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Confirmation Number: 1564466

Template: Full CV

Dr. Fahmi Jaafar

Correspondence language: English

Sex: Male

Date of Birth: 11/19

Designated Group: Visible Minority

Canadian Residency Status: Canadian Citizen

Contact Information

The primary information is denoted by (*)

Address

Primary Affiliation (*)

Université du Québec à Chicoutimi
555 Bd de l'Université
Chicoutimi Quebec G7H 2B1
Canada

Temporary

Concordia University
1455 Boulevard de Maisonneuve O
Montreal Quebec H3G 1M8
Canada
2019/06/01 - 2022/06/01

Telephone

Mobile (*)	1-514-5688163
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Email

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Website

Personal	http://fehmi_jaafar.net/
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Dr. Fahmi Jaafar

Language Skills

Language	Read	Write	Speak	Understand	Peer Review
English	Yes	Yes	Yes	Yes	Yes
French	Yes	Yes	Yes	Yes	Yes

Degrees

- 2015/10 - 2016/8 Post-doctorate, Post-doctorate, Cybersecurity, École Polytechnique de Montréal
 Degree Status: Completed
 Supervisors: Gabriela Nicolescu, 2015/10 - 2016/8
- 2014/1 - 2015/4 Post-doctorate, Post-doctorate, Computer Sciences and Cybersecurity, Queen's University at Kingston
 Degree Status: Completed
 Supervisors: Mohammad Zulkernine, 2014/1 - 2015/4
- 2009/9 - 2013/12 Doctorate, Ph.D., Computer Sciences, Université de Montréal
 Degree Status: Completed
 Thesis Title: Analyzing the Software Systems Evaluation and Quality
 Supervisors: Sylvie Hamel, 2009/9 - 2013/12; Yann-Gaël Guéhéneuc, 2009/9 - 2013/12
- 2007/9 - 2009/7 Master's Thesis, Masters of Science, Computer sciences, Université de Tunis
 Degree Status: Completed
 Thesis Title: Using Text Mining and Knowledge Management in Web Services Adaptation
 Supervisors: Rim Fayez, 2007/9 - 2009/7
- 2003/9 - 2007/6 Bachelor's, Bachelor of Science, Computer Engineering, Université de Tunis
 Degree Status: Completed
 Thesis Title: Machine Learning Techniques to Improve the Electronic Documentation Management
 Supervisors: Jalel Akaichi, 2006/9 - 2007/6

User Profile

Researcher Status: Researcher

Key Theory / Methodology: Applied Machine Learning - Pattern Recognition - Statistical Analysis - Anomaly Detection

Research Interests: Information Security - Internet of Things - Privacy Assurance

Research Specialization Keywords: Cyber Security, Internet of Things, Software Quality, Software Engineering

Disciplines Trained In: Computer Engineering and Software Engineering

Research Disciplines: Computer Engineering and Software Engineering

Areas of Research: Computer Systems, Information Systems

Fields of Application: Foundations and Knowledge Acquisition, Security

Employment

2021/6	Associate Professor Université du Québec à Chicoutimi Full-time, Associate Professor
2019/2 - 2022/7	Expert Consultant Auditor General of Canada Part-time Conduct cyber security audits to examine whether gouvernement's systems and practices provide reasonable assurance that its assets are safeguarded, its resources are managed efficiently, and its operations are carried out effectively.
2017/12 - 2021/8	Researcher Research and Developpement, Computer Research Institute of Montréal Full-time Elaborate industrial research projects with industrial partners and universities - Supervise students from undergraduate and graduate programs in Canadian Universities - Develop innovative technologies and approaches in cyber security and applied machine learning.
2016/8 - 2019/12	Adjunct Professor Department of Information Systems Security and Assurance, Faculty of Management, Concordia University of Edmonton Full-time, Adjunct, Assistant Professor Tenure Status: Non Tenure Track Supervise graduate students who are working toward Master degrees - Teach courses in Computer Science and Information Security - Plan lessons and assignments - Work with colleagues to develop the curriculum for the Master degree and certificate programs - Assess students' progress by grading papers, tests, and other work - Serve on academic and administrative committees that review and recommend policies and make budget decisions.
2015/3 - 2016/8	Research Scientist Research and Development, Ubitrak Inc. Full-time Discover, analyze and track advanced cyber intrusion campaigns and document lessons learned - Lead applied research projects in cyber security from specification to realization within timely and budgetary constraints.
2014/4 - 2015/4	Software Developer Analyst OMP Music Part-time Participate in the creation of a new nomenclature and teaching system that makes the process of learning, playing, and teaching music much easier and faster using Big Data Analytic.
2010/1 - 2013/12	Teaching assistant Computer Science and Operations Research, Université de Montréal Part-time, Term Tenure Status: Non Tenure Track Prepare labs, assignments, and oral presentation of material - Provide learning tasks and supervise students working in groups.

