POWERGRID CENTER OF EXCELLENCE IN CYBER SECURITY in POWER TRANSMISSION AND GRID OPERATION
Indian Institute of Science, Bangalore-560012

Job Description

Foundation for Science Innovation and Development (FSID) at the Indian Institute of Science (IISc) and Power Grid Corporation of India Limited (PGCIL) have entered into a partnership to establish the "POWERGRID Center of Excellence (CoE) on Cybersecurity in Power Transmission and Grid Operation", to enable continuous R&D on cyber security program matching with the emerging requirements in the field of transmission and grid operation that would lay a strong foundation for achieving excellence in Cyber security of Operational Infrastructure. This facility would engage in R&D aspects of cyber security of power systems including security analytics for situational awareness, security of field devices, security of communication protocols at different hierarchical levels in grid operations, security of SCADA systems and control center applications, competency building, and development of defense systems for probable future cyber-attacks. CoE envisioned to act as a nodal center and think tank for POWERGRID's cyber security concerns and to bring in experts from academia, research laboratories and industry together under one umbrella.

Designation	Center Head
Responsibilities	- Bootstrapping a new "Powergrid center of excellence in cyber security" an interdisciplinary world-class R&D center at IISc. - Setup and streamline the processes in the operationalization of the CoE initiatives, day-to-day management, and assisting the executive committee in achieving the CoE goals. - Strategize, Identify, and define immediate, short term and futuristic R&D projects, prepare action plans, implement and maintain program initiatives adhering to COE objectives. - Monitor the global cyber-security landscape for relevant developments in power system applications - Develop technical team, guide and mentor the members to develop security architectures, policy frameworks, test procedures, and audit mechanisms for equipment and protocols used in power grid operational environments such as, but not limited to, Intelligent Electronic Devices, monitoring devices, servers used for SCADA, Communication equipment, energy meters for applications currently in use in Indian Power System - Diligent tracking of project status, updates to various levels of stakeholders, and taking corrective actions where necessary - Where procurement of services/solutions is necessary, prepare RFP documents and drive vendor evaluations. - Interacting with IISc faculty, relevant industry/National R&D labs, funding offices at IISc, and research students to achieve the goals of the CoE.

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	• Knowledge dissemination through national and state forums for policymaking, scientific publications, white papers, patent applications, and technical reports.
Employment type	Full-time, fixed-term contract for a period of three years, initially with probation of six months. Based on requirements and performance, the contract can be extended by mutual consent.
Remuneration	Commensurate to experience and skill set, competitive with industry
Location	Bengaluru
Education	1. Masters or above in Electrical, Electronics, or computer science or allied disciplines or 2. BE/B.Tech in Electrical, Electronics, or computer science or allied disciplines and/or Management degree
Experience level	• Overall experience of 5+ years with at least 2 years in Project / Program Management and relevant R&D experience. This could be relaxed in the case of candidates with an exceptional track record.
Technical skills	• Experience in cyber security of equipment and protocols used in power substations, industrial control systems, industrial networks, operational technology, process engineering, SCADA systems, industrial hardware • Experience on the IEC61850 implementation for process bus and station bus and relevant SW/HW development. • Knowledge of security vulnerabilities, security measures threat modeling approaches, and tools • Understanding of network attacks, DDoS, encryption, authentication, logging and log analysis, security rules and policies, and knowledge of related protocols (e.g., TCP/IP, TLS, routing protocols) • Understanding of Database Security, data encryption, data desensitization, data backup, and managing identity and access such as RBAC • Exposure to cyber security audit mechanisms of OT systems, exposure to standards-based security assessment (ISO 27001, IEC62443 etc.), cyber security frameworks such as NIST, NERC CIP etc.
Management Skills	• Knowledge of program management principles, and processes, strong interpersonal skills, people management and mentoring skills, ability to work in small teams and manage projects independently • Should be very good in verbal and written communication in Hindi and English • Have a strong moral compass and uphold organizational values of public service, ethics, and integrity • Ability to interact with and manage senior-level stakeholders in government, academia, and industry

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Selection Process	After the closing date, the applications will be screened, and shortlisted candidates will be called for personal interviews.
How to Apply	Please send your CV with a cover letter and any other relevant supporting documents as a single PDF document to **apply.pgcoe@iisc.ac.in**. For any queries, please email **execom.pgcoe@iisc.ac.in** (preferred) Or call Ph. No.+91 80 22933556.
Closing date	**June 15th, 2023, 11.59 pm.**