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## Dr. Yann-Gaël Guéhéneuc

Correspondence language: French

### **Contact Information**

The primary information is denoted by (\*)

### Address

Primary Affiliation (\*)

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## Dr. Yann-Gaël Guéhéneuc

## Language Skills

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

## Degrees

- 2003/6	Doctorate, Software Engineering, Université de Nantes / École des Mines de Nantes
	Supervisors: Pierre Cointe, 2000/6 - 2003/6
- 1998/10	Master's Equivalent, Software Engineering, Université de Nantes
- 1998/10	Bachelor's Equivalent, Software Engineering, École des Mines de Nantes
- 1993/7	Diploma, Mathematics and Technology, Lycée Technologique Livet
Recognitions	
2021/2	IEEE TCSE Most Influential Paper at SANER'21 IEEE Distinction For M. Abbes, F. Khomh, YG. Guéhéneuc, and G. Antoniol ; An Empirical Study of the Impact of Two Antipatterns, Blob and Spaghetti Code, on Program Comprehension ; Proceedings of the 15th IEEE European Conference on Software Maintenance and Reengineering (CSMR'11), pp. 181-190, 2011.
2020/3	Outstanding Reviewer Award for Elsevier IST Elsevier Distinction For my reviews of submitted manuscripts, more than 34 as of 23/10/20
2019/8	Excellent Research Award Japan Information Processing Society Distinction For H. Washizaki, YG. Guéhéneuc, and F. Khomh ; ProMeTA: A Taxonomy for Program Metamodels in Program Reverse Engineering ; Springer Empirical Software Engineering (EMSE), pp. 2323-2358, 2018.

2019/5	Best Paper Award at MOBILESoft'19 ACM Distinction For A. Belkhir, M. Abdellatif, R. Tighilt, N. Moha, YG. Guéhéneuc, and É. Beaudry ; An Observational Study on the State of REST API Uses in Android Mobile Applications ; Proceedings of the 6th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft), pp. 66-75, 2019.
2019/1	IEEE TCSE Most Influential Paper at SANER'19 IEEE Distinction For F. Khomh, M. Di Penta, and YG. Guéhéneuc ; An Exploratory Study of the Impact of Code Smells on Software Change-proneness ; Proceedings of the 16th IEEE Working Conference on Reverse Engineering (WCRE'09), pp. 75-84, 2009.
2018/12	Best Paper Award at APSEC'18 IEEE Distinction For G. Hecht, H. Mili, G. Elboussaidi, A. Boubaker, M. Abdellatif, YG. Guéhéneuc, A. Shatnawi, J. Privat, and N. Moha ; Codifying Hidden Dependencies in Legacy J2EE Applications ; Proceedings of the 25th Asia-Pacific Software Engineering Conference (APSEC'18), pp. 305-314, 2018
2018/11	Best Student Paper Award at ICSOC'18 Springer Distinction For M. Abdellatif, G. Hecht, H. Mili, G. El Boussaidi, N. Moha, A. Shatnawi, J. Privat, and YG. Guéhéneuc ; State of the Practice in Service Identification for SOA Migration in Industry ; Proceedings of the 16th Springer International on Service-Oriented Computing (ICSOC), pp. 634-650, 2018.
2018/9	Most Influential Paper Award at CASCON'18 ACM Distinction For G. Antoniol, K. Ayari, M. Di Penta, F. Khomh, and YG. Guéhéneuc ; Is It a Bug or an Enhancement? A Text-based Approach to Classify Change Requests ; Proceedings of the 18th ACM Conference of the Center for Advanced Studies on Collaborative Research (CASCON), pp. 304-318, 2008.
2018/1	Most Influential Paper Award at SANER'18 IEEE Distinction For F. Khomh and YG. Guéhéneuc ; Do Design Patterns Impact Software Quality Positively? ; Proceedings of the 12th IEEE European Conference on Software Maintenance and Reengineering (CSMR), pp. 274-278, 2008.

## **User Profile**

Research Specialization Keywords: Software development, Software modelling, Program comprehension, Static analyses, Dynamic analyses, Historical analyses, Internet of Things, Service-oriented architecture

## Employment

2017/8	Full Professor Department of Computer Science and Software Engineering, Gina Cody School of Engineering and Computer Science, Concordia University Full-time Tenure Status: Tenure
2012/6 - 2017/8	Full Professor Département de génie informatique et génie logiciel, École Polytechnique de Montréal Full-time Tenure Status: Tenure
2013/3 - 2014/4	Guest Professor Computer Science, Wonju Campus, Yonsei University, Republic of Korea Full-time Tenure Status: Non Tenure Track
2008/6 - 2012/5	Associate Professor Département de génie informatique et génie logiciel, École Polytechnique de Montréal Full-time Tenure Status: Tenure
2008/5 - 2008/6	Associate Professor Département d'informatique et recherche opérationnelle, Université de Montréal Full-time Tenure Status: Tenure
2003/8 - 2008/5	Assistant Professor Département d'informatique et recherche opérationnelle, Université de Montréal Full-time Tenure Status: Tenure Track
1999/12 - 2001/5	Software Developer Object Technology International, Ottawa, ON, Canada
1998/12 - 2000/4	Invited Researcher School of Computer Science, Carleton University Full-time Tenure Status: Non Tenure Track

## Leaves of Absence and Impact on Research

 2020/3 - 2022/2 Special, Concordia University Main caregiver of my two daughters during the COVDI-19 pandemic, 33% work reduction
 2017/1 - 2020/12 Special, Concordia University

Chronic illness, 20% work reduction

## **Research Funding History**

### Awarded [n=7]

2024/1 - 2025/12	Desjardins Living Lab: Building Retrofit from Design to Implementation towards Prosumer
Co-investigator	and Grid-support Services, Grant

### Funding Sources:

Canada First Research Excellence Fund Electrification for Resilient Decarbonized Communities - Seed Grants

	Total Funding - 290,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Nizar Bouguila; Yann-Gaël Guéhéneuc;
	Collaborator : Bernard Bitar; Mayi Kato; Ursula Eicker;
	Principal Investigator : Manar Aymari
2024/1 - 2025/12 Principal Investigator	Digital Data Analysis and Modeling Platform for Decarbonizing the Built Environment, Grant
	Funding Sources: Canada First Research Excellence Fund Electrification for Resilient Decarbonized Communities - Seed Grants Total Funding - 300,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Francesco Ciari; Liangzhu Wang; Michaël Kummert; Ursula Eicker;
	Principal Investigator : Yann-Gaël Guéhéneuc
2018/5 - 2025/4	Empirical Software Engineering for the Internet of Things, Research Chair
Principal Investigator	Funding Sources: Canada Research Chairs (CRC) Tier 1 Total Funding - 1,400,000 Portion of Funding Received - 1,000,000
	Funding Competitive?: Yes
	Principal Investigator : Yann-Gaël Guéhéneuc
2024/1 - 2024/12 Principal Investigator	ReAnimate: 2024 Summer School on Retro Gaming History, Critic, and Development, Grant
	Funding Sources: ACM SIGSOFT Support for Summer/Winter Schools in Software Engineering Total Funding - 3,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Carl Therrien; Cristiano Politowski; Fabio Petrillo;
	Principal Investigator : Yann-Gaël Guéhéneuc
2023/5 - 2024/4	Building Multi-language, Multi-system Quality Models using Features and APIs, Grant
Principal Investigator	Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant COVID-19 Extension with Funds Total Funding - 48,000 Portion of Funding Received - 48,000 Funding Competitive?: No
	Principal Investigator : Yann-Gaël Guéhéneuc
2020/1 - 2023/12	Systems Analyses and Debugging for Program Comprehension, Grant
Co-investigator	<b>Funding Sources:</b> European Smalltalk User Group Total Funding - 2,400