2011/9 - 2011/12	Lecturer Department of Computer Engineering, École Polytechnique de Montréal Full-time, Sessional, Lecturer Tenure Status: Non Tenure Track Lecturer for INF3410: Requirements Specification and Systems Analysis (undergraduate course)
2006/1 - 2007/6	IT Analyst/Developer Le Campus Numérique francophone de Tunis, Agence Universitaire de la Francophonie Part-time Research, design, implement and manage software programs - Test and evaluate new programs - Identify areas for maintenance in existing programs - Write and implement efficient code.

Affiliations

The primary affiliation is denoted by (*)

(*) 2021/6 Associate Professor, Université du Québec à Chicoutimi

Research Funding History

Awarded [n=1]

2022/7 - 2025/12 Ensure the Cyber Resilience in Industry 4.0, Grant

Principal Investigator

Funding Sources:

Ideo Concept (Canadian dollar)

2022/7 - 2025/12 Mathematics of Information Technology and Complex Systems (MITACS)
Accelerate Program
Total Funding - 90,000
Portion of Funding Received - 90,000 (Canadian dollar)
Funding Competitive?: Yes

Courses Taught

2023/01/05	Lecturer, Université du Québec à Chicoutimi Course Title: 8INF968: Atelier pratique en cybersécurité I Course Code: 8INF968 Course Level: Graduate
2022/01/04	Lecturer, Université du Québec à Chicoutimi Course Title: 8INF917: Sécurité informatique pour l'Internet des Objets Course Code: 8INF917 Course Level: Graduate
2021/10/05	Lecturer, Université du Québec à Chicoutimi Course Title: Introduction à la cybersécurité
2021/09/01	Lecturer, Université du Québec à Chicoutimi Course Title: 8INF406: Informatique et industrie 4.0 Course Code: 8INF406 Course Level: Undergraduate

2019/01/01 - 2019/12/31	Lecturer, Concordia University of Edmonton Course Title: ISSM 536: Digital Forensics Course Level: Graduate Number of Credits: 3 Lecture Hours Per Week: 3 Tutorial Hours Per Week: 4
2018/01/01 - 2019/12/31	Lecturer, Concordia University of Edmonton Course Title: ISSM 525: Securing an E-Commerce Infrastructure Course Level: Graduate Number of Credits: 3 Lecture Hours Per Week: 3 Tutorial Hours Per Week: 4
2016/08/01 - 2019/12/31	Lecturer, Concordia University of Edmonton Course Title: ISSM 551: Disaster Recovery and Planning Course Level: Graduate Number of Credits: 3
2017/01/01 - 2018/04/30	Lecturer, Concordia University of Edmonton Course Title: ISAM 521: Information Systems Audit Course Level: Graduate Number of Credits: 3 Lecture Hours Per Week: 3 Tutorial Hours Per Week: 4
2010/09/06 - 2013/12/20	Teaching Assistant, Université de Montréal Course Title: IFT 1015 - Programmation I
2013/01/01 - 2013/04/30	Lecturer, École Polytechnique de Montréal Course Title: LOG 3410: Software Requirements Specification Course Level: Undergraduate Number of Credits: 3 Lecture Hours Per Week: 3 Tutorial Hours Per Week: 4
2013/01/08 - 2013/03/29	Teaching Assistant, École Polytechnique de Montréal Course Title: INF1010: Object Oriented Programming
2012/10/01 - 2012/11/09	Lecturer, Université de Montréal Course Title: IFT 1025: Advanced Web Programming Course Level: Undergraduate Number of Credits: 3 Lecture Hours Per Week: 3
2011/11/06 - 2012/09/29	Lecturer, École Polytechnique de Montréal Course Title: LOG 4430: Software Architecture and Advanced Design

