



Research Institute in Trustworthy Inter-connected Cyber-physical Systems (RITICS)

Fellowship Call

Closing date: Friday 12th January 2024/ 5pm GMT

The Research Institute in Trustworthy Inter-connected Cyber-physical Systems (RITICS) is inviting proposals from researchers for part-time fellowships.

Topic Areas

Applications should respond to the challenges identified in the NCSC Problem Book or the Cyber-Physical problem set. Whilst the most relevant challenge in the Problem Book is Problem 5, the other problems are also relevant to OT security. The Cyber-Physical problem set currently includes:

- How do we build security for products with long operational lives?
- How do we incentivise better security for cyber-physical systems?
- How can we understand the security of a wide variety of cyber-physical assets?
- How do we have confidence in the security of a cyber-physical system?
- How can we utilise upcoming technologies in a secure way within cyber-physical systems?

Proposals should make clear how the proposal addresses Cyber-Physical and OT aspects of the problem.

Responsibilities

The RITICS Fellowship roles are leadership roles. Supported by RITICS and the NCSC, you will provide thought leadership in your topic across the RITICS Community and beyond. Specifically, you will:

- Explore the problem space to determine the research questions that need to be addressed and the benefits and means of growing the research topic beyond the initial period of a year.
- Engage with existing, established communities or establish a new community around the topic.
- Identify and engage with relevant research projects that fall under your scope and identify new opportunities to develop and grow the area.
- Consider the pipeline for and sustainability of the topic, providing development opportunities, establish pathways to develop a new research angle, or connect relevant communities that are currently disparate.

Deliverables

The period of the Fellowship (1^{st} April $2024 - 31^{st}$ March 2025) is intended to be exploratory and stimulate your own innovation and creativity. Therefore, the exact nature and format of the deliverables to satisfy the responsibilities outlined above will naturally vary. The specifics of the exact programme of work to achieve the following can be discussed with the NCSC Technical Lead and the RITICS Co-Directors. The initial set of desired outcomes are:

- Demonstrate how you have built the community.
- Present outcomes of your problem definition activities.
- Articulate existing and recurrent research questions.
- Articulate the strategy for the topic going forward.

Assessment

Assessment of proposals will be undertaken by a panel who will be looking at the relevant strengths of the candidates and the proposed method for delivering in the topic areas.

Key Dates

Activity	Date
Call for Fellows Published by	Wednesday 1 st November 2023
Proposals due to be submitted	Friday 12 th January 2024
Announcement of Results	Thursday 1 st February 2024
Fellowships Starts	Monday 1 st April 2024
Fellowship Completed	Monday 31 st March 2025

Funding

Funding is available for up to 2 part-time fellows. The total pool of funding available is £170K to support the engagement and activities of the fellows in these topic areas. The funding can be used to cover the cost of the fellows' time and appropriate travel and meeting costs.

Application

A **2** page CV and a **1** page plan of work which clearly indicates the topic area being addressed should be provided describing the plan to deliver the desired outputs of the chosen topic. Breakdowns of any known costs should be included – costings should be calculated using the FEC model.

Applications should be sent to Furrah Hussain, RITICS Programme Manager (ritics@imperial.ac.uk). We must receive your application by **1700 on 12 January 2024.**