第1回次世代デジタル社会基盤研究領域セミナー （情報科学系セミナー）

テーマ

"Scalable Learning Environments for Teaching Cybersecurity Hands-on"

講演者：Masaryk 大学　助教　VYKOPAL, Jan　氏
日　時：令和4年6月20日（月）14：00～15：00
場　所：情報科学系研究棟Ⅲ棟5階　コラボレーションルーム6
　　　　及びオンライン（Webex）

講演要旨：

We will present our research effort and practical experience in designing and using learning environments that scale up hands-on cybersecurity classes: KYPO Cyber Range Platform and Cyber Sandbox Creator. The environments support virtual networks with full-fledged operating systems and devices that emulate real-world systems. The classes are organized as simultaneous training sessions with cybersecurity assignments and learners' assessment. For big classes, with the goal of developing learners' skills and providing formative assessment, we run the environment locally, either in a lab or on learners' own computers. For classes that exercise the developed skills and feature summative assessment, we use an on-premises cloud environment. Our approach is unique in supporting both types of deployment. Moreover, the approach enables learning analytics and educational data mining of learners' interactions with the environment. These analyses inform the instructor about the students' progress during the class and enable the learner to reflect on the finished training. We have released both environments under an open-source license so that other educators can freely use them.

講演者略歴：
Jan Vykopal is an assistant professor at Faculty Informatics, Masaryk University. Jan received the Ph.D. degree from Masaryk University, Brno, in computer systems and technologies in 2013 for network-based intrusion detection in high-speed networks. His current research interest is cybersecurity education, particularly active learning in cybersecurity using cyber ranges and virtual environments. Jan has been designing and organizing various cybersecurity games and exercises, including the Czech national defense exercise, since 2015.

会場での聴講を希望される方または学外の方で参加を希望される方は下記お問合せ先までご連絡ください。

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