Course Development

2021/12	Lecturer and Course Development, Université du Québec à Chicoutimi Course Title: 8PRO310 - Industrial Computing
2016/1	Lecturer and Course Development, Research and Development, Ubitrak Inc. Course Title: Secure Software Development Course Level: Graduate Secure development in the early stages of the software development life cycle - Learn secure coding practices, standards and guidelines

Program Development

2022/9	Member of the Program Advisory Committee, Université du Québec à Chicoutimi Program Title: Bachelor's degree in computer science - specialization in defensive cybersecurity Course Level: Undergraduate
2022/9	Member of the Program Advisory Committee, Université du Québec à Chicoutimi Program Title: Certificate in Defensive Cybersecurity Course Level: Undergraduate
2022/9	Member of the Program Advisory Committee, Université du Québec à Chicoutimi Program Title: The Cybersecurity Concentration of the Master's in Computer Science Course Level: Graduate

Student/Postdoctoral Supervision

Bachelor's [n=5]

2022/1 - 2022/8 Co-Supervisor	Maha Montassar (Completed) , the Ecole Nationale Des Sciences De L'Informatique Thesis/Project Title: Abnormal Behavior Detection in Surveillance Videos
2022/1 - 2022/10 Co-Supervisor	Ranim Rahali (Completed) , The National Engineering School of Sousse Thesis/Project Title: Detection of malicious scams in IoT using machine learning techniques
2021/1 - 2021/9 Co-Supervisor	Yasmine Bouzid (Completed) , Polytechnique Tunisie Thesis/Project Title: Secure Sensitive Information in Data-Centric Security IoT Networks with Machine Learning Based Intrusion Detection Systems
2021/1 - 2021/12 Co-Supervisor	Hajer Bouani (Completed) , ENSI - École Nationale des Sciences de l'Informatique Thesis/Project Title: Blockchain-based Privacy-Preserving for Computer Vision in IoT infrastructures
2020/1 - 2021/6 Co-Supervisor	Khaireddine Mejri (Completed) , Mediterranean Institute of Technology Student Degree Start Date: 2019/1 Thesis/Project Title: IoT Energy Consumption Analysis for Malware Infection Detection.

Master's Thesis [n=16]

2022/1 Co-Supervisor	Hadja FORGO (In Progress) , Quebec University at Chicoutimi Thesis/Project Title: Securing IoT Communication using Deep Learning.
2021/1 Co-Supervisor	Riadh Ben Chabane (In Progress) , École de technologie supérieure ÉTS Thesis/Project Title: Securing the Federated Learning
2020/9 - 2022/6 Co-Supervisor	Eniela Vela (Completed) , Concordia University Thesis/Project Title: Detecting Cyber Attacks in the Internet of Things
2018/1 - 2019/4 Principal Supervisor	Samuel Ubaneche (Completed) , Concordia University of Edmonton Student Degree Start Date: 2018/1 Thesis/Project Title: Specification and implementation of a new data privacy assurance block-chain model. Present Position: Mainframe Infrastructure Engineer, BMO Financial Group

