



**L-Università
ta' Malta**

**Office for Human
Resources Management
& Development**

University of Malta
Msida MSD 2080, Malta

Tel: +356 2340 2810
hrmd@um.edu.mt

www.um.edu.mt

Call for Applications

Post/s of Part-Time Research Support Officer II/III/IV

Process Engineering, Security, and Testing Research Lab (PEST)

Department of Computer Science

1. Applications are invited for a post of part-time Research Support Officer II/III/IV. The Research Support Officer will perform research and software development duties related to various projects undertaken by the Process Engineering, Security, and Testing Research Lab (PEST) within the Department of Computer Science of the University of Malta.
2. Applicants should preferably:
 - ◆ Have a minimum of a Masters Degree in Computer Science, with preference being given to a postgraduate qualifications and experience related to **software security and/or runtime verification**;
 - ◆ Have experience in low level systems programming;
 - ◆ Be familiar with academic work, particularly the process of writing papers;
 - ◆ Be able to work both independently and as a member of a team;
 - ◆ Have the ability to understand and apply scientific literature and knowledge especially in relation to computer science;
 - ◆ Have good communication skills, both oral and written (a good command of the English Language is essential);
3. **The selected candidate must be living in Malta for the period of employment.**
4. The hours of work and remuneration are as follows:

RSO II (Master's Degree) - a maximum of 80 hours for a period of 20 weeks - €12 per hour; or
RSO III (PhD Degree) - a maximum of 64 hours for a period of 16 weeks - €15 per hour; or
RSO IV (Post Doc) - a maximum of 48 hours for a period of 12 weeks - €20 per hour.
5. Candidates must submit their letter of application, a copy of their curriculum vitae and a copy of their certificates to christian.colombo@um.edu.mt by not later than **Thursday, 13th April 2023**.

Late applications will not be considered.

Office of the University,
Msida, 6th April 2023

Call for Applications

Post/s of Part-Time Research Support Officer II/III/IV

Process Engineering, Security, and Testing Research Lab (PEST)

Department of Computer Science

Further Information

1. The Process Engineering, Security, and Testing Research Lab (PEST) PEST is currently working on the Research Seed Fund Project titled: "Isolated monitoring with tamper-evident logs for secure runtime verification": By using runtime verification (RV), we can assert if a software application conforms to its specifications. However, in the event of an elevated malware infection, the malware may tamper with both the system trace for RV and the software application's runtime execution. A two-fold strategy involving isolation and tamper-evident logs will be investigated in this project: Isolation addresses attack vectors used for RV tampering without privilege escalation, while tamper-evident logs can uncover any escalation attempts. Therefore, our strategy is to use namespaces to safeguard the software system and its instrumentation from a compromised OS, and to use authenticated system logs.

PEST is also currently working on the locally funded project DETECTIF: The overarching aim of the DETECTIF is to improve on state-of-the-art mobile forensics when dealing with cybercrime incidents involving Android malware employed for financial theft and the compromise of personal safety. We intend to evolve a novel technique - Just-In-Time Memory Forensics (JIT-MF) to attain this aim by exposing otherwise non-available evidence.

<https://staff.um.edu.mt/mvel3/detectif/index.html>

2. The appointee might be offered travel opportunities involving workshops, conferences, research visits, and training.
3. The selection procedure will involve:
 - a. scrutiny of qualifications and experience claimed and supported by testimonials and/or certificates (copies to be included with the application);
 - b. short-listing; and
 - c. an interview and / or extended interview
4. The appointment will be subject to a probationary period and to the provisions of the Statutes, Regulations and Bye-Laws of the University which are now or which may hereafter be in force.