A HOTBED OF INNOVATION
Cybersecurity Ecosystem in New Brunswick

Aiming to transform its economic landscape toward a knowledge-based economy, New Brunswick is strategically focusing on technological innovation in cybersecurity.

Local government agencies, namely Opportunities New Brunswick and CyberNB, are currently working with industry, other government agencies, and universities to establish New Brunswick's leadership in Canada as a world-class cybersecurity hub.

The University of New Brunswick has by far the largest network security research group in Canada and is well poised to lead this effort.

Learn about our corporate and academic memberships: **cic@unb.ca**

Get access to Canadian Institute for Cybersecurity datasets and tools: **www.unb.ca/cic/datasets/**

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Canadian Institute for Cybersecurity

CYBERSECURITY
INNOVATION
IN NEW BRUNSWICK

DR. ALI GHORBANI
Director of the CIC and Tier 1 Canada Research Chair in Cybersecurity

Dr. Ghorbani leads efforts at the Canadian Institute for Cybersecurity (CIC). He has published over 200 peer-reviewed articles and supervised over 160 research associates, postdoctoral fellows, graduate and undergraduate students. He is co-inventor of three awarded patents in the area of network security and web intelligence.

ABOUT CIC

The province of New Brunswick, located in Eastern Canada, is strategically focusing on technological innovation in cybersecurity.

Since 2000, the University of New Brunswick has played an integral role in cybersecurity research and innovation in Canada. Today, the University has the largest network security research group in the country, and is well positioned to lead this effort through the Canadian Institute for Cybersecurity (CIC).

The Canadian Institute for Cybersecurity is the first of its kind to bring together researchers and practitioners from across the academic spectrum to share innovative ideas, create disruptive technology and carry out groundbreaking research into the most pressing cybersecurity challenges of our time.

The Institute, housed at the University of New Brunswick, is working with industry, the federal government, and provincial governments to solidify Canada's position as a world-class cybersecurity hub for innovation and talent development.

Certificate Programs
Cybersecurity 101 (2-5 days)
Cybersecurity bootcamp (20 wks)
(CCNB and IBM)

Undergraduate
Bachelor of computer science with specialization in cybersecurity

Graduate
Master of applied cybersecurity

A HUB FOR TALENT
Closing the Skills Shortage Gap

Training and education in cybersecurity are falling short of current, and even future, needs. The present cybersecurity skills shortage in Canada leaves the public, private sectors, and governments vulnerable to attack. The science of cybersecurity is about managing risk and avoiding surprises.

At the Institute, we view cybersecurity as a practical problem requiring practical solutions. For the last two decades, our institution has drawn upon multimillion dollar, industry-sponsored R&D in network and systems security to build cybersecurity solutions to protect cyberspace. We are a catalyst for creating an efficient cost-sharing mechanism through which educators, researchers and practitioners can work together with the private sector to advance cybersecurity knowledge and capabilities.

A HUB FOR INNOVATION

We have a team of nearly 50 researchers, technical staff, and graduate students using state-of-the art infrastructure – we are bringing together researchers from across the academic spectrum to share innovative ideas and carry out ground-breaking research into the most pressing cybersecurity challenges of our time.

The University of New Brunswick was among the first to recognise cybersecurity as an industry, and prompted the creation of Q1 Labs in 2000, which was acquired by IBM in 2011.

OUR INDUSTRY PARTNERS

Bell, TD, NB Power, J.D. Irving, McCain, IBM Security, Bulletproof, Canarie, SecurKey, F6 Networks, Canadian Security Establishment, The Co-operators, City of Fredericton.

CIC PROJECTS

Smart Grid, Big Data, Security Solutions, IDS/IPS, Device Profiling, User Profiling, Honeynet, System Security, Deep Web, Detection, Actionable Intelligence, Malware Analysis, Fog/Cloud

> " UNB helped grow cybersecurity innovation in New Brunswick, and we're now poised to bring our expertise to this critical global industry. "

- Dr. Ali Ghorbani, Canada Research Chair in Cybersecurity and Director of the Canadian Institute for Cybersecurity.