- 2017/9 - 2018/6
Principal Supervisor Babajide Adegoke (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2018/9
Thesis/Project Title: Exploring the use of pre-shared key in the authentication process of LTE base stations
Present Position: Information Security Professional
- 2017/9 - 2018/7
Principal Supervisor Ranbir Bali (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2018/1
Thesis/Project Title: Lightweight authentication for MQTT by using topic-based self-key agreement and block cipher
Present Position: Senior Information Security Analyst, NTT DATA Services
- 2017/6 - 2018/12
Co-Supervisor Gurpreet Kaur (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2017/5
Thesis/Project Title: Detecting blind cross-site attacks using machine learning
Present Position: IT Analyst, Alberta Health Services
- 2017/5 - 2018/12
Principal Supervisor Caesar Jude Clemente (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2017/5
Thesis/Project Title: Solving Software Insecurity
Present Position: Faculty member, Douglas College
- 2017/4 - 2018/9
Co-Supervisor Gurjot Balraj Singh (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2017/1
Thesis/Project Title: Analysis of Overhead Caused by Security Mechanisms in IaaS Cloud
Present Position: Enterprise Security Operations Analyst, Canadian Pacific Railway
- 2017/1 - 2018/6
Principal Supervisor Walter Isharufe (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2018/5
Thesis/Project Title: Study of Security Issues in Platform-as-a-Service (PaaS) Cloud Model
Present Position: Information Security Analyst - Governance, Risk Management and Compliance, Bennett Jones
- 2017/1 - 2018/4
Principal Supervisor Samip Dhakal (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2017/5
Thesis/Project Title: Blockchain for authentication in IoT
Present Position: Sécurité Analyst, eSentire Inc.
- 2017/1 - 2018/6
Co-Supervisor Gagandeep Singh (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2017/1
Thesis/Project Title: An Analysis of Android Malware Behavior
Present Position: IT Analyst
- 2016/9 - 2017/12
Co-Supervisor Manjinder Singh (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2018/6
Thesis/Project Title: Analyzing overhead from security and administrative functions in virtual environment
Present Position: IT Consultant, Government of Alberta
- 2016/9 - 2017/12
Principal Supervisor Pratibha Singh (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2017/9
Thesis/Project Title: Enhancing Bio-metric Security with Combinatoric Multi-Fingerprint Authentication Strategies
Present Position: Program analyst

- 2016/5 - 2017/12
Principal Supervisor Anis Kothia Chhotubhai (Completed) , Concordia University of Edmonton
Student Degree Start Date: 2018/1
Thesis/Project Title: Integration and automation of subdomain enumeration and service scanning tools to improve overall information gathering process
Present Position: Senior Cyber Security Analyst, Alberta Health Services
- 2014/6 - 2015/12
Academic Advisor Maryam Davari (Completed) , Queen's University
Student Degree Start Date: 2014/5
Thesis/Project Title: Classifying and Predicting Software Security Vulnerabilities Based on Reproducibility
Present Position: Research assistant, Purdue University
- Doctorate [n=5]**
- 2022/9
Co-Supervisor Farideh Sanei (In Progress) , Concordia University
Thesis/Project Title: Quality and Security Models in IoT
- 2022/1
Principal Supervisor Rachel Ladouceur (In Progress) , Quebec University at Chicoutimi
Student Degree Start Date: 2022/1
Thesis/Project Title: Detection of cyber influence activities.
- 2021/9
Principal Supervisor Amine Barrak (In Progress) , Quebec University at Chicoutimi
Thesis/Project Title: Secure DevOps and MLOps
- 2020/9
Co-Supervisor Abubakr Ibrahim (In Progress) , Laval University
Student Degree Start Date: 2020/9
Thesis/Project Title: Spam detection using XAI
Present Position: Postdoctoral researcher in Synchronmedia Lab, École de Technologie Supérieure at Montreal
- 2014/6 - 2015/6
Academic Advisor Md Shahrear Iqbal (Completed) , Queen's University
Student Degree Start Date: 2015/1
Thesis/Project Title: Smartphone Security and Privacy
Present Position: Ph. D. student

Post-doctorate [n=1]

- 2020/6 - 2021/2
Principal Supervisor Manel Grichi (Completed) , Computer Research Institute of Montreal
Thesis/Project Title: The Security in Software Systems

Staff Supervision

- Number of Scientific and Technical Staff: 30
Number of Visiting Researchers: 1
Number of Highly Qualified Personnel in Research Training: 29
Number of Volunteers: 5

Event Administration

- 2020/2 - 2020/12
Steering Committee Member, IoT Security Forum, Workshop, Internet Society Canada Chapter
The organization and financial planning of the Forum. Specification of the key ideas of the Forum and its strategic direction Making decisions, especially around the Forum venue and date, the budget and the overall technical content of the Forum.