	Portion of Funding Received - 0 Funding Competitive?: Yes Institut National de Recherche en Informatique et Automatique (INRIA) Équipe associée Total Funding - 13,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Christopher Fuhrman; Nicolas Anquetil; Stéphane Ducasse; Yann-Gaël Guéhéneuc
2023/5 - 2023/8	Software Engineering Open Data Infrastructure, Scholarship
Principal Investigator	Funding Sources: Mathematics of Information Technology and Complex Systems (MITACS) Globalink Research Award Total Funding - 6,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Rodrigo Morales;
	Principal Investigator : Yann-Gaël Guéhéneuc
Completed [n=19]	
2018/5 - 2023/4	Building Multi-language, Multi-system Quality Models using Features and APIs, Grant
Principal Investigator	Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant Total Funding - 240,000 Portion of Funding Received - 240,000 Funding Competitive?: Yes
	Principal Investigator : Yann-Gaël Guéhéneuc
2018/5 - 2023/4	Empirical Software Engineering for the Internet of Things, Grant
Principal Investigator	Funding Sources: Canada Foundation for Innovation (CFI) Canada Research Chair Tier 1 Total Funding - 282,135 Portion of Funding Received - 282,135 Funding Competitive?: Yes
	Principal Investigator : Yann-Gaël Guéhéneuc
2021/1 - 2023/4 Co-investigator	Ensuring Privacy while Reducing Asymmetry in the Customer-Merchant Relationship (Assurer le respect de la vie privée tout en réduisant l'asymétrie dans la relation client- commerçant in French), Grant
	Funding Sources: Laboratoire de recherches transdisciplinaires sur les écosystèmes informatiques (LATECE) Projet patrimonial Total Funding - 32,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Jean Privat; Marc-Olivier Killijian; Sébastien Gambs; Yann-Gaël Guéhéneuc

2020/1 - 2023/4 Principal Investigator	Interdisciplinary Research Collaboration between Quebec and Mexico to Support the Creation, Operation, and Testing of Robust Software for the IoT (Collaboration de recherche interdisciplinaire entre le Québec et le Mexique in French), Grant
	Funding Sources: Ministère des Relations internationales et de la Francophonie (MRIF) Groupe de travail Québec-Mexique Total Funding - 16,000 Portion of Funding Received - 5,434 Funding Competitive?: Yes
	Co-investigator : Carlos Coello Coello; Rodrigo Morales;
	Principal Investigator : Yann-Gaël Guéhéneuc
2020/1 - 2022/12	Open Partnership Joint Research, Grant
Co-investigator	Funding Sources: Japan Society for the Promotion of Science (JSPS) Open Partnership Joint Research Total Funding - 35,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Yann-Gaël Guéhéneuc;
	Principal Investigator : Hironori Washizaki
2020/7 - 2022/7	IoT Research: from Modelling to Implementing Smart Cities, Grant
Principal Investigator	Funding Sources: Concordia University Aid to Research-related Events Total Funding - 5,000 Portion of Funding Received - 1,193 Funding Competitive?: Yes
	Co-investigator : Ursula Eicker;
	Principal Investigator : Yann-Gaël Guéhéneuc
2021/5 - 2022/4 Co-investigator	SPAR Lab: A Research Laboratory to Develop and Assess Smart Process Applications, Grant
	Funding Sources: Canada Foundation for Innovation (CFI) Innovation Fund Total Funding - 1,806,058 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-investigator : Ghizlane El Boussaidi; Halima Elbiaze; Mounir Boukadoum; Naouel Moha; Simon Bacon; Wessam Ajib; Yann-Gaël Guéhéneuc;
	Principal Investigator : Hafedh Mili; Kim Lavoie
2018/2 - 2021/12 Co-investigator	An Intelligent Mixed-reality Simulation and Training Ecosystem for Extreme Environments, Grant
	Funding Sources: Consortium for Research and Innovation in Aerospace in Québec (CRIAQ) AUT-1653_TRL4+ Total Funding - 5,259,495 Portion of Funding Received - 15,750

Funding Competitive?: Yes Co-investigator : Andréa Lodi; Antoine Legrain; Caroline Aubé; David Meger; David Saussié; Giovanni Beltrame; Grégory Dudek; Inna Sharf; Yann-Gaël Guéhéneuc; Co-knowledge User : Abdo Shabah (Humanitas Solutions); Hermann Brassard (Presagis); Martin Rivest (Thalès); Taïf Rahman (Elisen & Associates); Principal Investigator : Gabriela Nicolescu 2020/6 - 2021/9 Verifying and Deploying 5G Cloud Infrastructure for Improved Logistic and Communication in Healthcare Facilities Dealing with COVID-19 Patients, Grant Principal Investigator Funding Sources: Mathematics of Information Technology and Complex Systems (MITACS) Accelerate Total Funding - 120,000 Portion of Funding Received - 120,000 Funding Competitive?: Yes Principal Investigator : Yann-Gaël Guéhéneuc; Principal Knowledge User : Abdo Shabah (Humanitas Solutions) 2020/9 - 2021/8 Real-time Surrogate Safety Analysis Solution using Lidar Technology Powered by Artificial Principal Investigator Intelligence, Grant Funding Sources: Mathematics of Information Technology and Complex Systems (MITACS) Accelerate Total Funding - 45,000 Portion of Funding Received - 45,000 Funding Competitive?: Yes Principal Investigator : Yann-Gaël Guéhéneuc; Principal Knowledge User : Asad Lesani (BlueCity Technology) Empirical Evaluation of Software Development Environments (Évaluation empirique des 2018/4 - 2019/12 environnements de développement logiciel in French), Grant Principal Investigator Funding Sources: Agence Universitaire de la Francophonie (AUF) Support for Interuniversity Solidarity Projects in the Americas (PRISA) Total Funding - 15,895 Portion of Funding Received - 15,244 Funding Competitive?: Yes Co-investigator : Marcelo Soares Pimenta; Marco Tulio Valente; Regina Motz; Principal Investigator : Yann-Gaël Guéhéneuc 2017/9 - 2019/8 Startup, Grant Principal Investigator Funding Sources: Concordia University Startup Total Funding - 75,000 Portion of Funding Received - 75,000 Funding Competitive?: No Principal Investigator : Yann-Gaël Guéhéneuc

2018/5 - 2019/4 Applying Machine Learning Techniques to the Identification and Correction of Anomalies Principal Investigator in Transaction Sale Data, Grant

		Funding Sources: Mathematics of Information Technology and Complex Systems (MITACS) Accelerate Total Funding - 3,000 Portion of Funding Received - 3,000 Funding Competitive?: Yes
		Co-investigator : Foutse Khomh;
		Principal Investigator : Yann-Gaël Guéhéneuc;
		Principal Knowledge User : Bernd Lehnert (SAP)
201	4/5 - 2019/4	Patterns in Mixed-language Systems, Research Chair
Principal Investigator	Funding Sources: Canada Research Chairs (CRC) Tier 2 Total Funding - 500,000 Portion of Funding Received - 500,000 Funding Competitive?: Yes	
		Principal Investigator : Yann-Gaël Guéhéneuc
-	4/5 - 2018/12	Development of Context-aware Software Reuse Techniques (REUSE), Grant
Co-investigator	Funding Sources: Ministry of Science, ICT and Future Planning (MSIP) National Research and Development Project Total Funding - 30,000 Portion of Funding Received - 0 Funding Competitive?: Yes	
		Co-investigator : Yann-Gaël Guéhéneuc;
		Principal Investigator : Young-kwang Nam
	8/5 - 2018/8	Low Resource Open Source Web Browser, Scholarship
Principal Investigator	Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award (USRA) Total Funding - 6,000 Portion of Funding Received - 6,000 Funding Competitive?: Yes	
		Principal Investigator : Yann-Gaël Guéhéneuc
	5/5 - 2018/4 ncipal Investigator	Service-oriented Architectural Reengineering of Object-oriented Legacy Software (Réingénierie architecturale orientée services de logiciels légataires orientés objet in French), Grant
		Funding Sources: Fonds de recherche du Québec - Nature et technologies (FRQNT) Team Grant Total Funding - 144,000 Portion of Funding Received - 144,000 Funding Competitive?: Yes
		Co-investigator : Ghizlane El Boussaidi; Hafedh Mili; Naouel Moha;
		Principal Investigator : Yann-Gaël Guéhéneuc
201	2/5 - 2018/4	Building Practical Software Quality Models, Grant

