**JOB DESCRIPTION**

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Post-Doctoral Research Associate in Trustworthy Systems</th>
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<tbody>
<tr>
<td>Department / Unit:</td>
<td>Information Security Group</td>
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<tr>
<td>Job type</td>
<td>Post-Doctoral Research Associate</td>
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<tr>
<td>Grade:</td>
<td>7, spine point 31</td>
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<tr>
<td>Accountable to:</td>
<td>Dr Daniele Sgandurra (PI)</td>
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<td>Accountable for:</td>
<td>Head of Department</td>
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**Purpose of the Post**

The Information Security Group at Royal Holloway, University of London, is seeking a highly motivated postdoctoral researcher for the EU Horizon2020-funded FutureTPM project. The successful candidate will join the ISG Smart Card and IoT Security Centre, working on the development and integration of quantum-resistant cryptography into the Trusted Platform Module (TPM), on the development of a virtual quantum-resistant TPM, and on dissemination and standardization activities of the project.

The goal of FutureTPM is to create a Quantum-Resistant (QR) Trusted Platform Module (TPM) by designing and developing QR algorithms suitable for inclusion in a TPM. The algorithm design will be accompanied by implementation and performance evaluation, as well as formal security analyses in the full range of TPM environments: i.e. hardware, software and virtualization environments. Use cases in online banking, activity tracking and device management will provide environments and applications to validate the FutureTPM framework.

**Key Tasks**

The main responsibilities of the post are:

- Collaborating with the FutureTPM project partners towards common goals
- Attending FutureTPM meetings and conference calls in all relevant Work Packages
- Leading WP activities, in particular with respect to virtual TPM, dissemination and standardisation
- Developing novel research ideas
- Contributing to writing bids for research funding
- Attending conferences and presenting research papers
- Providing input to project web sites and other dissemination and engagement forums
- Public dissemination of research and project outcomes, e.g., through web sites and outreach events

**Other Duties**
The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by his/her manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.