2020/1 - 2020/8	Program Chair, The 2nd Asia IoT Technologies Conference, Conference Ensuring that a well-balanced, high-quality technical program is organized and presented at the conference. Developing the conference's call for papers. Managing the peer review process and the conference schedule.
2019/1 - 2020/1	Program Chair, International Conference on Multimedia and Image Processing, Conference Ensuring that a well-balanced, high-quality technical program is organized and presented at the conference. Developing the conference's call for papers. Managing the peer review process and the conference schedule.
2017/1 - 2019/6	Organization Committee Member, The Annual Information Security and Assurance Research Event at Concordia University of Edmonton., Workshop
2018/11 - 2019/5	Co-organizer and Program Manager, Artificial Intelligence and Cyber-security Workshop under the 87th ACFAS Congress., Workshop
2018/6 - 2018/10	Co-organizer, Forum In-Sec-M, Conference

Editorial Activities

2020/6	Reviewer, Transactions on Dependable and Secure Computing, Journal
2022/10 - 2023/12	Reviewer, IEEE Transactions on Network and Service Management, Journal
2022/3 - 2023/6	Editor, Blockchain and Artificial Intelligence Based Solution to Enhance the Privacy in Digital Identity and IoTs, Book
2020/11 - 2021/7	Editor, Intrusion detection systems for avionics networks and bus technologies, Report
2020/12 - 2021/5	Editor, 5G Deployment in Smart Cities : Threats Analysis, Report
2019/5 - 2020/6	Editor, Social Media: a review of privacy, security and disinformation issues, Book
2019/6 - 2019/12	Reviewer, IEEE Transactions on Industrial Informatics, Journal
2019/6 - 2019/12	Reviewer, Information and Software Technology, Journal
2019/6 - 2019/11	Reviewer, The 30th International Symposium on Software Reliability Engineering (ISSRE 2019), Conference Abstract
2018/8 - 2019/9	Reviewer, IEEE Embedded Systems Letters, Journal
2018/5 - 2019/4	Editor, Identification of the source of a malicious cyber activity, Report
2018/5 - 2018/7	Reviewer, FM 2019: 23rd International Symposium on Formal Methods – 3rd World Congress on Formal Methods, Conference Abstract
2017/11 - 2018/5	Reviewer, Journal of Systems and Software, Journal
2017/1 - 2017/10	Reviewer, International Journal of Applied Engineering Research, Journal
2014/7 - 2015/3	Reviewer, Software Quality Journal, Journal
2014/1 - 2014/4	Reviewer, 2014 Eighth International Conference on Software Security and Reliability (SERE), Conference Abstract

Expert Witness Activities

- 2019/10 - 2021/6 Committee Member and Contributor, Canadian Data Governance Standardization Collaborative, Canada, Ottawa
The Collaborative spent two years working together to build a standardization Roadmap that will benefit Canadian organizations and citizens. The Canadian Data Governance Standardization Roadmap tackles the challenging questions we face when we talk about standardization and data governance. The Roadmap describes the current and desired Canadian standardization landscape and makes 35 recommendations to address gaps and explore new areas where standards and conformity assessment are needed.
- 2018/5 - 2019/2 Contributor and Member of the Orientation Committee, Cyber-security for 4.0 Environments in Quebec., Canada, Montreal
Promote the development of cyber-security in an industry 4.0 environment - Identify the cyber-security challenges related to the Industry 4.0.
- 2019/10 - 2019/1 Contributor, The Digital Joint Research and Innovation Benchmark., Canada, Montreal
- Identify best practices in cybersecurity in the advanced manufacturing sector including critical infrastructure, evaluate their level of use and promote their adoption.

