The Systems Security Research Lab (http://s2lab.isg.rhul.ac.uk), led by Dr Lorenzo Cavallaro within the School of Mathematics and Information Security at Royal Holloway, University of London, is seeking to appoint 2 Post-Doctoral Research Assistants (PDRAs) to work on the EPSRC-funded project entitled "MobSec: Malware and Security in the Mobile Age".

The overall goal of MobSec is to improve the security of mobile devices by reducing the risk from installing and using third party applications. Outcomes of the project so far include a large-scale study on the impact of vulnerabilities in hybrid Android apps as well as novel techniques for facilitating and interpreting the results of dynamic analysis of Android apps and malware. For example, a recent result from MobSec, which will be presented at USENIX Security 2017, shows how to identify concept drift in machine learning models used for malware classification.

More information on the project is available at: http://s2lab.isg.rhul.ac.uk/projects/mobsec/

The main responsibilities of the post are:

- Developing novel analysis techniques to reconstruct the behaviour of Android apps
- Developing novel techniques to detect malicious or unwanted behaviour of Android apps, hardening apps and detecting leaks of sensitive information
- Developing research objectives and publishing research
- Planning own day to day research activity
- Attending project meetings with internal and external collaborators
- Supervision of interns and project students
- Attending conferences and presenting research papers
- Public dissemination of research outcomes, e.g., through web sites and outreach events

Any other duties as required by the line manager or Head of Department that are commensurate with the grade. As the needs of the College change so the above job profile, duties and location of the role within the Faculty of the College will be adjusted accordingly.