

Senior Security IoT Researcher



Research Center: Digital Science (Digital Security Unit)

Technology Innovation Institute (TII) is a publicly funded research institute, based in Abu Dhabi, United Arab Emirates. It is home to a diverse community of leading scientists, engineers, mathematicians, and researchers from across the globe, transforming problems and roadblocks into pioneering research and technology prototypes that help move society ahead.



Necessary Knowledge and Experience

5+ years of professional experience in Embedded Cybersecurity (IoTs)

Experience in intrusion detection systems, network traffic analysis, and network signatures development.

Understanding of security breach protocols and attack vectors in perception, network and application layers of IoTs.

Experience with at least one of the following areas - malware analysis/vulnerability research/penetration testing.

You have a hands-on ability to develop POCs based on research findings using different programming frameworks while working closely with development teams

Development and managing hardware, software, and security policies for the protection of systems, networks, and data.

Experience in enforcing security best practices in IoT networks (plans and standards) and knowledge of the latest security threats.

Embedded Operating systems and embedded devices architecture

Security design and post-implementation reviews of IoT solutions.

Design and implementation of solutions for identification, collection and analysis of data pertaining to IoT security, assets, vulnerabilities and its sources.

Development of hunting rules and triggers, which focus on adversary activity within the IoT domain, and endpoint threat management.

Assist in the planning, design and development of go-to-production solutions.

Develop and enforce security best practices in IoT networks (plans and standards).

Proficient in machine learning fundamentals and deep learning frameworks and in Building and Training AI models, with ML frameworks such as Caffe, Tensorflow, Pytorch
Experience with deep learning, Reinforcement learning, Federated learning, and other types of machine learning algorithms.

Development of Intrusion Detection/Protection solutions for IoTs and cyber-incident response solutions and malware/threat use cases.

Excellent programming skills in Python.

Deep knowledge of working with high volume and velocity data sets relevant to the intrusion detection system for IoTs (NSL KDD etc..)

Demonstrable experience with version-control system solutions (e.g., GitHub or GitLab)

Experience using collaboration tools (e.g. Atlassian)

Well-developed planning and organizational skills, with the ability to prioritize, multi-task, and set and meet deadlines

Demonstrated analytical and manuscript preparation skills, including a track record of authoring peer-reviewed research publications

Strong communication, presentation, and problem-solving skills

Excellent communication skills, both written and verbal, that can be applied in both technical and non-technical multi-functional teams

Self-motivated and strong work ethic

Education and Certification Requirements

PhD/ master's degree in relevant topics related to Cybersecurity and Embedded Systems (IoTs)

Our benefits

We ask our employees to give us their best, and we're committed to doing the same. It's why we offer attractive benefits designed to empower you and your family to live life well.

We offer



Growth and development



Inspiration and innovation



Recognition and rewards



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An environment to thrive

- The leading advanced technology research institute in the region
- Specialised research domains and multi-disciplinary project teams
- Dynamic and globally connected workplace
- A culture of curiosity and creativity
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- Quality, rigorous, ethical work environment
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- Exceptional, state-of-the-art facilities and the highest scientific standards
- Partnerships with leading universities and institutions
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