

NEAL KUSHWAHA

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PROFILE

Mr. Kushwaha's background focuses on (1) cyber and its relation to international law (Law of Armed Conflict and International Humanitarian Law) and (2) data centre (IT infrastructure, IT security, physical data centre design, power, cooling, business processes, and IT consolidation). He is currently working on his PhD on cyber and international law.

SUMMARY OF QUALIFICATIONS

With over 24 years of experience in IT, Mr. Kushwaha has strong IT operational knowledge. He has successfully moved 30 data centres covering 3 continents. He was responsible for building the IT Operations team and business at the Bank of Canada where his data centre design and commissioning experience was put to the test and was recognised and commended by the adviser to the Governor. Over the last two decades, he has been focused on delivering projects for several Federal Canadian Government departments, agencies, and services along with large private sector organisations covering facility construction to IT consolidation including cloud migrations.

Mr. Kushwaha's experience doesn't stop there, he has managed a wide range of project and reported to various levels of management. He enjoys juggling the time, cost, scope and quality of any project. He has strong negotiation skills and enjoys delivering presentations to all levels of staff and management.

Mr. Kushwaha is often requested to advise and guide private and public organisations with their cyber challenges as it relates to cybercrime versus cyber espionage, cyber sabotage, and cyber warfare. He delivers an annual conference where topics cover cyber, international law, data centres, cloud convergence, security, emissions, disaster scenarios/stories, and much more. Mr. Kushwaha holds multiple valid security clearances (Government of Canada and NATO), is certified by the Uptime Institute, and is fully bilingual.

Recently, Mr. Kushwaha has written papers on cyber issues and how they relate to the International Law of Armed Conflict and International Humanitarian Law. His papers were peer reviewed, published, and presented at the U.S. Army's University of North Georgia, the 2018 European Conference on Cyber Warfare and Security at the University of Oslo (Norway), and the 2018 Knowledge Management conference at the University of Pisa (Italy). He holds an annual conference in Ottawa to share knowledge and educate people in the industry on security (physical, logical, personnel, and emissions), technology, and cyber matters with speakers from Europe, USA, and Canada.

Besides that, Neal is also an accomplished mountaineer with over 28 years of climbing experience. After supporting a daring rescue at 6,700 m, he finally summited mount Everest at 05:35 AM (local time) on 23 May 2018. In 2014, Neal attempted to climb Mount Lhotse (4th highest peak at 8,516 m / 27,940 ft) but was interrupted by an avalanche that took 16 lives. Neal not only discusses cyber and data centre matters, but is regularly called to deliver keynotes on his mountaineering accomplishments and challenges. He delivers exciting talks complete with images and videos while relating his climbing experience to business and even the cyber industry. On 28 June 2019, Mr. Kushwaha was awarded the Silver Medal of Bravery for risking his life to save another on Mt Everest.

PROFESSIONAL DEVELOPMENT

- ✓ CyCon (2017, 2020) – NATO Cooperative Cyber Defence Centre Excellence (CCDCOE) – Tallinn Estonia
- ✓ Data Centre Architecture Roadmap (2015-2019) – Ottawa Canada
- ✓ International Institute for Applied Knowledge Management (IIAKM) Knowledge Management conference (2019) – Warsaw University of Life Sciences, Faculty of Economics, Poland Warsaw; Received award for "Best Research Idea" for presenting research on "Cyber as an Economic Enabler"
- ✓ European Conference on Cyber Warfare and Security (ECCWS, 2018) – University of Oslo, Oslo Norway

- ✓ International Institute for Applied Knowledge Management (IIAKM) Knowledge Management conference (2018) – University of Pisa, Pisa Italy
- ✓ Civil-Military Symposium (2017) – US Army, University of North Georgia Military College, North Georgia USA
- ✓ Accredited Data Centre Tier Specialist (2010) – Uptime Institute, Seattle WA
- ✓ New Data Center Designs and ISS Technology Update (2010) – HP, Houston TX
- ✓ Operationalizing Strategic Plans (2007) – Concordia University – John Molson School of Business
- ✓ Gartner Data Centre World Conference (2006) – London, UK
- ✓ ITIL V2 Foundation (2005) – IMP Solutions, Ottawa, ON
- ✓ COMPAQ ASE Training (1998) – Compaq Canada, Vancouver, BC
- ✓ Electrical Engineering (1992-1995) – University of Saskatchewan

PUBLICATIONS

- ✓ Is cyber shape-shifting?, US Army, University of North Georgia Military College, (2017)
The US Army selected and published this paper which discusses the how cyber may not be a Domain of Warfare. The paper was selected, presented, and published at the University of North Georgia's Military College on 8-9 November 2017 in Dahlonega, USA.
- ✓ Cyber weapons and the U.S. Constitution, European Conference on Cyber Warfare and Security, (2018)
Upon a blind peer review by the editorial board of the conference, the paper was selected, presented, and published at the 17th annual European Conference on Cyber Warfare and Security (ECCWS) was hosted by the University of Oslo, department of Informatics. It was presented on 28-29 June 2018 in Oslo, Norway.
- ✓ Buyer's remorse of cyber security, IIAKM 2018 Knowledge Management conference (2018)
Upon a double-blind peer review by the editorial board of the conference, the extended abstract was selected, presented, and published at International Institute for Applied Knowledge Management's (IIAKM) 2018 Knowledge Management (KM) conference, hosted by the University of Pisa's department of Economics and Management. It was presented on 20-23 June 2018 in Pisa, Italy.
- ✓ Crown in the clouds: a Canadian data sovereignty crisis, International Conference on Cyber Warfare and Security (ICCWS), (2019)
Upon a double blind peer review by the editorial board of the conference, the paper was selected without any changes for presentation and publication at the 15th annual International Conference on Cyber Warfare and Security (ICCWS), hosted by the Center for Cybersecurity Education and Research (CCSER), Old Dominion University (ODU) on 12-13 March 2020 in Norfolk, Virginia. Due to COVID-19, the presentation was not delivered.
- ✓ Up in the air: ensuring Government data sovereignty in the cloud, NATO CCDCOE Cyber Conflict Conference 2020 (2020)
Upon a double blind peer review by the editorial board of NATO CCDCOE 12th international CyCon 2020 conference (Cooperative Cyber Defence Centre of Excellence Cyber Conflict conference), the paper was selected for publication and presentation on 26-29 May 2020 in Tallinn, Estonia. Unfortunately, due to the COVID19 pandemic, the conference was cancelled, however, the proceedings were still published and an online event held for 3 days.

SECURITY CLEARANCE

Mr. Kushwaha carries the following active government of Canada authorised clearances under file number 95520634.

- ✓ Enhanced Reliability
- ✓ SECRET (Level II)
- ✓ TOP SECRET (Level III)
- ✓ TOP SECRET (Level III) with SIGINT special access