Dr. Fehmi Jaafar

Correspondence language: English

Contact Information

The primary information is denoted by (*)

Address

Primary Affiliation (*)	Temporary
Computer Research Institute of Montréal 405 Ogilvy Avenue #101 Montreal Quebec H3N 1M3 Canada	Concordia University of Edmonton 7128 Ada Blvd NW Edmonton Alberta T5B 4E4 Canada 2016/08/01 - 2018/07/01

Telephone

Mobile (*)	1-514-5688163
Work	1-780-4137825

Email

Personal	jaafar@cs.queensu.ca
Temporary	fehmi.jaafar@concordia.ab.ca, 2016/08/01 - 2018/07/01
Work (*)	fehmi.jaafar@crim.ca

Dr. Fehmi Jaafar

Language Skills

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

Degrees

- 2016/8 Post-doctorate, Cybersecurity, École Polytechnique de Montréal
  Supervisors: Gabriela Nicolescu, 2015/10 - 2016/8
- 2015/4 Post-doctorate, Computer Sciences and Cybersecurity, Queen's University at Kingston
  Supervisors: Mohammad Zulkernine, 2014/1 - 2015/4
- 2013/12 Doctorate, Computer Sciences, Université de Montréal
  Supervisors: Sylvie Hamel, 2009/9 -
- 2009/6 Master's Thesis, Computer sciences, Université de Tunis
  Supervisors: Rim Fayez, 2007/9 -
- 2007/6 Bachelor's, Computer Science, Université de Tunis

User Profile

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

Employment

2017/12 **Researcher**
Computer Research Institute of Montréal
- Develops and transfers technologies and knowledge in order to add value to cyber security software and services and contribute to their commercialization. - Elaborate industrial research projects with industrial partners and universities. - Supervise students from undergraduate and graduate programs in Canadian Universities.

2016/8 **Adjunct Professor**
Department of Information Systems Security and Assurance, Faculty of Management, Concordia University of Edmonton
Full-time, Adjunct
Tenure Status: Non Tenure Track
- Conduct research and experiments to advance knowledge in Computer Science, Software Engineering and Information Security.- Supervise graduate students who are working toward Master degrees.- Publish original research and analysis in international conferences and academic journals.- 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 at Concordia University of Edmonton.- Assess students' progress by grading papers, tests, and other work.- Serve on academic and administrative committees that review and recommend policies, make budget decisions, and advise on hiring and promotions.

2015/3 - 2016/8 Research Scientist
Research and Development, Ubitrak Inc.

2014/4 - 2015/4 Software Developer Analyst
OMP Music
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
Preparing labs and assignments, oral presentation of material, responding to questions, providing learning tasks, getting students to work 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

Research Funding History

Awarded [n=10]

2018/11 - 2019/4
Principal Applicant

Identification of the source of a malicious cyber activity, Contract

Funding Sources:
National Defence (Canada)
Innovation for Defence Excellence and Security (IDEaS)
Total Funding - 165,000
Portion of Funding Received - 165,000
Funding Competitive?: Yes

2018/5 - 2018/8
Principal Applicant

Student Training and Education Program (STEP), Grant

Funding Sources:
Government of Canada and Government of Alberta
Student Training and Education Program (STEP)

Total Funding - 10,000
Portion of Funding Received - 10,000
Funding Competitive?: Yes

2017/4 - 2018/3
Principal Applicant

The Cyber Security Cooperation Program grant, Grant

Funding Sources:
The Canadian Government - Concordia University of Edmonton
The Cyber Security Cooperation Program
Total Funding - 20,000
Portion of Funding Received - 20,000
Funding Competitive?: Yes

2015/10 - 2017/10
Principal Applicant

Research Scholarship in Computer Security, Fellowship

Funding Sources:
Mathematics of Information Technology and Complex Systems (MITACS)
Elevate
Total Funding - 120,000
Portion of Funding Received - 60,000
Funding Competitive?: Yes