Principal Investigator	Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant Total Funding - 204,000 Portion of Funding Received - 204,000 Funding Competitive?: Yes
	Principal Investigator : Yann-Gaël Guéhéneuc
2012/5 - 2017/4	ICD Management, Grant
Principal Investigator	Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC) Collaborative Research and Development Grant (CRD) Total Funding - 132,000 Portion of Funding Received - 132,000 Funding Competitive?: Yes
	Co-investigator : Roger Champane; Yvan Labiche;
	Collaborator : Claire Mangado; Giuliano Antoniol; John Mullins;
	Principal Investigator : Yann-Gaël Guéhéneuc;
	Principal Knowledge User : Pierre Labrèche (CMC Electronics)
Under Review [n=3]	
2024/5 - 2029/4 Co-applicant	Centre for Systems, Technologies and Applications for Radiofrequency and Communications (Centre pour les systèmes, technologies et applications en radiofréquences et communications, STARaCom, in French), Grant
	Funding Sources: Fonds de recherche du Québec - Nature et technologies (FRQNT) Strategic Cluster Total Funding - 500,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-applicant : Yann-Gaël Guéhéneuc and 56 others;
	Principal Applicant : David Plant
2024/5 - 2027/4 Co-applicant	Interuniversity Research Center on Digital Humanities (Centre de recherche interuniversitaire sur les humanités numériques, CIRHN, in French), Grant
	Funding Sources: Fonds de recherche du Québec - Société et culture (FRQSC) Strategic Cluster Total Funding - 300,000 Portion of Funding Received - 0 Funding Competitive?: Yes
	Co-applicant : Yann-Gaël Guéhéneuc and 70 others;
	Principal Applicant : Michael Eberle-Sinatra
2024/1 - 2025/12	International Community Energy Living Labs (ICELL), Grant
Co-investigator	Funding Sources: Canada First Research Excellence Fund Electrification for Resilient Decarbonized Communities - Seed Grants Total Funding - 250,000 Portion of Funding Received - 0 9

Funding Competitive?: Yes

Co-investigator : Aphrodite Salas; Caroline Hachem-Vermette; Ivan Kantor; Luiz Lopes; Mohamed Ouf; Yann-Gaël Guéhéneuc;

Principal Investigator : Ursula Eicker

# Student/Postdoctoral Supervision

Bachelor's [n=4]	
2020/1 - 2020/4 Principal Supervisor	Pascal Archambault (Completed) , Concordia University Thesis/Project Title: <i>Automated Bill Recognition System (Internship)</i> Present Position: Ph.D. Student at Université de Montréal, QC, Canada
2019/5 - 2019/6 Principal Supervisor	Nellybett Andrea (Completed) , Concordia University Thesis/Project Title: <i>Kapua and Kura (Internship)</i> Present Position: Living in Toronto, ON, Canada
2018/5 - 2018/8 Principal Supervisor	Pascal Archambault (Completed), Concordia University Thesis/Project Title: <i>Open-source Web Browser for Embedded/Low-consumption</i> <i>Hardware (Internship with NSERC USRA)</i> Present Position: Ph.D. Student at Université de Montréal, QC, Canada
2017/6 - 2017/8 Principal Supervisor	Raphaël Bissonnette (Completed) , Concordia University Thesis/Project Title: <i>Open Data Infrastructure (Internship)</i> Present Position: Unknown

### Bachelor's Equivalent [n=9]

2023/7 - 2023/8 Principal Supervisor	Mathis Goichon (Completed), Institut national des sciences appliquées de Lyon, France Thesis/Project Title: <i>Servicisation and Web Internface for Ptidej (Internship)</i> Present Position: Software engineer at Orange
2022/7 - 2022/9 Principal Supervisor	Timothé Verstraete (Completed), Institut national des sciences appliquées de Lyon, France Thesis/Project Title: <i>WIMP Project (Internship)</i> Present Position: DevOps and Cloud Engineer at AVISTO, France
2019/7 - 2019/11 Principal Supervisor	Thibault Lamonier (Completed), École des hautes études d'ingénieur, Lille, France Thesis/Project Title: <i>Multi-language Parsers for PADL (Internship)</i> Present Position: Consultant Cyber Risk and Security, France
2019/4 - 2019/7 Principal Supervisor	Palmyre Würtz-Baroth (Completed), École Polytechnique, Paris, France Thesis/Project Title: <i>P-MARt for Multi-language Patterns (Internship)</i> Present Position: Tool and Operations Project Manager at SNCF, France
2017/6 - 2017/8 Principal Supervisor	Jean Rublé (Completed), École nationale supérieure d'informatique pour l'industrie et l'entreprise, Évry, France Thesis/Project Title: <i>Linguistic Antipatterns (Internship)</i> Present Position: DevOps Engineer at Orange, Paris, France
2017/5 - 2017/8 Principal Supervisor	Dipti Ranjan Sahu (Completed), Indian Institute of Technology Bombay, Mumbai, MH, India Thesis/Project Title: <i>Open Data Infrastructure (Internship with MITACS Globalink)</i> Present Position: Unknown

2017/5 - 2017/8 Principal Supervisor	Julien Hebmann (Completed) , Polytech Montpellier, France Thesis/Project Title: <i>JavaScript in NetSurf (Internship)</i> Present Position: Software Engineer in Montpellier, France
2017/5 - 2017/8 Principal Supervisor	Niverthan Panchalingam (Completed), Polytech Paris, France Thesis/Project Title: <i>JavaScript in NetSurf (Internship)</i> Present Position: Functional Verification and Validation Engineer at MBDA, Le Plessis- Robinson, France
2017/1 - 2017/5 Principal Supervisor	Zichao Deng (Completed), Nanyang Technological University, Singapore Thesis/Project Title: <i>Improving Brunch (Internship with MITACS Globalink)</i> Present Position: Unknown

## Master's Equivalent [n=2]

2019/5 - 2019/6	Gleison Brito (Completed) , Federal University of Minas Gerais, Belo Horizonte, MG, Brazil
Principal Supervisor	Thesis/Project Title: REST and GraphQL (Internship)
	Present Position: Technical Education Teacher at Proz, São Paulo, SP, Brazil
2019/5 - 2019/8	João Eduardo Montandon (Completed), Federal University of Minas Gerais, Belo
Principal Supervisor	Horizonte, MG, Brazil
	Thesis/Project Title: Developers' Characteristics (Internship)
	Present Position: Seeking Research Position at a University in Portugal

