

PARTNER COMPANIES ONBOARD RUN 2

ATTILA CYBERTECH

Attila Cybertech is an Operations Technology (OT) Cybersecurity firm. They secure their clients' critical assets through a holistic approach with a range of solutions from risk assessments to secured network design, firewall selection, configuration and testing for industrial control systems (such as SCADA, DCS, PLC, RTU) as well as various industrial protocols and process control systems.

Cyber threats are continually evolving. Attila strongly believes that innovation is one of the strategies to mitigate these threats. They seek innovation through internal and external collaboration by sharing ideas, concepts and domain knowledge. In collaboration with their customers, Institutions of Higher Learning (IHL) and Technology Partners, they push the boundaries of cyber technology to develop the most resilient policies and protections for their control systems and operational technology assets.

Project: Operational Technology Cyber Security

As a Trainee, you will join our Cyber Security Team to develop and review security policies and implement real-life cyber security solutions for our clients in the operational technology arena. You will also be involved in system hardening, penetration testing, product development and technical reviews of cybersecurity solutions, servers, network devices etc.

^{2.} \land cloudsine

Cloudsine is an up-and-coming cloud and Cybersecurity technology company headquartered in Singapore that provides consulting services to help customers adopt, secure and innovate in the public cloud such as AWS, Azure or Google Cloud. Also, they have a unique cloud security product, WebOrion[®] - it uses patent-pending technologies to provide their clients with a unique set of counter measures against web hackings including defacements, ransomware, DDOS, Blackhat SEOs, etc. Its flagship cloud software, WebOrion[®], is used by large enterprises such as Banks, Government, Telcos, and Large Forbes Global 2000 companies spread across Asia such as Australia, Indonesia, India, Philippines, Hong Kong and Singapore.

Project: Cloud Security Engineer - Security Operations, Compliance and Engineering (Project STAR)

Project Star is a company-wide security project, where the goal is to help the company obtain a recognised certification as a SaaS provider.

The project involves enhancing information security across the whole organisation. This includes security of devices, networks, cloud infrastructure, web security, coding, vulnerability assessment, and other cybersecurity-related activities. In addition, the Trainee will get training related to web and cloud security, and will eventually be part of the team that offers this as professional services to our external customers.



Cysense's mission is to make good Cybersecurity easy, accessible, and value-adding for businesses around the globe. We are a SaaS product that contextualises tech and policy controls via a risk-based approach to security. The company has venture and angel backing. Started by two INSEAD MBAs and an experienced Silicon Valley entrepreneur, the team has 25+ years' experience in security, risk management and consulting, and are eager to go fast and grow the company globally.

Project 1: Risk quantification

Cysense is looking for Trainees to research and develop a set of models to contextualise and quantify cyber risk in dollar terms. The project will involve researching existing best practices for cyber risk quantification, identifying data sources that can enhance our data models and integrating the data captured by our platform, and provide our clients with unparalleled insight into their cyber posture.

Project 2: Cyber security strategy advisory

Cysense is looking for Trainees to develop content for our automated strategy advisory engine. The project will involve researching best practices and regulatory, legal and contractual requirements for our target audience and defining controls that can be implemented to achieve these requirements. Lastly, the project includes developing supporting collateral to make implementing these controls as easy as possible for our clients.

4.



Evie.ai is a venture-backed enterprise (B2B) SaaS startup. We power smarter workplaces with Evie - the Intelligent Assistant for the Intelligent Enterprise. We enable people to partner with AI employees, amplifying human intelligence and creativity to deliver superhuman productivity, unprecedented operational efficiency and new business opportunities.

Project: Security & Privacy Upgrades

Evie is the first of many enterprise AI workers to transform how companies operate. As an enterprise AI Trainee, data security and privacy are fundamental principles. We continually improve our security and privacy posture, and the goal of this project would be to deliver security and privacy upgrades to key systems.

Some examples would be automating vulnerability scanning, simplifying our infrastructureas-code codebase, and enhancing core systems to reduce data footprint in line with enhanced global privacy laws.





Heron Technology Pte Ltd (Heron) was formerly known as Nova Systems (Singapore) Pte Ltd. The company was founded in February 2017 as a wholly-owned subsidiary of the Australian defence & aerospace company Nova Aerospace Pty Ltd. In June 2021, the company was wholly bought out by its founding Managing Director, Ryan Lee Swee Ann, following the Nova Group's decision to divest its non-defence business in Asia. Heron's current business comprises Cybersecurity and digital aviation technology services.