2017/5 - 2017/8
Principal Applicant

STEP program - Research Analysis, Grant

Funding Sources:
Government of Canada and Government of Alberta
STEP Canada-Alberta Grant
Total Funding - 10,000
Portion of Funding Received - 10,000
Funding Competitive?: Yes

2014/11 - 2015/2
Co-applicant

Research Scholarship in Web and Mobile Computing, Scholarship

Funding Sources:
Mathematics of Information Technology and Complex Systems (MITACS)
Accelerate
Total Funding - 90,000
Portion of Funding Received - 15,000
Funding Competitive?: Yes

2012/9 - 2013/9
Principal Applicant

Doctoral Scholarship, Scholarship

Funding Sources:
Faculté des études supérieures de l'Université de Montréal
Doctoral Scholarship
Total Funding - 12,000
Portion of Funding Received - 12,000
Funding Competitive?: Yes

2009/9 - 2013/9
Principal Applicant

Excellence Scholarship, Scholarship

Funding Sources:
Ministry of Higher Education, Scientific Research and Technology, Tunisia
Excellence Scholarship in Computer Science
Total Funding - 50,000
Portion of Funding Received - 50,000
Funding Competitive?: Yes

2009/9 - 2013/8
Principal Applicant

Doctoral Foreign Scholarship, Scholarship

Funding Sources:
Faculté des études supérieures de l'Université de Montréal

Doctoral Foreign Scholarship
Total Funding - 50,000
Portion of Funding Received - 50,000
Funding Competitive?: Yes

2012/12 - 2013/1
Collaborator

Research and development Grants, Grant

Funding Sources:
Agence Québec Wallonie Bruxelles pour la jeunesse (AQWBJ)
Research and development Grants
Total Funding - 20,000
Portion of Funding Received - 5,000
Funding Competitive?: Yes

Completed [n=1]

2018/4 - 2018/12
Principal Applicant

Passeport Innovation, Grant

Funding Sources:
Ministère de l'Économie, de la Science et de l'Innovation (Quebec)
Passeport Innovation
Total Funding - 75,000
Portion of Funding Received - 75,000
Funding Competitive?: Yes

Under Review [n=1]

2018/11 - 2019/2
Principal Applicant

Facing cyber attacks against cities infrastructures., Contract

Funding Sources:
A Canadian City.
Total Funding - 100,000
Portion of Funding Received - 100,000
Funding Competitive?: Yes

Student/Postdoctoral Supervision

Master's Thesis [n=23]

2018/5 - 2018/12
Co-Supervisor

Adeola Ajao, Concordia Univrsity of Edmonton
Thesis/Project Title: An early notification measure for unauthorized data access to prevent privacy breaches in PaaS cloud
Present Position: IT Consultant

2018/1 - 2018/12
Principal Supervisor

Samuel Ubaneche (In Progress) , Concordia Univrsity of Edmonton
Student Degree Expected Date: 2018/12
Thesis/Project Title: Specification and implementation of a new data privacy assurance block-chain model.
Present Position: Research associate

2018/1 - 2018/7
Co-Supervisor

Gurpreet Kaur LNU (Completed) , Concordia Univrsity of Edmonton
Thesis/Project Title: Detecting blind cross-site attacks using machine learning
Present Position: Web Developer