## Master's non-Thesis [n=6]

2018/9 - 2019/8 Principal Supervisor	Vaibhav Jain (Completed), Concordia University Thesis/Project Title: <i>MQTT for IoT (Informal Collaboration)</i> Present Position: Senior Software Engineer at Wayfair, Toronto, ON, Canada
2018/5 - 2018/8 Principal Supervisor	Satnam Singh (Completed), Concordia University Thesis/Project Title: Seodin: An Open Data Infrastructure (Internship) Present Position: Senior ML Engineer at OpenText, Waterloo, ON, Canada
2018/5 - 2018/8 Principal Supervisor	Adrien Poupa (Completed) , Concordia University Thesis/Project Title: <i>A C# PADL Creator (Internship)</i> Present Position: Technical Lead at Turbulent, Montréal, QC, Canada
2018/5 - 2018/8 Principal Supervisor	Urmil Kansara (Completed), Concordia University Thesis/Project Title: <i>A Java Implementation of the Little Computer People (Internship)</i> Present Position: Technical Lead at Tech Mahindra, Toronto, ON, Canada
2018/5 - 2018/8 Principal Supervisor	Vaibhav Jain (Completed), Concordia University Thesis/Project Title: <i>A Java Implementation of the Little Computer People (Internship)</i> Present Position: Senior Software Engineer at Wayfair, Toronto, ON, Canada
2018/5 - 2018/8 Principal Supervisor	Tejas Sadrani (Completed), Concordia University Thesis/Project Title: <i>A Java Implementation of the Little Computer People (Internship)</i> Present Position: Software Engineer at PointClickCare, Mississauga, Ontario, Canada

### Master's Thesis [n=9]

2022/1 - 2023/12	Gabriel Ullmann (In Progress), Concordia University
Principal Supervisor	Thesis/Project Title: Studying Game Engine Architectures
	Present Position: M.Sc. Student
2020/1 - 2023/12	Jianbin Lai (In Progress) , Concordia University
Principal Supervisor	Thesis/Project Title: CoAP and MQTT IoT APIs Comparisons
	Present Position: M.Sc. Student

2020/1 - 2021/11 Principal Supervisor	Mohammad Nazemi (Completed), Concordia University Thesis/Project Title: <b>Implementing a Library to Calculate Surrogate Safety Measures</b> (MITACS Funding) Present Position: Software engineer, BlueCity Technology, Montréal, QC, Canada
2019/9 - 2021/2 Co-Supervisor	Rafik Tighilt (Completed), UQÀM Thesis/Project Title: <b>Assistance à la maintenance et à l'évolution des logiciels</b> <b>via l'identification automatique d'anti-patrons dans les architectures à base de</b> <b>microservices</b> (FRQNT Master's Research Scholarship) Present Position: Software engineer, Morgan Stanley, Montréal, QC, Canada
2019/6 - 2021/8 Principal Supervisor	Tuan Van Tran (Completed), Concordia University Thesis/Project Title: <b>Formalising Solutions to REST API Practices a s Design</b> (Anti)patterns Present Position: Software engineer, CoreLogic, Toronto, ON, Canada
2017/9 - 2018/12 Co-Supervisor	Antoine Barbez (Completed), Polytechnique Montréal Thesis/Project Title: <b>Deep Learning Structural and Historical Features for Anti</b> <b>Patterns Detection</b> Present Position: Computer Vision Research Engineer, Parkopedia, Montréal, QC, Canada
2016/9 - 2018/5 Co-Supervisor	Atefeh Meshinchi (Completed), Polytechnique Montréal Thesis/Project Title: <b>QoS-aware Adaptive Resource Allocation Framework in SDN- based IoT Middleware</b> Present Position: Senior Technical Manager, Bell IoT, Montréal, QC, Canada
2016/5 - 2018/1 Co-Supervisor	Rim Ben Dhaou (Completed), École de technologie supérieure Thesis/Project Title: <b>Modélisation de systèmes avioniques avec AADL</b> (NSERC CRD Funding) Present Position: Software Consultant, Nexio, Montréal, QC, Canada
2016/5 - 2017/12 Co-Supervisor	Mahdis Zolfagharinia (Completed) , Polytechnique Montréal Thesis/Project Title: <b>The Impact of Operating Systems and Environments on Build</b> <b>Results</b> Present Position: ERP Project Manager, Lamour, Montréal, QC, Canada
Doctorate [n=17]	
2022/9 - 2026/8 Principal Supervisor	Farideh Sanei (In Progress) , Concordia University Thesis/Project Title: <b>Quality of IoT Systems</b> Present Position: Ph.D. Student
2022/9 - 2026/8 Co-Supervisor	Sikander Ejaz (In Progress), Concordia University Thesis/Project Title: <b>Design and Implementation of an IoT Middleware for Cities of the</b> <b>Future</b> Present Position: Ph.D. Student
2022/6 - 2022/12 Principal Supervisor	José Eduardo Cardoza Plata (Completed) , Instituto Politécnico Nacional, Mexico City, Mexico Thesis/Project Title: <i>WIMP Project (Internship)</i> Present Position: Ph.D. Student
2022/1 - 2025/12 Co-Supervisor	Alireza Adli (In Progress), Concordia University Thesis/Project Title: <b>Developing a Framework to Assess Building- and Mobility- related Carbon Emissions in a Neighbourhood</b> Present Position: Ph.D. Student

2021/9 - 2025/8 Co-Supervisor	Nour Khezemi (In Progress) , ÉTS Thesis/Project Title: <b>Study of IoT System Architectural Styles and their Quality</b> <b>Requirements</b> Present Position: Ph.D. Student
2021/5 - 2025/12 Principal Supervisor	Peter Yefi (In Progress) , Concordia University Thesis/Project Title: <b>Designing IoT Systems for Sustainability</b> Present Position: Ph.D. Student
2021/5 - 2025/4 Principal Supervisor	Jean Baptiste Minani (In Progress) , Concordia University Thesis/Project Title: <b>Testing IoT Systems</b> Present Position: Ph.D. Student
2021/1 - 2024/12 Co-Supervisor	Imen Trabelsi (In Progress) , ÉTS Thesis/Project Title: <b>Unsupervised Learning for Microservices Migration</b> Present Position: Ph.D. Student
2020/1 - 2025/12 Co-Supervisor	Belal Nwiran (In Progress) , Concordia University Thesis/Project Title: <b>Action Recognition in the Edge for Drone Control</b> Present Position: Ph.D. Student
2018/5 - 2022/6 Principal Supervisor	Cristiano Politowski (Completed), Concordia University Thesis/Project Title: Improving Video Game Balance Testing Using Autonomous Agents
	Present Position: Post-doc., GEODES, DIRO, Université de Montréal, QC, Canada
2017/9 - 2023/5 Co-Supervisor	Layan Etaiwi (Completed), Polytechnique Montréal Thesis/Project Title: <b>Consensus-based Recommendation Technique for Software</b> <b>Engineering Applications</b> Present Position: Job Seeker
2017/9 - 2023/5 Principal Supervisor	William Flageol (Completed), Concordia University Thesis/Project Title: <b>Improving Object Oriented Programming by Integrating</b> <b>Language Features to Support Immutability</b> (FRQNT Doctoral Research Scholarship) Present Position: Lecturer, Université du Québec à Trois-Rivières, QC, Canada
2017/5 - 2017/8 Co-Supervisor	Fatima Sabir (Completed), COMSATS Institute of Information Technology Lahore Thesis/Project Title: <b>Detection of Antipatterns from Service Oriented Architecture</b> Present Position: Professor, University of the Punjab, PB, Pakistan
2016/5 - 2021/7 Principal Supervisor	Manel Abdellatif (Completed), Polytechnique Montréal Thesis/Project Title: <b>Service Identification to Support the Migration of Legacy</b> <b>Systems to SOA</b> (FRQNT Doctoral Research Scholarship) Present Position: Institutional Researcher, École de technologie supérieure, Montréal, QC, Canada
2015/9 - 2017/4 Co-Supervisor	Fabio Petrillo (Completed), Universidade Federal do Rio Grande do Sul Thesis/Project Title: <b>Swarm Debugging: the Collective Debugging Intelligence of the</b> <b>Crowd</b>
2015/1 - 2019/7 Principal Supervisor	Present Position: Professor, École de technologie supérieure, Montréal, QC, Canada Zeinab Kermansaravi (Completed), Polytechnique Montréal Thesis/Project Title: Linguistic Anti-patterns: Impact Analysis on Code Quality Present Position: Job Seeker
2014/9 - 2017/12 Co-Supervisor	Rubén Saborido-Infantes (Completed), Polytechnique Montréal Thesis/Project Title: <b>Assisting Developers and Users in Developing and Choosing</b> <b>Efficient Mobile Device Apps</b> Present Position: Researcher, Department of Computer Science and Programming Languages, University of Malaga, Spain

