CYMAR Cyber at Sea: Issues Concerning the Maritime Sector

CYBER 2022: The Seventh International Conference on Cyber-Technologies and Cyber-Systems

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Professor Kevin Jones, Executive Dean of the Faculty of Science and Engineering and Founder of the Maritime Threats research group. Fellow of BCS, IET and IMarEST. His research and teaching interests cover the Trustworthiness of Complex Systems, including Cyber Security, with a focus on the Maritime domain. Kevin is a Fellow of the IMARest, IET and the BCS, a Senior Member of the IEEE and the ACM, and a Liveryman of the WCIT.



Dr Kimberly Tam is a lecturer at the University of Plymouth, UK. Bridging the gap between the university's maritime navigation department and cyber-security research groups, she has been researching maritime cyber-security in depth since 2016. During those years she has been worked on funded projects researching maritime cybersecurity risk, portside and in vessels, cybersecurity threats, and vulnerability analysis.



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Cyber at Sea: Track purpose

Global supply chains rely heavily on maritime transportation (food, energy, goods) This special track is interested in maritime cyber threats, risks, and safety This is cyber-security in the context of Maritime systems (information and operational technology) IT/OT



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CyMar Contents

Investigating the Security and Accessibility of Voyage Data Recorder Data using a USB attack Avanthika Vineetha Harish, Kimberly Tam, Kevin Jones

A ship Honeynet project to collect data on cyber threats to maritime **<u>Stephen McCombie</u>**, Jeroen Pijpker Bio

Timely Maritime Cyber Threat Resolution in a Multi-Stakeholder Environment Allan Nganga

Reducing the cyber-attack surface in the maritime sector via individual behaviour change Konstantinos Mersinas





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Projection of future challenges

Autonomy

Autonomous ports and autonomous ships/vessels are likely to be more vulnerable to cyber attack and need to be designed with security in mind (i.e., secure by design)

Rising Attacks

There are more and more cyber-attacks on critical national infrastructure, the maritime sector included. As attacks become more frequent and sophisticated, it is important to be prepared



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