2018/1 - 2018/7 Principal Supervisor	Samim Khalili (Completed) , Concordia Univrsity of Edmonton Thesis/Project Title: Enhancing authentication and key agreement procedure in 5G mobile network using geo-encryption technique Present Position: Information Security Consultant
2017/11 - 2018/7 Principal Supervisor	Ranbir Bali (Completed) , Concordia Univrsity of Edmonton Thesis/Project Title: Lightweight authentication for MQTT by using topic-based self-key agreement and block cipher Present Position: Certified Specialist, Best Buy
2017/9 - 2018/12 Co-Supervisor	Amanpreet Singh Bains, Concordia Univrsity of Edmonton Thesis/Project Title: Security Risks Management of Information Systems Present Position: Information and Network Security
2017/9 - 2018/6 Principal Supervisor	Babajide Adegoke (Completed) , Concordia University of Edmonton Thesis/Project Title: Exploring the use of pre-shared key in the authentication process of LTE base stations Present Position: Information Security Consultant
2017/7 - 2018/4 Principal Supervisor	Samip Dhakal (Completed) , Concordia University of Edmonton Thesis/Project Title: Blockchain for authentication in IoT Present Position: IT and Banking Professional
2017/5 - 2018/6 Principal Supervisor	Caesar Jude Clemente (Completed) , Concordia University of Edmonton Thesis/Project Title: Solving Software Insecurity Present Position: Lecturer, Concordia University of Edmonton
2017/4 - 2016/9 Co-Supervisor	Gurjot Balraj Singh (Completed) , Concordia University of Edmonton Thesis/Project Title: Analysis of Overhead Caused by Security Mechanisms in IaaS Cloud Present Position: Information Security Senior Consultant, NTT DATA Services
2017/1 - 2017/7 Principal Supervisor	Damanjeet Kaur (Completed) , Concordia University of Edmonton Thesis/Project Title: Taxonomy of Android Vulnerabilities. Present Position: Software Analyst
2017/1 - 2017/12 Co-Supervisor	Pratibha Singh LNU (Completed) , Concordia University of Edmonton Thesis/Project Title: Enhancing Bio-metric Security with Combinatoric Multi-Fingerprint Authentication Strategies Present Position: Program analyst
2017/1 - 2017/9 Principal Supervisor	Tunde Yekini (Completed) , Concordia University of Edmonton Thesis/Project Title: Study of Trust at Device Level of the Internet of Things Architecture Present Position: Security analyst, TD Bank Group (TD)
2017/1 - 2017/7 Principal Supervisor	Jasmeen Kaur Babrah (Completed) , Concordia University of Edmonton Thesis/Project Title: In-Depth Experimental Analysis of Behavior of Crypto-Ransomware Present Position: IT Consultant, Government of Alberta
2017/1 - 2017/12 Principal Supervisor	Pooja Prasad (Completed) , Concordia University of Edmonton Thesis/Project Title: Securing Cyber Physical System in Health Care Environment Present Position: Lecturer, Concordia University of Edmonton
2017/1 - 2017/12 Co-Supervisor	Mayank Ashwinkumar Jaiswal (Completed) , Concordia University of Edmonton Thesis/Project Title: System Call Analysis of Malware Application on Android Platform Present Position: Information and Network Security
2017/1 - 2017/6 Principal Supervisor	Walter Isharufe (Completed) , Concordia University of Edmonton Thesis/Project Title: Study of Security Issues in Platform-as-a-Service (PaaS) Cloud Model Present Position: Information Security Senior Consultant, NTT DATA Services

2017/1 - 2017/12 Co-Supervisor	Harjot Kaur LNU (Completed) , Concordia University of Edmonton Thesis/Project Title: Unauthorized Data Leakage from an Organisation through Web Browser Fingerprinting Vulnerability Present Position: Anti-Virus Analyst, Fortinet
2017/1 - 2017/6 Principal Supervisor	Gagandeep Singh LNU (Completed) , Concordia Universiy of Edmonton Thesis/Project Title: An Analysis of Android Malware Behavior Present Position: Software Analyst
2016/9 - 2017/4 Co-Supervisor	Ruchi Mishr (Completed) , Concordia University of Edmonton Thesis/Project Title: Behavioural Study of Malwares Impacting Financial Institutions and Clients Present Position: Senior Security Analyst, Scotiabank
2016/9 - 2017/12 Co-Supervisor	Manjinder Singh LNU (Completed) , Concordia University of Edmonton Thesis/Project Title: Analyzing overhead from security and administrative functions in virtual environment Present Position: IT Consultant, Government of Alberta
2016/5 - 2017/7 Co-Supervisor	Anis Kothia Chhotubhai (Completed) , Concordia Univrsity of Edmonton Thesis/Project Title: Integration and automation of subdomain enumeration and service scanning tools to improve overall information gathering process Present Position: Infosec Analyst, HackerOne
2014/12 - 2015/12 Academic Advisor	Maryam Davari (Completed) , Queen's University Thesis/Project Title: Classifying and Predicting Software Security Vulnerabilities Based on Reproducibility Present Position: Research assistant, Purdue University