Research Funding Application Assessment Activities

- 2020/1 External Reviewer, Discovery Grants (individual) program - NSERC, Academic Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC)
Number of Applications Assessed: 1
- 2019/1 - 2023/12 External Reviewer, Application Evaluation, Academic Reviewer, Mathematics of Information Technology and Complex Systems -MITACS
Number of Applications Assessed: 6
- 2018/1 - 2019/12 Committee Member, Scholarship Committee, Academic Reviewer, The Computer Research Institute of Montreal
Number of Applications Assessed: 20

Organizational Review Activities

- 2018/12 - 2020/12 External Expert and Auditor, Auditor General of Quebec - Le Vérificateur Général du Québec
Inspect and evaluate the information security of a set of **provincial organisations**. Evaluate the efficiency, effectiveness and compliance of operation processes with corporate security policies and related government regulations.
- 2019/9 - 2020/4 Auditor, In-Sec-M the Canadian Cluster of the Cyber-security Industry
Computer Security Evaluation and Audit of Canadian Organizations during a set of Strategic Interventions.
- 2019/1 - 2019/6 Reviewer, Télé-université
Evaluation of an Undergraduate Program in Computer Science at **TÉLUQ University**, part of the Québec University system.

Event Participation

2021/5	Speaker, Seminar on AI and Cybersecurity of Institute Intelligence and Data - Laval University, Seminar
2021/12 - 2022/5	Speaker, The Information Systems Audit and Control Association - ISACA Seminars, Seminar
2019/6 - 2019/10	Presenter, Cyber-security and Personal Data, Conference
2018/11 - 2019/2	Speaker, IT Connect 2019, Workshop
2017/12 - 2018/2	Presenter, Techno Scientific Day, Seminar

Community and Volunteer Activities

2017/1 - 2018/12	Volunteer, Action For Healthy Communities Assistance to help newcomers: learn about their community, navigate access to mainstream and community services and resources, develop stronger connections in their new community in Canada and connect to new networks and support groups.
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Knowledge and Technology Translation

2017/12 - 2018/12	Project Manager and Principal Researcher, R&D Collaboration with Industry Group/Organization/Business Serviced: PM SCADA Target Stakeholder: Industry/Business-Medium (100 to 500 employees) Outcome / Deliverable: Development of an intelligent penetration test application. Evidence of Uptake/Impact: This project aims to integrate machine learning and artificial intelligence techniques into the PEN testing framework to reduce PEN testing human resource requirements while maximizing test coverage.
2018/4 - 2018/5	Contributor and Panelist, R&D Collaboration with Industry Group/Organization/Business Serviced: Le Centre Facilitant la Recherche et l'Innovation dans les Organisations (CEFRIO) Target Stakeholder: Industrial Consortium Outcome / Deliverable: Supporting companies and organizations in transforming their business processes and practices through the appropriation and use of digital technology.
2015/1 - 2016/8	Project Manager and Researcher, R&D Collaboration with Industry Group/Organization/Business Serviced: Ubitrak Inc. Target Stakeholder: Industry/Business-Small (<100 employees) Outcome / Deliverable: Real Time Detection of Privilege Escalation by an Attacker.
2014/7 - 2015/3	Software Developer Analyst, Consulting for Industry Group/Organization/Business Serviced: OMP Music Target Stakeholder: Industry/Business-Small (<100 employees) Outcome / Deliverable: Creation of a new nomenclature and teaching system that makes the process of learning, playing, and teaching music much easier and faster using Big Data Analytic.
2014/6 - 2015/3	Research Advisor, R&D Collaboration with Industry Group/Organization/Business Serviced: Irdeto Target Stakeholder: Industry/Business (>500 employees) Outcome / Deliverable: Click Fraud Detection & Protection Tool.