Post-doctorate [n=7]	
2022/5 - 2022/12 Principal Supervisor	Majid Babaei (Completed), Concordia University Thesis/Project Title: <b>Automated Robustness Testing Framework for State Machines</b> Present Position: Faculty Lecturer, Technology & Innovation, School of Continuing Studies, McGill University, Montréal, QC, Canada
2020/3 - 2020/7 Principal Supervisor	Benjamin Benni (Completed), Concordia University Thesis/Project Title: <b>Software Engineering Drones for Emergency Responses</b> Present Position: Software Engineer, Instant System, Biot, France
2020/3 - 2021/12 Principal Supervisor	Fatima Sabir (Completed), Concordia University Thesis/Project Title: <b>Software Engineering Drones for Emergency Responses</b> Present Position: Professor, University of the Punjab, PB, Pakistan
2018/6 - 2018/12 Principal Supervisor	Rodrigo Morales (Completed), Concordia University Thesis/Project Title: <b>Improving Software Quality of IoT Systems through Refactorings</b> Present Position: Lecturer, Concordia University, Montréal, QC, Canada
2018/6 - 2018/12 Principal Supervisor	Rubén Saborido-Infantes (Completed), Concordia University Thesis/Project Title: <b>Search Based Software Engineering for IoT Software</b> <b>Optimisation</b> Present Position: Researcher, Department of Computer Science and Programming Languages, University of Malaga, Spain
2017/9 - 2018/12 Co-Supervisor	Md Saidur Rahman (Completed), Polytechnique Montréal Thesis/Project Title: <b>Applying Machine Learning Techniques to the Identification and</b> <b>Correction of Anomalies in Data</b> Present Position: Senior R&D Data Scientist, Desjardins, Montréal, QC, Canada
2016/12 - 2017/7 Co-Supervisor	Anas Shatnawi (Completed) , UQÀM Thesis/Project Title: <b>Service-oriented Reengineering</b> Present Position: Senior R&D Software Engineer, Berger-Levrault, Montpellier, France
Diploma [n=1]	
2022/6 - 2022/7 Principal Supervisor	Martin Lecourt (Completed) , Lycée Louis-le-Grand, France Thesis/Project Title: <i>Observational Internship (Internship)</i> Present Position: Diploma Student
Research Associate	[n=2]
2023/5 - 2023/6	Elbachami Alikacom (Completed) Concerdia University

2023/5 - 2023/6	Elhachemi Alikacem (Completed), Concordia University
Principal Supervisor	Thesis/Project Title: Development of a Mock-up Factory
	Present Position: Lecturer at École de technologie supérieure, Montréal, QC, Canada
2017/9 - 2018/8	Fábio Petrillo (Completed), Concordia University
Principal Supervisor	Thesis/Project Title: Alleviating the New Software Engineering Crisis
	Present Position: Professor, École de technologie supérieure, Montréal, QC, Canada

## **Event Administration**

2023/9 - 2024/7	Co-organiser, 3rd International Workshop on Automated Software Engineering for Computer Games (ASE4Games'24) with ASE'24, Workshop, 2024/7 - 2024/7
2023/5 - 2024/6	Co-organiser and Lecturer, ReAnimate: 2024 Summer School on Retro Gaming History, Critic, and Development, Course, 2024/6 - 2024/6

2023/9 - 2024/4	Co-organiser, 6th International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'24) with ICSE'24, Workshop, 2024/4 - 2024/4
2019/9 - 2024/4	Steering Committee Member, International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT), Workshop, 2019/9 - 2024/4
2022/9 - 2023/5	Co-organiser, 5th International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'23) with ICSE'23, Workshop, 2023/5 - 2023/5
2021/11 - 2022/10	Co-organiser, 2nd International Workshop on Automated Software Engineering for Computer Games (ASE4Games'22) with ASE'22, Workshop, 2022/10 - 2022/10
2021/9 - 2022/5	Co-organiser, 4th International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'22) with ICSE'22, Workshop, 2022/5 - 2022/5
2020/11 - 2021/11	Co-organiser, 1st International Workshop on Automated Software Engineering for Computer Games (ASE4Games'21) with ASE'21, Workshop, 2021/11 - 2021/11
2020/9 - 2021/5	Co-organiser, 3rd International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'21) with ICSE'21, Workshop, 2021/5 - 2021/5
2019/4 - 2020/12	Program Co-chair, 28th IEEE/ACM International Conference on Program Comprehension (ICPC'20), Conference, 2020/7 - 2020/7
2019/9 - 2020/5	Co-organiser, 2nd International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'20) with ICSE'20, Workshop, 2020/5 - 2020/5
2017/5 - 2019/12	General Chair, 27th IEEE/ACM International Conference on Program Comprehension (ICPC'19), Conference, 2019/5 - 2019/5
2018/9 - 2019/5	Co-organiser, 1st International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'19) with ICSE'19, Workshop, 2019/5 - 2019/5
2015/5 - 2018/5	Steering Committee Member, International Conference on Program Comprehension (ICPC), Conference, 2015/5 - 2018/5

## **Editorial Activities**

2020/5 - 2022/12 Editor in Chief, MDPI IoT, Journal

# **Organizational Review Activities**

2018/1 - 2026/12	Commissioner, Bureau de coopération interuniversitaire Committee for the Evaluation of Program Proposals ( <i>Commission d'évaluation des projets</i> <i>de programmes</i> in French)
2022/10 - 2023/9	Co-chair, IEEE CS TCSE Most Influential Paper Award At the 39th IEEE International Conference on Software Maintenance and Evolution (ICSME'23)
2023/3 - 2023/6	External Referee, Singapore Management University, Singapore Evaluated a dossier for a promotion to Full Professor