Doctorate [n=2]

2017/1 - 2014/1 Academic Advisor	Darine Ameyed (Completed) , École de technologie supérieure Thesis/Project Title: Modélisation et spécification formelle de contexte et sa prédiction dans les systèmes diffus : une approche basée sur la logique temporelle et le modèle stochastique. Present Position: Postdoctoral researcher in Synchromedia Lab, École de Technologie Supérieure at Montreal
2014/6 - 2015/6 Academic Advisor	Md Shahrear Iqbal (In Progress) , Queen's University Thesis/Project Title: Smartphone Security and Privacy Present Position: Ph. D. student

Event Administration

2017/1 - 2017/6	Organizer, The Annual Information Security and Assurance Research Event at Concordia University of Edmonton, Workshop, 2017/6 - 2017/6
2017/1 - 2017/6	Organization Committee member, The Information Security and Assurance Research Event at Concordia University of Edmonton., Seminar, 2017/6 - 2017/6

Editorial Activities

2018/10 - 2018/12	Reviewer, Selection of Source Code Metrics for Improving Prediction of Change-Proneness Modules: A Case-Study on eBay Services., Journal
2018/2 - 2018/5	Reviewer, Automated Game-Theoretic Verification of Security Systems, Report

2017/11 - 2018/5	Reviewer, Change-proneness of java classes with code smells and design patterns, Journal
2018/1 - 2018/4	Reviewer, Ontologies and Relational Databases Meta-Schema Design: a Three-Level Unified Lifecycle, Conference Abstract
2018/1 - 2018/4	Reviewer, Adaptive Security in Cloud and Edge Networks New IoT Security Approach, Conference Abstract
2017/1 - 2017/10	Reviewer, MPSKMean Model to Form Attribute Based Clusters to Extract Multiple Pattern in Seasonal Data, Journal
2014/7 - 2015/3	Reviewer, Finding fault with fault injection: an empirical exploration of distortion in fault injection experiments, Journal
2014/6 - 2014/12	Reviewer, Technology independent honeynet description language, Conference Abstract
2014/1 - 2014/6	Reviewer, Integrating the Modelica DSL into a Platform for Model-based Tool Interoperability, Conference Abstract
2014/1 - 2014/4	Reviewer, Fast Discovery of VM-Sensitive Divergence Points with Basic Block Comparison, Conference Abstract

Expert Witness Activities

2018/5 - 2019/2	Contributor and member of the orientation Committee, Cyber-security for 4.0 environments in Quebec., Canada, Montreal - Identify best practices in cybersecurity in the advanced manufacturing sector including critical infrastructure, evaluate their level of use and promote their adoption. - Promote the development of cybersecurity in a 4.0 environment.

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: With the advent of a new generation of malware and cyber-attacks, detection can be difficult using conventional cyber security methods and tools. This project aims to integrate machine learning and artificial intelligence techniques into the PEN testing framework. In order to reduce PEN testing human resource requirements while maximizing test coverage, this project explore the automation of the PEN testing framework. Activity Description: 1. Requirements Analysis: we elaborate a prioritized feature set and identify design constraints that can inform the architecture design. 2. Architecture Document: we specify the architecture document which it is useful as a means for sharing information with partners and other collaborators throughout the product life-cycle. 3. Data Specification: we specify the type, quality, quantity and other data attributes as well as the projected data flows.

