**Project title**: CAIRIS In The Cloud (CRITiC)

**Contact**: Shamal Faily (sfaily@bournemouth.ac.uk); Tim Orman <TOrman@bournemouth.ac.uk>

**Project Description**:

* CAIRIS (Computer Aided Integration of Requirements and Information Security) is an open-source security design tool for specifying usable and secure systems.
* CAIRIS has been evaluated in a number of real world case studies, but wider adoption of CAIRIS is required to understand how the tool and underlying meta-model enables help designers identify and value assets, and use risks to rationalise decision making around security. Such adoption is currently hindered by the fact that the CAIRIS desktop application is only supported on Linux.
* To boost its wider adoption, a CAIRIS web application has been under development since mid-2015. Unfortunately, while largely functionally complete, additional work is required before it can be safely deployed to a self-hosted or cloud environment. This work, if completed, will raise the technology readiness level of CAIRIS, and ensure it is used more widely to support teaching in Higher Education, and design research in industry.

**Project Objectives**

The aim of the CAIRIS In The Cloud (CRITiC) project is to customise and configure CAIRIS to run in a self-hosted or cloud environment.

**Project Team & Work Plan**

* The CRITiC project team will consist of Shamal Faily, Tim Orman, and an undergraduate Research Software Engineer (RSE).
* The RSE – working under the direction of Faily and Orman – will extend CAIRIS to make it compatible with the Web Server Gateway Interface (WSGI) specification. Following this, CAIRIS will be evaluated and, where appropriate,customised for both self-hosted and Platform as a Service environments.
* The outputs of this project will be (i) the scripts, configuration data, and modifications to CAIRIS resulting from the above work, (ii) an architectural design document describing the key elements, its components and connectors, and models describing its different deployment options. Both outputs will become part of the CAIRIS project on github, thereby making project outputs available to the wider community.

The project will run between Jan 2017 and June 2017.

**Research Assistant**: We require **an Undergraduate Research Assistant** to work as a research software engineer (RSE). The RSE will assist Faily and Orman in the development and evaluation of project outputs, and assist in the authorship of publications arising from this project.

The skills required include experience in one or more of the following: Python, Linux, JavaScript

**Hourly rate:** £9.76

**Number of hours:** 205 Hours