2023/5 - 2023/5	Reviewer, Mathematics of Information Technology and Complex Systems (MITACS) Provided external reports
2023/1 - 2023/1	Reviewer - Review Committee 1507 (Computer Science), Natural Sciences and Engineering Research Council of Canada (NSERC) Provided external reports
2022/4 - 2022/11	Reviewer, Mathematics of Information Technology and Complex Systems (MITACS) Provided external reports
2022/1 - 2022/6	External Referee, Université de Namur Evaluated a dossier for a promotion to Full Professor
2022/4 - 2022/4	External Referee, Institut National de Recherche en Informatique et Automatique (INRIA) Provided an external report to support a secondment (détachment in French)
2022/1 - 2022/1	Reviewer - Review Committee 1507 (Computer Science), Natural Sciences and Engineering Research Council of Canada (NSERC) Provided external reports
2021/8 - 2021/9	Reviewer - Alliance Grant, Natural Sciences and Engineering Research Council of Canada (NSERC) Provided external reports
2021/7 - 2021/8	External Referee, Concordia University Provided an external report for the Valedictorian Prize
2021/5 - 2021/7	External Referee, University of Alberta Evaluated a dossier for a promotion to Associate Professor
2020/5 - 2021/5	Jury Member, École Nationale des Sciences de l'Informatique, Tunisia For an accreditation to supervise research ( <i>Habilitation à diriger des recherches</i> in French)
2021/4 - 2021/4	Reviewer, Mathematics of Information Technology and Complex Systems (MITACS) Provided external reports
2021/2 - 2021/2	Reviewer, Canada Research Chairs Provided an external report
2021/2 - 2021/2	Nominator, ACM Mining Software Repositories Conference Series (MSR) Nominated a candidate for the Ric Holt Early Career Achievement Award
2020/2 - 2020/6	External Foreign Expert, Department of Computer Science, COMSATS University Islamabad, PB, Pakistan Evaluated a dossier for a promotion to Associate Professor on Permanent Tenure
2020/3 - 2020/4	Reviewer, Mathematics of Information Technology and Complex Systems (MITACS) Provided external reports
2020/1 - 2020/1	Reviewer, Swiss National Science Foundation Provided external reports
2020/1 - 2020/1	External Referee, Queen's University at Kingston, ON, Ontario, Canada Evaluated a dossier for the Distinguished University Professor program
2020/1 - 2020/1	Reviewer - Review Committee 1507 (Computer Science), Natural Sciences and Engineering Research Council of Canada (NSERC) Provided external reports
2019/7 - 2019/9	Promotion Referee, Carleton University, Ottawa, ON, Canada Evaluated a dossier for a promotion to Associate Professor

2019/5 - 2019/9	External Foreign Expert, Department of Computer Science, COMSATS University
	Islamabad, PB, Pakistan Evaluated a dossier for a promotion to Associate Professor on Permanent Tenure
2019/4 - 2019/8	Jury Member, Institut de Recherche en Informatique et Systèmes Aléatoires (IRISA) For an accreditation to supervise research ( <i>Habilitation à diriger des recherches</i> in French)
2015/2 - 2019/5	Co-creator, Polytechnique Montréal, QC, Canada Joint Ph.D. program in Software Engineering between Polytechnique Montréal and Université de Montréal
2018/11 - 2019/1	External Foreign Expert, Department of Computer Science, COMSATS University Islamabad, PB, Pakistan Evaluated a dossier for a promotion to Associate Professor on Permanent Tenure
2018/11 - 2019/1	Reviewer - Review Committee 1507 (Computer Science), Natural Sciences and Engineering Research Council of Canada (NSERC) Provided external reports
2018/8 - 2018/11	External Referee, University of Calgary, AB, Canada Evaluated a dossier for a promotion to Full Professor
2018/8 - 2018/9	External Reviewer, University of Saskatchewan Evaluated a dossier for a promotion to Full Professor
2018/2 - 2018/4	Reviewer, Canada Research Chairs Provided an external report
2018/2 - 2018/3	Reviewer - CRD Grant, Natural Sciences and Engineering Research Council of Canada (NSERC) Provided external reports
2018/1 - 2018/3	Nominator, CS-Can/Info-Can Nominated a candidate for the Outstanding Young Computer Science Researcher prize
2018/1 - 2018/2	Nominator, ACM Mining Software Repositories Conference Series (MSR) Nominated a candidate for the Early Career Achievement Award
2017/5 - 2017/5	External Referee, Singapore Management University, Singapore Evaluated a dossier for a promotion to Associate Professor
2017/2 - 2017/2	Referee, Heidelberg Laureate Forum Provided an external report to support the application of a young researcher

## **International Collaboration Activities**

2020/1 - 2024/12	Co-investigator, Mexico Research collaborations with Carlos Colleo Colleo at the Center for Research and Advanced Studies of the National Polytechnic Institute, Mexico City, Mexico ( <i>Centro de</i> <i>Investigación y de Estudios Avanzados del Instituto Politécnico Nacional</i> in Spanish)
2014/6 - 2024/12	Co-investigator, Japan Research collaborations with Hironori Washizaki at the Waseda University, Tokyo, Japan
2019/5 - 2023/12	Co-investigator, France

Associated Team (*Équipe associée* in French) with Nicolas Anquetil and Stéphane Ducasse from the RMod Team at INRIA Lille, France

# **Committee Memberships**

2023/9 - 2024/6	Committee Member, Program Committee, 40th IEEE International Conference on Software Maintenance and Evolution (ICSME'24)
2024/1 - 2024/2	Committee Member, Program Committee, 19th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE'24)
2023/11 - 2023/12	Committee Member, Program Committee, 11th International Conference on Mobile Software Engineering and Systems (MOBILESoft'23)
2023/3 - 2023/9	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 2 articles (with multiple revisions)
2023/7 - 2023/8	Committee Member, Program Committee, 30th Asia-Pacific Software Engineering Conference (APSEC'23)
2023/3 - 2023/8	Committee Member, Reviewers, Springer Empirical Software Engineering (EMSE) Reviewed 1 articles (with multiple revisions)
2023/4 - 2023/6	Committee Member, Program Committee, 39th IEEE International Conference on Software Maintenance and Evolution (ICSME'23)
2023/5 - 2023/5	Committee Member, Program Committee, 3rd International Workshop on MDE for Smart IoT Systems (MeSS'23)
2022/2 - 2023/5	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 3 articles (with multiple revisions)
2018/9 - 2023/4	Chair, Department Hiring Committee for a Canada Research Chair, Concordia University
2018/9 - 2023/4	Chair, Department Hiring Committee for a Gina Cody Research Chair, Concordia University
2023/3 - 2023/3	Committee Member, Program Committee, 12th International Workshop on the Reliability of Intelligent Environments (WoRIE'23)
2023/3 - 2023/3	Committee Member, Program Committee, 11th International Workshop of Eye Movements in Programming (EMIP'23)
2023/1 - 2023/3	Committee Member, Reviewers, Springer Journal of Computer Science and Technology (JCST) Reviewed 1 article
2021/2 - 2022/11	Committee Member, Reviewers, IEEE Transactions on Software Engineering (TSE) Reviewed 2 articles (with multiple revisions)
2022/7 - 2022/8	Committee Member, Program Committee, 29th Asia-Pacific Software Engineering Conference (APSEC'22)
2022/2 - 2022/8	Committee Member, Reviewers, AITO Journal of Object Technology (JOT) Reviewed 2 articles
2021/12 - 2022/7	Committee Member, Reviewers, Wiley Journal of Software: Practice and Experience (JSPE) Reviewed 1 article (with multiple revisions)
2021/5 - 2022/7	Committee Member, Reviewers, Elsevier Journal of Systems and Software (JSS) Reviewed 2 articles (with multiple revisions)
2022/6 - 2022/6	Committee Member, Reviewers, Springer Software Quality Journal (SQJ) Reviewed 1 article