2018/1 - 2018/7 Contributor and Panelist, Technology, Product, Process, Service Improvement/ Development
Group/Organization/Business Serviced: The ninth edition of the Regional Leaders's Summit (RLS 2018)
Target Stakeholder: Government Personnel
Outcome / Deliverable: Participation and writing of the RLS Digital Joint Research and Innovation Benchmark to tackle future economic challenge through digitization. Through four theme (Tools and initiatives to sensitize SMEs to 4.0, Audit procedures in 4.0 industry, Big data in 4.0, Cyber-security in 4.0), the main objective of the Benchmark was to share each regional leader’s experience and best practice in order to set a common ground. It was also the occasion to witness a diversity of practices and solutions and identifying path for future collaborations.

2018/4 - 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, Technology, Product, Process, Service Improvement/ Development
Group/Organization/Business Serviced: Ubitrak Inc.
Target Stakeholder: Industry/Business (>500 employees)
Outcome / Deliverable: Search Results Real Time Detection of Privilege Escalation by an Attacker
References / Citations / Web Sites: Fehmi Jaafar, Gabriela Nicolescu, Christian Richard: A Systematic Approach for Privilege Escalation Prevention. QRS Companion 2016: 101-108

2014/7 - 2015/3 Consultant, Consulting for Industry
Target Stakeholder: General Public
Outcome / Deliverable: 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.

2014/6 - 2015/3 Researcher, R&D Collaboration with Industry
Target Stakeholder: General Public
Outcome / Deliverable: Click Fraud Detection & Protection Tool
References / Citations / Web Sites: Iqbal, Md Shahrear, et al. "Fcfraud: Fighting click-fraud from the user side." High Assurance Systems Engineering (HASE), 2016 IEEE 17th International Symposium on. IEEE, 2016.

International Collaboration Activities

2018/3 - 2018/8 Contributor and participant, Canada
Participation and writing of the Regional Leaders' Summit (RLS 2018) Digital Joint Research and Innovation Benchmark. Through four theme (Tools and initiatives to sensitize SMEs to 4.0, Audit procedures in 4.0 industry, Big data in 4.0, Cyber-security in 4.0), the main objective of the Benchmark was to share each regional leader’s experience and best practice in order 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 approaches for software quality analysis

Committee Memberships

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, The industry cluster In-Sec-M
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 recommendationsbased on the selection criteria. - Participating in orientation meetings or discussions. - Submitting comfort ratings for all applications received. - Reading, scoring, and providing in-depth evaluations for a subset ofapplications. - Reading, participating in deliberations for, and scoring all fellowship applicationsdiscussed during the review meeting. - Recommending potential new members.

Presentations

1. 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

2. (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

3. 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

4. - 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

5. (2013). Static Relationships with Design Patterns.First Workshop on Patterns Promotion and Anti-patterns Prevention (PPAP), Italy
Invited?: Yes, Keynote?: No

6. (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

Publications

Journal Articles

1. Caesar Jude Clemente, Fehmi Jaafar, and Yasir Malik. (2018). A Comparative Analysis of Security Bug Prediction using Deep Learning versus Traditional Machine Learning Algorithms. The IEEE Transactions on Reliability.
   Submitted
   Refereed?: Yes, Open Access?: No
2. 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
   Refereed?: Yes, Open Access?: No
3. Samim Khalili, Fehmi Jaafar, and Pavol Zavarsky. (2018). Enhancing Authentication and Key Agreement Procedure in 5G Mobile Network Using Geo-Encryption Technique. The IEEE Transactions on Reliability.
   Submitted
   Refereed?: Yes, Open Access?: No
4. 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.
   Accepted
   Refereed?: Yes, Open Access?: No
5. 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
   Refereed?: Yes
6. Fehmi Jaafar, Yann-Gaël Guéhéneuc, Sylvie Hamel, Foutse Khomh, and Mohammad Zulkernine. (2016). Evaluating the Impact of Design Pattern and Anti-pattern Dependencies on Faults and Changes.Journal of Empirical Software Engineering.
   Published
   Refereed?: Yes
7. Angela Lozano, Fehmi Jaafar, Kim Mens, and Yann-Gaël Guéhéneuc. (2014). Clones and Macro co-changes.Journal of Electronic Communications of the European Association of Software Science and Technology.
   Published
   Refereed?: Yes, Open Access?: Yes
8. Fehmi Jaafar, Yann-Gaël Guéhéneuc, Giuliano Antoniol, and Sylvie Hamel. (2014). Detecting Asynchrony and Dephase Change Patterns by Mining Software Repositories. Journal of Software : Evolution and Process.
   Published
   Refereed?: Yes, Open Access?: No
9. Fehmi Jaafar, Yann-Gaël Guéhéneuc, Sylvie Hamel, and Foutse Khomh. (2013). Analysing Anti-patterns Static Relationships with Design Patterns.Electronic Communication of the European Association of Software Science and Technology. 59
   Published
   Refereed?: Yes