Project: Establishment of Security Operations Centre-as-a-Service (SOCaaS)

Heron is rolling out SOCaaS services and transforming its Cybersecurity business from mainly consultancy and testing services to end-to-end Cybersecurity services. To roll out Heron's SOCaaS, Trainees can expect to work on establishing a local infrastructure connected to Spectrum's main servers in Europe, customised to local regulatory and customers' requirements.

6.



Horangi Cyber Security is a Singapore-based CREST-accredited company backed by a team of global cybersecurity experts in Asia and trusted by Industry Leaders such as Gojek, MoneySmart, PropertyGuru and Tiket.com.

Founded by ex-Palantir cybersecurity experts Paul Hadjy and Lee Sult in 2016, Horangi Cyber Security offers the latest product innovation and technology to protect organisations.

Project: Threat Hunting

Candidates can expect to work on a choice of either 1 of the following 2 hands-on research projects where they will be expected to document their findings and possibly have a chance of publishing an official blog post on it:

1. Research an exploit development technique, and where possible, create tooling to automate the process;

2. Research threat hunting methodologies and techniques, and where possible create tooling to automate the detection of 1 type of threat.

Successful candidates will be given guidance on project selection and technical advisory every step of the way during execution.



SInsiderSecurity

Founded in 2015, InsiderSecurity is an award-winning, homegrown Deep Tech company in Cybersecurity analytics where government and large enterprises are using their products today. They catch cyber threats that firewalls or antivirus misses. Their technology is the first to be accredited by IMDA in User and Entity Behaviour Analytics. Their team is included in the ASEAN 40 Under 40 List for their innovative Cybersecurity work and awardee on CSA Cybersecurity Innovation Day 2020, not just one but two categories. Led by cyber warfare experts, they are solving big problems and building the future of Cybersecurity.

Project: Cybersecurity Product Development

As a Trainee, you will develop Cybersecurity products that detect and stop sophisticated threats such as the recent SolarWinds attackers.

8. *j-Sprint* Trust without Boundaries

i-Sprint Technologies Pte Ltd was established in the year 2021, a subsidiary company of i-Sprint Innovations Pte Ltd is a leading provider in Securing Identity and Transactions in the Cyber World that enables individuals, organisations, and societies to build trust and identity assurance for powering productivity gain through digital identity and identity of things (IDoT).

Project: Corporate IT Security Assessment and Monitoring

Trainees will get to work with counterparts locally and overseas to exert sound IT security domain knowledge and assessment skills. They will be expected to work with China counterparts to acquire and utilise technical abilities to assess and monitor security by accessing corporate-wide IT infrastructure resources, comprising both cloud-based and onpremises IT resources.

9. Omentum Z YOUR CYBER SECURITY PARTNER

Momentum Z is a Singapore Cybersecurity firm spun off from a Defense company in Singapore. Our vision is to provide an enterprise-grade solution to every company, with the vision to raise the level of cyber security and compliance in Singapore.

Our products and services include: Red Teaming VAPT (Vulnerability Assessment and Penetration Testing) vCISO (or CISO advisory) Cyber Threat Intelligence Data Protection Product (DPP) Cyber Education

Project: Project INTELNET

The project comprises 40% application and 60% research, where Trainees can explore new areas by reading up different domains of the operation, coming up with hypotheses, and



performing proof of concept. It is very suitable for those who wish to work in an unconventional cybersecurity lab. Trainees will be expected to perform assessments, not just VAPT but also on protocol-level security assessment. While Trainees need not have prior knowledge of the environment, they can expect to complete some work of an analyst, researcher, and taking on a white hackers role.

10.



PROTOS LABS

Protos Labs is a Singapore homegrown startup founded by ex-Booz Allen Cybersecurity consultants. We empower insurers to underwrite cyber risk confidently through advanced cyber risk quantification models and proactive monitoring, enabling them to access new market segments, minimise claims and maximise profits in the US20B cyber insurance market. Our founding team has successfully implemented our technology for large global financial institutions and defence clients. Now, we are taking this know-how to the insurers.

