



**Research Position in the area of International Strategic and Security Studies Programme
Cyber Security of Embedded Defence Systems**

National Institute of Advanced Studies, Bangalore

National Institute of Advanced Studies (NIAS) was conceived and founded in 1988 by the late Mr. J. R. D. Tata, who sought to create an institution to conduct advanced multidisciplinary research. Housed in a picturesque green campus in Bangalore the Institute serves as a forum to bring together individuals from diverse intellectual backgrounds, in the natural and life sciences, humanities, social sciences, and conflict and security studies. The philosophy underlying NIAS is given shape by its multidisciplinary research teams. The Institute is unique in its integrated approach to the study of intersections between science and technology, philosophy, social issues and leadership. The objective is to nurture a broad base of scholars, managers and leaders who would respond to the complex challenges that face contemporary India and global society, with insight, sensitivity, confidence and dedication. For more details: www.nias.res.in

About the Programme/Project:

International Strategic and Security Studies Programme (ISSSP). ISSSP has a distinctive interdisciplinary orientation and seeks to combine science and technology with the disciplines of international relations, economics and political science in understanding strategic and security developments in India and the world. The research team works on science & technology applications, strategy and policy oriented research. Research interests include Nuclear and Missile Technologies, Space Security, maritime domain awareness, advanced weapon systems, Cyber Security and Artificial Intelligence as applied to Defence systems, Politico-strategic issues concerning India's Neighbourhood, Indian Ocean Region and Future War Scenarios.

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<http://www.nias.res.in/research-schools-issp.php> and <http://issp.in/>

Title of Position/s:

Junior/ Senior Research Fellow

Job description (what is expected)

Study distributed embedded system architecture, dataflow and implementation to establish system vulnerabilities (to backdoors, malicious hidden codes left inside memories., FPGAs etc) cyber threats and resolve the issues /take remedial measures:

- Analyse the cyber security vulnerabilities with respect to software, hardware, communication, protocols, encryptions and substituted delays.
- Study any other aspect of vulnerability in the digital systems
- Identify cyber threats, which can become critical in the future Defence systems

- Bring out the remedial measures possible to deal with the identified types of cyber threats in defence systems.

Qualifications:

M.Sc. in Digital Forensics and Information Security / M. Tech. in Cyber Security and Incident Response / M.Sc. Cyber Security; / M. Tech Computer Science / M. Tech. in Electronic and Communications Engineering, with NET /GATE or Equivalent Qualification. Candidates with a minimum of 2 years of relevant research experience post Masters degree will be considered for the level of Senior Research Fellow.

Research experience in the field of embedded system Cyber Security and Network Security is desirable

Mode of Application:

Interested applicants should submit their curriculum vitae electronically along with the following documents: -

1. Covering letter
2. Statement of Purpose
3. Copy of degree certificate

The deadline for receiving applications is 30th September 2020. Short-listed candidates will be invited to NIAS for an interview.

Salary will be commensurate with qualifications and experience and comparable to other premier institutions in the country.

The applications should be addressed to:

Prof PM Soundar Rajan

ISSSP

National Institute of Advanced Studies

Indian Institute of Science Campus

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