2022/5 - 2022/5	Committee Member, Program Committee, 2nd International Workshop on MDE for Smart IoT Systems (MeSS'22)
2022/1 - 2022/3	Committee Member, Reviewers, IEEE Transactions on Dependable and Secure Computing (TDSC) Reviewed 1 article
2022/2 - 2022/2	Committee Member, Program Committee, 10th International Workshop of Eye Movements in Programming (EMIP'22)
2021/12 - 2022/2	Committee Member, Reviewers, Springer Empirical Software Engineering (EMSE) Reviewed 2 articles (with multiple revisions)
2021/10 - 2022/2	Committee Member, Reviewers, Elsevier Journal of Computer Languages (COLA) Reviewed 1 article
2021/4 - 2022/2	Committee Member, Reviewers, Springer Empirical Software Engineering (EMSE) Reviewed 3 articles (with multiple revisions)
2021/10 - 2021/12	Committee Member, New Ideas and Emerging Results (NIER) Program Committee, 44th IEEE/ACM International Conference on Software Engineering (ICSE'22)
2021/9 - 2021/11	Committee Member, Reviewers, AITO Journal of Object Technology (JOT) Reviewed 1 article
2020/9 - 2021/11	Committee Member, Reviewers, ACM Transactions on Software Engineering and Methodology (TOSEM) Reviewed 1 article (with multiple revisions)
2021/8 - 2021/8	Committee Member, Program Committee, 28th Asia-Pacific Software Engineering Conference (APSEC'21)
2020/11 - 2021/7	Committee Member, Reviewers, Springer Arabian Journal for Science and Engineering (AJSE) Reviewed 1 article (with multiple revisions)
2021/6 - 2021/6	Committee Member, Program Committee, 5th International Conference on Computer Science and Application Engineering (CSAE'21)
2021/6 - 2021/6	Committee Member, Reviewers, IEEE Access Reviewed 1 article
2021/5 - 2021/6	Committee Member, Reviewers, Springer Journal of Ambient Intelligence and Humanized Computing (JAIHC) Reviewed 1 article (with multiple revisions)
2021/5 - 2021/5	Committee Member, Program Committee, 1st International Workshop on MDE for Smart IoT Systems (MeSS'21)
2021/3 - 2021/4	Committee Member, Program Committee, 10th International Workshop on the Reliability of Intelligent Environments (WoRIE'21)
2021/1 - 2021/4	Committee Member, Reviewers, Elsevier Science of Computer Programming (SCP) Reviewed 1 article (with multiple revisions)
2020/3 - 2021/4	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 1 article (with multiple revisions)
2021/3 - 2021/3	Committee Member, Petro-Canada Young Inovator Award (PCYIA), Concordia University
2021/3 - 2021/3	Committee Member, Program Committee, 8th International Workshop of Eye Movements in Programming (EMIP'21)
2021/3 - 2021/3	Committee Member, University Research Awards (URAs), Concordia University

2021/3 - 2021/3	Committee Member, Program Committee, 45rd IEEE Computer Software and Applications Conference (COMPSAC'21)
2021/3 - 2021/3	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 1 article (for a special issue)
2021/2 - 2021/3	Committee Member, RR (Registered Report) Program Committee, 18th International Working Conference on Mining Software Repositories (MSR'21)
2021/1 - 2021/2	Committee Member, Program Committee, 29th IEEE/ACM International Conference on Program Comprehension (ICPC'21)
2020/8 - 2020/9	Committee Member, Program Committee, 19th International Conference on Software and System Engineering (ICSR'20)
2020/7 - 2020/9	Committee Member, Program Committee, 27th Asia-Pacific Software Engineering Conference (APSEC'20)
2020/3 - 2020/9	Committee Member, Reviewers, Elsevier Expert Systems With Applications (ESWA) Reviewed 1 articles (with multiple revisions)
2020/1 - 2020/9	Committee Member, Reviewers, Elsevier Journal of Systems and Software (JSS) Reviewed 1 article (with multiple revisions)
2019/4 - 2020/9	Committee Member, Reviewers, Wiley Journal of Software: Evolution and Process (JSEP) Reviewed 3 articles (with multiple revisions)
2020/5 - 2020/5	Committee Member, Program Committee, 4th International Workshop on Model-Driven Engineering for the Internet-of-Things (MDE4IoT'20)
2020/1 - 2020/5	Committee Member, Best Thesis Award, CNRS GDR GPL Programming and Software Engineering Research Cluster of CNRS, France ( <i>Groupement</i> <i>de Recherche Génie de la Programmation et du Logiciel</i> in French)
2019/6 - 2020/5	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 2 articles (with multiple revisions)
2020/2 - 2020/3	Committee Member, Program Committee, 44th IEEE Computer Software and Applications Conference (COMPSAC'20)
2020/2 - 2020/3	Committee Member, Research Award, Université du Québec à Montréal, QC, Canada
2020/2 - 2020/2	Committee Member, Program Committee, 7th International Workshop of Eye Movements in Programming (EMIP'20)
2019/8 - 2020/1	Committee Member, Reviewers, Springer Empirical Software Engineering (EMSE) Reviewed 2 articles (with multiple revisions)
2019/3 - 2020/1	Committee Member, Reviewers, Elsevier Journal of Systems and Software (JSS) Reviewed 1 article (with multiple revisions)
2019/3 - 2020/1	Committee Member, Reviewers, ACM Computing Surveys (CSUR) Reviewed 1 article (with multiple revisions)
2019/12 - 2019/12	Committee Member, Tools Program Committee, 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER'20)
2019/11 - 2019/12	Committee Member, Program Committee, 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER'20)
2019/10 - 2019/11	Committee Member, Software Engineering in Practice (SEIP) Program Committee, 42nd IEEE/ACM International Conference on Software Engineering (ICSE'20)
2018/11 - 2019/10	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 1 article (with multiple revisions)

2019/8 - 2019/9	Committee Member, Program Committee, 26th Asia-Pacific Software Engineering Conference (APSEC'19)
2018/7 - 2019/9	Committee Member, Reviewers, Wiley Journal of Software: Practice and Experience (JSPE) Reviewed 1 article (with multiple revisions)
2019/7 - 2019/8	Committee Member, Reviewers, Springer Software Quality Journal (SQJ) Reviewed 1 article (with multiple revisions)
2019/6 - 2019/7	Committee Member, Program Committee, 19th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM'19)
2019/5 - 2019/5	Committee Member, Reviewers, Elsevier Applied Computing and Informatics (ACI) Reviewed 1 article
2019/1 - 2019/5	Committee Member, Best Thesis Award, CNRS GDR GPL Programming and Software Engineering Research Cluster of CNRS, France ( <i>Groupement</i> <i>de Recherche Génie de la Programmation et du Logiciel</i> in French)
2019/2 - 2019/4	Committee Member, Program Committee, 43rd IEEE Computer Software and Applications Conference (COMPSAC'19)
2019/3 - 2019/3	Committee Member, Tools Program Committee, 27th IEEE/ACM International Conference on Program Comprehension (ICPC'19)
2018/6 - 2019/3	Committee Member, Reviewers, Springer Automated Software Engineering (AUSE) Reviewed 1 article (with multiple revisions)
2018/2 - 2019/3	Committee Member, Reviewers, Springer Empirical Software Engineering (EMSE) Reviewed 5 articles (with multiple revisions)
2019/1 - 2019/2	Committee Member, Program Committee, 6th International Workshop on Eye Movements in Programming (EMIP'19)
2019/1 - 2019/2	Committee Member, Program Committee, International Symposium on Software Engineering for Cloud, Edge and IoT Systems (SECEI'20)
2018/12 - 2019/2	Committee Member, Reviewers, Hindawi Scientific Programming (SP) Reviewed 1 article
2018/11 - 2019/2	Committee Member, Reviewers, IEEE Transactions on Software Engineering (TSE) Reviewed 1 article
2018/6 - 2019/2	Committee Member, Reviewers, Wiley Journal of Software: Evolution and Process (JSEP) Reviewed 1 article
2018/12 - 2018/12	Committee Member, Demonstration Program Committee, 26th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER'19)
2018/10 - 2018/11	Committee Member, Reviewers, Elsevier Science of Computer Programming (SCP) Reviewed 1 article
2018/10 - 2018/10	Committee Member, Reviewers, ACM Communications Reviewed 1 article
2018/9 - 2018/10	Committee Member, Shepherd, 12th Latin American Conference on Pattern Languages of Programs (SugarLoafPLoP'18)
2017/2 - 2018/10	Committee Member, Reviewers, IEEE Transactions on Software Engineering (TSE) Reviewed 4 articles (with multiple revisions)
2018/7 - 2018/9	Committee Member, Reviewers, Hindawi Scientific Programming (SP) Reviewed 1 article