Project: Cyber Risk Intelligence Platform

The Trainee will be attached to the cyber threat intelligence team. He/She will be responsible for identifying potential risks and threats to client organisations. This includes conducting allsource analysis, adversary profiling and research to identify, monitor, and assess threats posed by cyber threat actors to clients. His/her work will feed directly into the advanced risk models developed in the Nexus platform. The Trainee will develop a deep understanding of industry-leading frameworks (e.g., MITRE ATT&CK, Diamond Model Analysis, ACE) and be mentored by threat intelligence experts who have built CTI teams globally.

11.

Responsible Cyber

Responsible Cyber Pte. Ltd. is a Singaporean company, and its corporate shareholders include Singtel Innov8 and NUS Enterprise. The company provides cybersecurity as a service, and it is building an amazing cyber platform IMMUNE.

Project: IMMUNE; Cybersecurity Platform

The Trainee will hands-on and be guided to understand Cybersecurity concepts, including attack surface, threats, vulnerabilities etc, and the Cybersecurity NIST baseline. The Trainee will also research current AI implementations in Cybersecurity and create novel AI use cases for Cybersecurity around vulnerability management. The Trainee will also have opportunities to write academic papers in collaboration with other team members.





Scantist was founded in 2016 by Nanyang Technology University's Prof. Liu Yang and Prof. Srikanthan after their state-of-the-art research yielded the discovery of vulnerabilities in popular commercial and open-source applications recognised via bug-bounties from Apple and Adobe. Scantist's objective is simple, to translate cutting-edge Cybersecurity research into viable, easy-to-use tools and solutions so that security becomes an enabler – and not a hurdle – in an increasingly technology-dependent world.

Project: Application Security Engine Development

Application security is the biggest threat faced by organisations today. Recent breaches like Solar Winds have brought the issue to the forefront - organisations need to secure not just the software applications they build but also those acquired through vendors, partners, and other sources. Scantist aims at providing state-of-the-art application security tools, leveraging over a decade of R&D that yielded 100+ CVE disclosures impacting Apple, Adobe and many more.

This project focuses on extending and enhancing the Scantist Vulnerability Analysis Engines - based on over 10-years of proprietary research conducted at NTU - to provide pro-active vulnerability management solutions to our clients.

13.



Speardome was established as a Singapore base Centre of Excellence (C.O.E.) by a world leader defence corporation, to focus on top-notch Cyber Artificial Intelligence R&D aligned with Singapore's national cyber & data science strategic development. Speardome focuses on creating innovative solutions and local talent development.

Project: Cybersecurity on SCADA

Trainees can expect to develop means of monitoring activity on Cybersecurity in an OT environment, using IIOT sensors and COTS to triage the origin of attacks. Trainees will need to possess both offensive and defensive skills to identify the vulnerability and conduct penetration to penetrate the system. They can also expect to work out a strategy to harden the system by applying the risk assessment result and propose control measures to address and mitigate vulnerabilities, through developing a mean to monitor and detect the hacking activities via the events collected from the IIOT, IOT sensors and Cybersecurity-related system & network logs.

12.





Silence Laboratories aims to seamlessly secure every interaction across digital worlds or between digital and physical worlds. We have designed multi-factor authentication frameworks which use a fusion of sensing and security algorithms for seamless security and unprecedented user experience. We aim to increase convenience for users by replacing existing tedious authentication methods (TFAs and MFAs) and minimising user interventions. We have customised our IPs and algorithms to solve problems pertaining to authentication of login attempts to web services, ride-sharing verification, last-mile delivery and localisation.

Project: Enhancing On Chain and Off Chain Multi-Factor Authentication Framework

The project focuses on developing algorithms and support for the in-house seamless authentication framework. Our authenticators would be exploiting different sensing modalities for the intelligent and prudent understanding of context and user behaviour. The project would add robustness and scalability for MFA/TFA solutions deployments.



PARTNER COMPANIES ONBOARD RUN 1

1.

ATTILA CYBERTECH

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Project: DevSecOps Engineer- Security Operations, Compliance and Engineering (Project STAR)

As a Trainee, you will be working on Project Star - a cloud security project that aims to attain a recognised cloud certification as a SaaS provider. The Trainee will hone their skills in security technologies e.g. encryption, access control and strong cloud security knowledge.



