods and techniques to work within established research programmes: experience in systems software research, publication record in systems
- Excellent communication and interpersonal skills
- Excellent time management and organisational skills
- Ability to work independently and as part of a team
- Ability to liaise confidently and effectively with a range of individuals
- Willingness to learn and develop
- Ability to present in both written and oral publications
- Ability to meet deadlines