International Collaboration Activities

- 2022/1 - 2023/12 Contributor and Participant, Morocco
Cyber4d : Cyber for Development
- 2018/6 - 2020/9 Research Program Adviser, Germany
Specifying a novel hypervisor specially designed for real-time embedded systems to be secure, reliable and efficient.
- 2018/3 - 2018/8 Contributor and Participant, Canada
Participation and writing of the Regional Leaders' Summit (RLS 2018) Digital Joint Research and Innovation Benchmark. The Regional Leaders Summit (RLS) is a forum comprising seven regional governments: Bavaria (Germany), Georgia (USA), Québec (Canada), São Paulo (Brazil), Shandong (China), Upper Austria (Austria), and Western Cape (South Africa). The main objective of the Benchmark was to share to set a common ground. It was also the occasion to witness a diversity of practices and solutions and identifying path for future collaborations.
- 2018/5 - 2018/5 Presenter and Researcher, Canada
Presenting the Research & Development activities at the Computer Research Institute of Montreal for an Indian government delegation.
- 2012/11 - 2013/2 Visiting Researcher, Belgium
Creating a long term collaboration between Montreal University in Canada and Université Catholique de Louvain in Belgium to develop new software quality analysis approaches.

Committee Memberships

- 2022/9 Committee Member, The Scholarships Program Committee, Université du Québec à Chicoutimi
- 2021/12 Committee Member, Advisory Committee Member, Université du Québec à Chicoutimi
Develop and update Graduate and Undergraduate programs in Cybersecurity
- 2019/1 Committee Member, Advisory Committee Member, Auditor General of Quebec -
Vérificateur Général du Québec
- 2018/6 - 2019/3 Committee Member, Technical Committees, The 3rd International Conference on
Cryptography, Security and Privacy
- 2018/3 - 2019/3 Committee Member, Scientific Committee, The IEEE International Conference on Big
Data, Deep Learning and Fighting Cyber Terrorism
- 2018/6 - 2018/10 Committee Member, The In-Sec-M Cyber Security Forum Organizing Committee, In-Sec-
M In-Sec-M the Canadian cluster of the cyber-security industry
Forum Planning/Local Arrangements - Panelist suggestion and invitation - Forum Program
Planning.
- 2018/1 - 2018/8 Committee Member, The Graduate Scholarships Program Committee, Computer
Research Institute of Montréal
Participate in the review of applications and provide recommendations based on the
selection criteria - Reading, scoring, and providing in-depth evaluations for a subset of
applications - Recommending potential new members.

Other Memberships

2019/1	Member of the Foundations of Data Governance, Standards Council of Canada Contribute in International Standards for the Internet of Things and related technologies - Contribute in Canadian Standards for the Foundations of Data Governance
2017/12	Employee Campaign Member, Centraide of Greater Montreal Support the activity of raising funds to improve the quality of life in Greater Montreal communities and empower its most vulnerable members.
2014/6	Member, The Alumni and Donor Network of Montreal University Support Outreach activities and new projects of Montreal University.

Presentations

- René Breyel, Walter Knitl, and Mourad Debbabi. (2019). IoT CyberSecurity – A fragmented challenge. IT Connect at the Champlain College Saint-Lambert, Montreal, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes
Description / Contribution Value: Discussing the best practices to implement “IoT Security by Design”.
- Dr. Schallum Pierre. Dr. Julie Paquette. (2018). Securing the information and Social Media.The "Cybersecurity and Social Media" study day at Saint Paul University., Ottawa, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes
- Pascal Monette, Gilles Savard, Lyne Dubois. (2018). Cyber-security Challenges in Industry 4.0. The ninth edition of the Regional Leaders's Summit (RLS 2018), Quebec, Canada
Main Audience: Decision Maker
Invited?: Yes, Keynote?: Yes
- José M. Fernandez, Gabriela Nicolescu, Biswajit Nandy, etc. (2018). Combating Insider Threats by Profiling from Activity Logging Data. The Cybersecurity Forum organized by InSec-M, Ottawa, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes
- Robert Nastas, Jean LeDuc, Jérémie Farret. (2018). Cyber-security issues in the Internet of Things.Cyber-security and Internet of Things Workshop at CRIM, Montreal, Canada
Invited?: Yes, Keynote?: Yes
- Rudolf Ferenc, Radu Marinescu. (2013). Static Relationships with Design Patterns.First Workshop on Patterns Promotion and Anti-patterns Prevention (PPAP), Italy
Invited?: Yes, Keynote?: No
- Kim Mens, Ángela Lozano. (2013). Clones and Co-changes: a systematical review. The REsearch Laboratory on software Evolution And Software Development technology Event (RELEASeD), Belgium
Invited?: Yes, Keynote?: Yes