SInsiderSecurity

Founded in 2015, InsiderSecurity is an award-winning, homegrown Deep Tech company in Cybersecurity analytics where government and large enterprises are using their products today. They catch cyber threats that firewalls or antivirus misses. Their technology is the first to be accredited by IMDA in User and Entity Behaviour Analytics. Their team is included in the ASEAN 40 Under 40 List for their innovative Cybersecurity work and awardee on CSA Cybersecurity Innovation Day 2020, not just one but two categories. Led by cyber warfare experts, they are solving big problems and building the future of Cybersecurity.

Project: Cybersecurity Product Development

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OCEANIA ROBOTICS

Oceania Robotics is a Singapore based Robotics company that manufactures pioneering autonomous Robotics solutions in the niche area of pest maintenance, ship maintenance and façade inspection. With a comprehensive product roadmap and an expert team of robot developers, the company delivers products and services that target pest control, inspection, cleaning, painting and paint stripping of the ship hull. With a full suite of Robotics platforms, Oceania Robotics brings several first of its kind autonomous and modular capabilities, significantly improving productivity, efficiency and safety.

Having established strong partnerships with pest control companies, local shipyards, maintenance contractors, universities, and support from governmental agencies, Oceania Robotics is very well positioned to be a global front runner in these newly emerging industries.

Project: Dragonfly

Dragonfly is the world's first autonomous mosquito trap and kill robot that can easily deploy in various settings. Equipped with a full suite of high performance mosquito control features, our robots offer effective protection against mosquito bites, risk of dengue and other diseases. Dragonfly will be operating in a public environment. It is operated autonomously or via remote control. As such, the software for the robot may be susceptible to cyber attack and it is important to ensure the security of its software layer.

As a Trainee, you will help ensure the robot's security from identification and authentication control, use control, system integrity, data encryption, and control access to data of the robot.





Privasec is an independent Cybersecurity consulting firm that has been operating for more than 6 years. They have offices located in 6 different cities - Australia and Singapore with a growing presence in South East Asia.

They offer Cybersecurity services ranging from Offensive Security to Strategy, Governance, Risk and Compliance services - including ISO27001 implementation and adoption of other International Standards for our clients. They are also ISO27001 certified, CREST Accredited and a PCI QSA company. They are a registered Services supplier for both the Singapore Government as well as the Australian Government.

Project 1: Offensive Security Assessments

As a Trainee, you will aid the different teams: Strategy, Governance, Risk and Compliance, Offensive Security and Drone Security. You will be helping these teams build capabilities and educating the market around Privasec's Privacy, Cloud Security Architecture and Drone Security work. You will also be working on certification, compliance and penetration testing engagements.

Project 2: Governance, Risk and Compliance Assessments

As a Trainee, you will be exposed to a wide breadth of Cybersecurity controls and frameworks and assess them against various industries. This may include Risk Assessment, Gap Analysis and Security Hygiene Check, based on industrial standards and frameworks such as ISO27001, MAS TRM and NIST Cybersecurity Framework.

6.



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Project: Data-Driven Application Security

Scantist was awarded the Cyber Security Agency Innovation Award 2020. As a part of the award, Scantist is conducting a large-scale commercial POC with an industry leading demand driver to automatically detect malicious code and vulnerabilities in software applications at source code and binary level with actionable remediation and reports. As a Trainee, you will be combining AI-based techniques with traditional program analysis to create a scalable and extensible malicious code/vulnerability identification framework.



8.



Speardome was established as a Singapore base Centre of Excellence (C.O.E.) by a world leader defence corporation, to focus on top-notch cyber Artificial Intelligence R&D aligned with Singapore's national cyber & data science strategic development. Speardome focuses on creating innovative solutions and local talent development.

Project: System Hardening Methodology Documentation

As a Trainee, you will help work on a green-field Big Data platform that will be utilised to monitor, protect and mitigate cyber threats to critical assets and infrastructures.



Specialising in mobile security and cryptography, V-Key provides a seamless user experience to enterprises – to enhance and simplify their mobile applications' security. Through indepth research on mobile threats, V-Key has developed an award-winning and patented technology with V-OS (This is deployed by top banks, mobile payment providers, and governments to secure software solutions and protect millions globally).

Their solutions can be easily incorporated into existing mobile applications, making them threat-aware and self-defending against malicious attacks.

Project: Research on Mobile Security Attacks and Defences

As a Trainee, you will be helping V-Key enable new generation technology by providing the Cybersecurity infrastructure for banking, government and smart homes, among many others. You will also be working on securing digital transactions.