Conference Publications

1. Samip Dhakal, Fehmi Jaafar, and Pavol Zavarsky. (2019). Private Blockchain Network for IoT Device Firmware Integrity Verification and Update. The International Symposium on High Assurance Systems Engineering, China
   Conference Date: 2019/1
   Paper
   Accepted
   Refereed?: Yes, Invited?: No
2. Tunde Akeem Yekini, Fehmi Jaafar and Pavol Zavarsky. (2019). Study of Trust at Device Level of the Internet of Things Architecture. The International Symposium on High Assurance Systems Engineering, China
   Conference Date: 2019/1
   Paper
   Accepted
   Refereed?: Yes, Invited?: No
3. Jasmeen Kaur, Fehmi Jaafar, and Pavol Zavarsky. (2018). Experimental Analysis of Behavior of Crypto Ransomware. The Thirteenth International Conference on Systems, ICONS, Greece
   Paper
   Published
   Refereed?: Yes, Invited?: No
4. Manjinder Singh, Sergey Butakov and Fehmi Jaafar. (2018). Analyzing Overhead from Security and Administrative Functions in Virtual Environment. The IEEE 2018 International Conference on Platform Technology and Service, PlatCon, South Korea, Korea, Republic of
   Paper
   Published
   Refereed?: Yes, Invited?: No
5. Caesar Jude Clemente, Fehmi Jaafar, and Yasir Malik. (2018). Is Predicting Software Security Bugs using Deep Learning Better than the Traditional Machine Learning Algorithms?. IEEE International Conference on Software Quality, Reliability, and Security, Portugal
   Paper
   Published
   Refereed?: Yes, Invited?: No
6. Gagandeep Singh, Fehmi Jaafar, Pavol Zavarsky. (2018). An Analysis of Android Malware Behavior. IEEE International Workshop on Information Assurance. IEEE International Workshop on Information Assurance, Portugal
   Paper
   Published
   Refereed?: Yes, Invited?: No
7. Mayank Jaiswal, Yasir Malik, and Fehmi Jaafar. (2018). Android Gaming Malware Detection Using System Call Behaviour Analysis. The IEEE International Symposium on Digital Forensic and Security, ISDFS, Turkey
   Paper
   Accepted
   Refereed?: Yes, Invited?: No
8. Pooja Rajendra Prasad, Sergey Butakov, and Fehmi Jaafar. (2018). Information Security Considerations for Wireless Infusion Pumps. IEEE International Workshop on Safety and Security in Cyber-Physical Systems, Portugal
   Paper
   Published
   Refereed?: Yes, Invited?: No

9. Gurpreet Kaur, Yasir Malik, and Fehmi Jaafar. (2018). Detecting Blind Cross-Site Attacks Using Machine Learning. The International Conference on Signal Processing and Machine Learning, China
Paper
Accepted
Refereed?: Yes, Invited?: No

10. Ranbir Singh Bali, Fehmi Jaafar and Pavol Zavarasky. (2018). Lightweight Authentication for MQTT by using Topic-Based Self Key Agreement and Block Cipher. The Association for Computing Machinery. International Conference on Cryptography, Security and Privacy (ICCSP 2019), Kuala Lumpur, Malaysia
Conference Date: 2019/1
Paper
Accepted
Refereed?: Yes, Invited?: No

