

Protecting Critical Systems Risk Assessment of OT and IT Infrastructure

As industries evolve and adopt more interconnected technologies, the risks to operational technology (OT) and information technology (IT) systems are growing. Remote terminal units (RTUs), programmable logic controllers (PLCs), and Industrial Internet-of-Things (IIoT) devices now work together in complex networks — creating both new opportunities and new challenges in cybersecurity.

To support stronger and more resilient critical infrastructure, we are collaborating with the University of Saskatchewan to advance how cybersecurity risks are identified and managed across OT and IT environments.

This project is focused on developing practical, industry-ready tools and techniques to automate the risk analysis of individual devices and improve ongoing risk monitoring across entire networks. By working closely with industry partners, the research will deliver solutions that can be integrated into existing systems — enhancing protection strategies and supporting informed decision-making.

Through this initiative, we are helping drive innovation in cybersecurity, providing organizations with the tools they need to strengthen their operations and stay ahead of emerging threats.

Building smarter cybersecurity solutions for interconnected operations.

Through collaboration with leading researchers, we are advancing practical tools to strengthen the security of operational technology (OT) and information technology (IT) networks — helping industry partners protect critical systems against emerging threats.

Proponent: *University of Saskatchewan* **Project Duration:** June 2024 to July 2026

Project Cost: \$222,000

IMII Contribution:\$90,000MITACS Contribution:\$120,000Industry In-Kind Contribution:\$12,000

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