Ryerson University

TED ROGERS SCHOOL OF MANAGEMENT

Cybersecurity Research Lab (CRL)

Ryerson's Cybersecurity Research Lab Joins Transnational Consortium to Create Interoperable DLTs Enhanced by AI and IoT

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Ryerson University's Cybersecurity Research Lab (CRL) collaborates with the transnational ITEA3 consortium as part of the Interoperable Distributed Ledger Technology (I-DELTA) project to implement a platform with the potential to transform business interactions and exchanges of information. The consortium also includes Mavennet Systems Inc., a Canadian leader in blockchain and Artificial Intelligence enterprise solutions.

The I-DELTA project aims to create an interoperable Distributed Ledger Technologies (DLT) based platform enhanced by AI, integrating with existing IT systems such as ERP and IoT applications. To achieve this, I-DELTA has assembled a consortium of 19 partners from different countries, including Canada, Czech Republic, Germany, Romania, Spain, and Turkey. These entities will be cooperating in delivering proof-of-concept DLTs in different domains such as smart cities, smart communities, grids, and Industry 4.0 supply chains, all of which will use a common and interoperable architecture.

The main objective of I-DELTA is the acceleration and optimization of document management and tracking systems, sourced by ERP systems in different companies. Using a DLT platform instead of a centralized system, the long delivery times for securely exchanging files and documents will be reduced, and potential errors will be eliminated, ensuring compliance and stakeholder accountability.

For the Canadian consortium, the CRL is focusing on the supply chain management (SCM) challenges that can be solved with a network of interoperable, DLT-enabled global supply chains. More transparency and traceability throughout all the events in the supply chain can help reduce double-spending, financial discrepancies, increase efficiencies, and identify issues and their causes in real-time throughout the supply chain.

"Distributed Ledger Technologies (DLT) has become one of the most promising and impactful innovations in decades. Interoperable DLTs have the potential to completely transform the way our society works, allowing us to move from the "Internet of information era" to the "Internet of Value era", whereby decentralized and immutable contracts define business interactions and secure exchanges of information and value" says Dr. Atty Mashatan, CRL's director and professor of Information Technology Management at Ted Rogers School of Management, Ryerson University.

"I am incredibly honoured to be paving the future of DLTs together with a partner with the caliber of the Ryerson's CRL. The impact and magnitude of this project showcases the leadership Canadian industry and academia is developing in the space at international level." says Patrick Mandic, Co-Founder and CEO of Mavennet Systems Inc.

The I-DELTA project aims on resolving problems associated to DLT, such as inefficient and non-transparent business processes, growing number of security threats, maintaining digital identities, and a lack of interoperability and standards within ledger technologies.

About ITEA

ITEA is a transnational and industry-driven Research, Development and Innovation (R&D&I) programme in the domain of software innovation. ITEA is a Cluster programme of EUREKA, an intergovernmental network for R&D&I cooperation, involving over 40 countries globally. ITEA is the home of software innovation, enabling an international and knowledgeable community to collaborate in funded projects that turn innovative ideas into new businesses, jobs, economic growth and benefits for society. ITEA's mission is to enable businesses, with the involvement of their customers, to create innovative solutions that master the Digital Transition and tackle the major challenges in a way that helps to bring society forward.

Visit the ITEA website to learn more.

About Ryerson's Cybersecurity Research Lab

The Cybersecurity Research Lab (CRL) is an academic research lab at Ted Rogers School of Management at Ryerson University. The CRL conducts cutting-edge information security research, trains the next generation of cybersecurity experts, and is spearheading a crucial and

ongoing dialogue with the Information and Computer Technology (ICT) industry in Canada. The lab is led by Dr. Atefeh (Atty) Mashatan, an Information Security Researcher and Solutions Architect.

The CRL is recognized for its strong partnerships and linkages to industry. Its mission is to help organizations, large and small, to find innovative and cost effective cyber risk mitigation strategy and solutions. The lab's research expertise is in Cryptography, Blockchain Technology, Quantum-resistant solutions, Machine Learning and its applications in cybersecurity, Enterprise Security Architecture, and Security of Internet of Things (IoT).

For more information about the CRL, please visit www.ryerson.ca/crl

About Mavenet

Mavennet Systems Inc. is a Canadian solutions architect that builds scalable, interconnected blockchain solutions for private enterprises. Through leading solutions like QCAD, MetalTrail and Neoflow, Mavennet is helping companies realize impactful blockchain opportunities through accessible technology offerings, best-in-class implementation and top-tier support services. To learn more about Mavennet's work in accelerating the adoption of blockchain and AI, visit http://www.mavennet.com.

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Information about the partners and project contact details can be found at the I-Delta ITEA3 page.

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