11. Gurjot Balraj Singh, Fehmi Jaafar, Sergey Butakov. (2018). Analysis of Overhead Caused by Security Mechanisms in IaaS Cloud.The IEEE International Conference on Control, Decision and Information Technologies, CoDIT 2018., Thessaloniki, Greece
Conference Date: 2018/4
Paper
Published
Refereed?: Yes, Invited?: No

12. Maryam Davari, Mohammad Zulkernine, and Fehmi Jaafar. (2017). An Automatic Software Vulnerability Classification Framework. The International Conference on Software Security and Assurance (ICSSA), Altoon, United States
Paper
Published
Refereed?: Yes, Invited?: No

13. Fehmi Jaafar. (2017). An Integrated Architecture for IoT Fingerprinting. IEEE QRS Companion 2016. IEEE International Conference on Software Quality, Reliability and Security, Prague, Czech Republic
Paper
In Press
Refereed?: Yes, Invited?: No

14. Harjot Kaur, Pavol Zavarsky, and Fehmi Jaafar. (2017). Unauthorized Data Leakage from an Organisation through Web Browser Fingerprinting Vulnerability. The IEEE World Congress on Internet Security, London, United Kingdom
Conference Date: 2017/12
Paper
Published
Refereed?: Yes, Invited?: No

15. Fehmi Jaafar, Angela Lozano, Yann-Gael Gueheneuc, and Kim Mens. (2017). On the Analysis of Co-Occurrence of Anti-Patterns and Clones. IEEE International Conference on Software Quality, Reliability and Security, Prague, Czech Republic
Conference Date: 2017/7
Paper
In Press
Refereed?: Yes, Invited?: No

16. Fehmi Jaafar, Gabriela Nicolescu, and Christian Richard. (2016). A Systematic Approach For Privilege Escalation Prevention. IEEE International Conference on Software Quality, Reliability and Security, Companion, Vienna, Austria
Conference Date: 2016/8
Paper
Published
Refereed?: Yes, Invited?: No

17. Md Shahrear Iqbal, Fehmi Jaafar, Mohammad Zulkernine, and Yuan Gu. (2016). Fighting Click-Fraud from User Side. IEEE High Assurance Systems Engineering Symposium., Orlando, United States
Conference Date: 2016/1
Paper
Published
Refereed?: Yes, Invited?: No

18. Darine Ameyed, Fehmi Jaafar, and Jaouhar Fattahi. (2015). A Slow Read attack Using Cloud. The International Conference on Electronics, Computers and Artificial Intelligence, Bucharest, Romania
Paper
Published
Refereed?: Yes, Invited?: No

19. Fehmi Jaafar, Foutse Khomh, Yann-Gaël Guéhéneuc, and Mohammad Zulkernine. (2014). Anti-pattern Mutations and Fault-proneness.The 14th International Conference on Quality Software., Dallas, United States
Paper
Published
Refereed?: Yes, Invited?: No

20. Fehmi Jaafar, Salima Hassaine, Yann-Gael Gueheneuc, Sylvie Hamel, and Bram Adams. (2013). On the Relationship Between Program Evolution and Fault-proneness. European Conference on Software Maintenance and Reengineering., Genova, Italy
Paper
Published
Refereed?: Yes, Invited?: No

21. Nasir Ali, Fehmi Jaafar, and Ahmed E. Hassan. (2013). Leveraging Historical Co-Change Information for Requirements Traceability. The Working Conference on Reverse Engineering., Koblenz-Landau, Germany
Paper
Published
Refereed?: Yes, Invited?: No

22. Fehmi Jaafar, Yann-Gael Gueheneuc, Sylvie Hamel, and Foutse Khomh. (2013). Mining the Relationship Between Anti-patterns Dependencies and Fault-proneness. Working Conference on Reverse Engineering, Koblenz-Landau, Germany
Paper
Published
Refereed?: Yes, Invited?: No

23. Fehmi Jaafar. (2012). On the analysis of evolution of software artefacts and programs.The IEEE International Conference on Software Engineering,
Abstract
Published
Refereed?: Yes, Invited?: No