
MIT Job Description

Job Title: IT – IT Security & Risk	Position Title: Information Security Engineer
Reports to: Director of Research Computing	% Effort or Wkly Hrs: 40hrs/week
Department: Sloan Technology Services(STS)	

Position Overview:

The Information Security Engineer is a member of the MIT Sloan Technology Services (STS) team, responsible for supporting the implementation of security and risk management protocols across the School. Under the guidance of the Director, this role provides expert assistance to ensure the School's research and administrative IT infrastructure and information assets are protected. The role performs security assessments and security attestations of IT applications, systems and development projects, investigates events using security tools and works with appropriate teams to remediate information security threats.

The Information Security Engineer works to identify threats and manage incident response to preserve the protection of critical Sloan information assets and infrastructure. The role works with other STS staff and MIT Security staff to monitor MIT Sloan security controls, analyze system logs for security events, and gather threat intelligence. Other responsibilities include vulnerability management and e-discovery, digital forensics, and incident response management.

The Information Security Engineer communicates and educates IT and the School about security policies and industry standards, and provide solutions for enterprise/research/business security issues.

The role requires strong analytical, communication and consulting skills with knowledge of Information Security and related technologies. This position keeps abreast of current security threats and stays current with security technology evolution, and plays a key role in designing and understanding security controls and supporting and maintaining those controls. Familiarity with a variety of technologies and security systems matched with attention to detail is required to ensure continuity of approach and control structure across multiple projects and initiatives.

Principal Duties and Responsibilities (Essential Functions):**

- Support the implementation of security and risk management programs across the School.
 - Collaborate with other MIT Sloan staff to assure the creation and implementation of proactive security operations on critical infrastructure, applications/platforms and information assets
 - Process and evaluate information received from all available sources, and respond with the appropriate communication and dispatch procedures
 - Conduct forensic investigations and target reviews of suspect areas
 - Identify and resolve root causes of security-related problems
- Provide consulting and assistance for data use agreements and data security processes
 - Respond to requests for assistance in research data management plan development and assessment
 - Perform security assessments and security attestations of IT applications, information services and development projects
 - Conduct IT security awareness and compliance training programs designed by the Director.
 - May guide users on the usage and administration of security tools that control and monitor information security.
 - Ensures users understand and adhere to necessary procedures to maintain security.
- Ensure collection and reporting on key metrics related to protection of information assets and infrastructure
 - Consult regularly with staff and faculty colleagues on security processes, incidents and requests; solicit feedback, analyze and recommend improvements
 - Assist the Director and other STS staff in gathering and reporting on key security and compliance metrics
- Collaborate with Institute security personnel to assure overall security of Sloan community, IT assets and infrastructure.
 - Establish and maintain relationships within STS to ensure seamless security and compliance of IT services and data.
 - Establish relationships and collaborate with Institute security personnel. Understand their services and deployable resources, evaluate Institute security processes and policies to assure alignment, integration and support.

- Understand and advise STS leadership on the tools available from the Institute that might be used within Sloan for information protection.

Other duties as assigned and required

Supervision Received: Position reports to the Director of Research Computing

Supervision Exercised: Position may coordinate and supervise daily work of external vendor staff on a project basis, and hire and supervise interns/contractors.

Qualifications & Skills:

REQUIRED EDUCATION AND EXPERIENCE:

- Education
 - Bachelor's Degree in technology field
 - 5+ years of relevant experience
- Technical Skills
 - Knowledge of security issues and remediation techniques
 - Knowledge of critical security controls, preferably NIST Cyber Security Framework
 - Familiarity with secure coding practices, ethical hacking and threat modeling.

PREFERRED EDUCATION AND EXPERIENCE:

- Education
 - Master's Degree in Computer Science, Information Systems or other related field.
- Technical Skills
 - Working knowledge of security issues, techniques and implications across computer platforms.
 - Knowledge of critical security controls, preferably NIST Cyber Security Framework.
 - Working knowledge of scripting languages, e.g. PowerShell, Python, Perl.
 - Familiarity with secure coding practices, ethical hacking and threat modeling.
 - Strong understanding and experience with managing computers and users on a network and understanding how systems interoperate.
 - Possess or be willing to work towards a related security certification (e.g. CISSP, SANS GSEC)
- Project Management
 - Demonstrated familiarity with standard principles of project management.
 - Must be able to coordinate multiple tasks, set priorities, and meet deadlines
 - Must be resourceful, detail oriented and able to operate independently and on a team
 - Experience gathering and analyzing business and end user requirements

Sloan Competencies

- Collaborates with others while respectfully advancing organization goals and achieving desired outcomes.
- Communicates openly and effectively by exchanging high-quality information, ideas and opinions in an open and timely manner within and outside the School.
- Works towards team success with humility. Is self-directed and proactive while advancing work and achieving results.
- Demonstrates desire and drive for learning that enhances individual performance and contributes to organizational effectiveness
- Manages ambiguity and navigates change while being comfortable and confident working in a fast-paced and changing environment
- Influences others by gaining commitment, buy-in, and support
- Fosters innovation and experimentation by applying original thinking, expertise, and professional experience to solve problems and develop new options and approaches
- Builds diversity and inclusion by modeling and promoting the MIT values and contributing to an environment where everyone feels supported and is able to thrive
- Acts with caring and a sense of community while demonstrating genuine respect towards every person

*** To comply with regulations by the American with Disabilities Act (ADA), the principal duties in job descriptions must be essential to the job. To identify essential functions, focus on the purpose and the result of the duties rather than the manner in which they are performed. The following definition applies: a job function is essential if removal of that function would fundamentally change the job.*