Broadcast Interviews

2022/05/05	Des pirates informatiques au service de l'État, C'est jamais pareil, Radio Canada, Frédéric Tremblay https://ici.radio-canada.ca/ohdio/premiere/emissions/cest-jamais-pareil/segments/entrevue/400951/cyb
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- 2020/11/27 IoT cyber security, Moteur de recherche, Radio Canada, Mathieu Duggal
<https://ici.radio-canada.ca/ohdio/premiere/emissions/moteur-de-recherche/segments/entrevue/211027/ha>
- 2018/04/23 Research Activities in Cybersecurity at the Computer Research Institute of Montreal., Catherine Mathys
<https://www.youtube.com/watch?v=-Va3xHePYdo>

Text Interviews

- 2019/06/15 Securing Private Data in IoT Networks, Jessica Dostie
<https://www.ledevoir.com/societe/science/556567/plaidoyer-pour-des-donnees-mieux-protegees>

Publications

Journal Articles

1. Manel Grichi, Amine Barrak, Haïfa Nakouri, Fehmi Jaafar, and Yasir Malik. (2023). How Can Machine Learning Demystify the Software Security Bugs: An Empirical Investigation. Empirical Software Engineering - Springer. Accepted,
2. Darine Ameyed, Fehmi Jaafar, Fabio Petrillo, and Mohamed Cheriet. (2023). Quality and Security Frameworks for IoT-Architecture Models Evaluation. Springer Nature Computer Science - Springer. Accepted,
3. Amine Barrak, Fabio Petrillo, and Fehmi Jaafar. (2022). Serverless on Machine Learning: A systematic mapping study. IEEE Access. Published,
4. Sajid Habib Gill, Noor Ahmed Sheikh, Samina Rajpar, NZ Jhanjhi, Muneer Ahmad, Mirza Abdur Razzaq, Sultan S Alshamrani, Yasir Malik, and Fehmi Jaafar. (2021). Extended forgery detection framework for covid-19 medical data using convolutional neural network. Computers, Materials and Continua. Published,
5. Zeinab (Azadeh) Kermansaravi, Md. Saidur Rahman, Fehmi Jaafar, FoutseKhomh, and Yann-Gaël Guéhéneuc. (2021). Investigating Design Patterns and Design Anti-pattern Mutations and their Change-and Fault-proneness. Empirical Software Engineering. Published,
6. Manel Grichi, Mouna Abidi, Fehmi Jaafar, Ellis E Eghan, and Bram Adams. (2020). On the impact of interlanguage dependencies in multilanguage systems empirical case study on java native interface applications (JNI). IEEE Transactions on Reliability. Published,
7. Mohammad Shahrear Iqbal, Fehmi Jaafar, Mohammad Zulkernine, and Yuan Gu. (2018). Protecting internet users from becoming victimized attackers of click-fraud. Journal of Software: Evolution and Process. 3(30) Published,
8. Darine Ameyed, Moeiz Miraoui, Atef Zaguia, Fehmi Jaafar, and Chakib Tadj. (2018). Using Probabilistic Temporal Logic PCTL and Model Checking for Context Prediction. Computing and Informatics Journal. Published,
9. Fehmi Jaafar, Angela Lozano, Kim Mens, and Yann-Gaël Guéhéneuc. (2017). Analyzing Software Evolution and Quality by Extracting Asynchrony Change-patterns. Journal of Systems and Software. Published,

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