2017/12 - 2018/9	Committee Member, Reviewers, ACM Transactions on Software Engineering and Methodology (TOSEM) Reviewed 1 article (with multiple revisions)
2018/7 - 2018/8	Committee Member, Program Committee, 25th Asia-Pacific Software Engineering Conference (APSEC'18)
2018/6 - 2018/7	Committee Member, Program Committee, 18th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM'18)
2018/6 - 2018/6	Committee Member, Doctoral Symposium Program Committee, 33rd IEEE/ACM International Conference on Automated Software Engineering (ASE'18)
2018/4 - 2018/6	Committee Member, Program Committee, 33rd IEEE/ACM International Conference on Automated Software Engineering (ASE'18)
2018/2 - 2018/5	Committee Member, Reviewers, Elsevier Journal of Systems and Software (JSS) Reviewed 1 article (with multiple revisions)
2018/1 - 2018/5	Committee Member, Best Thesis Award, CNRS GDR GPL Programming and Software Engineering Research Cluster of CNRS, France ( <i>Groupement</i> <i>de Recherche Génie de la Programmation et du Logiciel</i> in French)
2017/3 - 2018/5	Committee Member, Reviewers, Springer Empirical Software Engineering (EMSE) Reviewed 4 articles (with multiple revisions)
2017/3 - 2018/4	Committee Member, Reviewers, Elsevier Journal of Systems and Software (JSS) Reviewed 2 articles (with multiple revisions)
2018/2 - 2018/2	Committee Member, Program Committee, 26th IEEE/ACM International Conference on Program Comprehension (ICPC'18)
2018/1 - 2018/2	Committee Member, Demonstration Program Committee, 25th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER'18)
2017/5 - 2017/11	Committee Member, Reviewers, Elsevier Information and Software Technology (IST) Reviewed 3 articles (with multiple revisions)
2017/3 - 2017/11	Committee Member, Reviewers, Elsevier Science of Computer Programming (SCP) Reviewed 1 article
2017/7 - 2017/8	Committee Member, Program Committee, 24th Asia-Pacific Software Engineering Conference (APSEC'17)
2017/6 - 2017/8	Committee Member, Reviewers, Springer Software Quality Journal (SQJ) Reviewed 1 article (with multiple revisions)
2017/6 - 2017/7	Committee Member, New Ideas and Emerging Results (NIER) Program Committee, 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME'17)
2017/1 - 2017/3	Committee Member, Program Committee, 25th IEEE International Conference on Program Comprehension (ICPC'17)
2016/9 - 2017/1	Committee Member, New Ideas and Emerging Results (NIER) Program Committee, 39th IEEE/ACM International Conference on Software Engineering (ICSE'17)

# **Other Memberships**

2010/5 - 2024/8	Senior Member, Institute of Electrical and Electronics Engineers (IEEE)

2007/3 - 2024/4 Member, Ordre des ingénieurs du Québec

### **Presentations**

 (2022). Al System Design Patterns: System Architecture, Component Design, and Model Operation. Huawei Strategy and Technology Workshop, Montréal, Canada Main Audience: Knowledge User Invited?: Yes, Keynote?: No

## **Publications**

### **Journal Articles**

- Jean Baptiste Minani, Fatima Sabir, Naouel Moha, and Yann-Gaël Guéhéneuc. (2024). A Systematic Review of IoT Systems Testing: Objectives, Approaches, Tools, and Challenges. IEEE Transactions on Software Engineering (TSE). Accepted Refereed?: Yes
- Hafedh Mili, Imen Benzarti, Amel El Kharraz, Ghizlane El Boussaidi, Yann-Gaël Guéhéneuc, and Petko Valtchev. (2023). Discovering Reusable Functional Features in Legacy Object-oriented Systems. IEEE Transactions on Software Engineering (TSE). 49(7) In Press Refereed?: Yes
- Jean Baptiste Minani\*, Fatima Sabir, Naouel Moha, and Yann-Gaël Guéhéneuc. (2023). A Multi-Method Study of Internet of Things Systems Testing in Industry. IEEE Internet of Things Journal (IoTJ). In Press Refereed?: Yes
- William Flageol\*, Eloi Menaud\*, Yann-Gaël Guéhéneuc, Mourad Badri, and Stefan Monnier. (2023).
   A Mapping Study of Language Features Improving Object-oriented Design Patterns. Elsevier Information and Software Technology (IST).
   In Press Refereed?: Yes
- 5. Rafik Tighilt\*, Manel Abdellatif, Imen Trabelsi\*, Loïc Madern, Naouel Moha, and Yann-Gaël Guéhéneuc. (2023). On the Maintenance Support for Microservice-based Systems through the Specification and the Detection of Microservice Antipatterns. Elsevier Journal of Systems and Software (JSS). 204 In Press Refereed?: Yes
- Nicolas Anquetil, Julien Delplanque, Stéphane Ducasse, Oleksandr Zaitsev, Christopher P. Fuhrman, and Yann-Gaël Guéhéneuc. (2022). What Do Developers Consider Magic Literals? A Smalltalk Perspective. Elsevier Information and Software Technology (IST). 146 In Press Refereed?: Yes
- Hironori Washizaki, Foutse Khomh, Yann-Gaël Guéhéneuc, Hironori Takeuchi, Naotake Natori, Takuo Doi, and Satoshi Okuda. (2022). Software-Engineering Design Patterns for Machine Learning Applications. IEEE Computer. 55(1): 30-39. Published Refereed?: Yes

- Imen Trabelsi\*, Manel Abdellatif, Abdalgader Abubaker, Naouel Moha, Sébastien Mosser, Samira Ebrahimi-Kahou, and Yann-Gaël Guéhéneuc. (2022). From Legacy to Microservices: A Type-based Approach for Microservices Identification using Machine Learning and Semantic Analysis. Wiley Journal of Software: Evolution and Process (JSEP). In Press Refereed?: Yes
- Gias Uddin, Yann-Gaël Guéhénuc, Foutse Khomh, and Chanchal Roy. (2021). An Empirical Study of an Ensemble of Stand-Alone Sentiment Detection Tools for Software Engineering Document. IEEE Transactions on Software Engineering and Methodology (TOSEM). 31(3): 1-38. Published Refereed?: Yes
- Zeinab Kermansaravi\*, Md Saidur Rahman\*, Foutse Khomh, Fehmi Jaafar, and Yann-Gaël Guéhéneuc. (2021). Investigating Design Patterns and Design Anti-pattern Mutations and their Change- and Fault-proneness. Springer Empirical Software Engineering (EMSE). 26(1) In Press Refereed?: Yes
- Cristiano Politowski\*, Fabio Petrillo, Gabriel C. Ullmann\*, Yann-Gaël Guéhéneuc. (2021). Game Industry Problems: An Extensive Analysis of the Gray Literature. Elsevier Information and Software Technology (IST). 134 In Press

Refereed?: Yes

- Fatima Sabir\*, Yann-Gaël Guéhéneuc, Francis Palma, Naouel Moha, Ghulam Rasool, and Hassan Akhtar. (2021). A Mixed-method Approach to Recommend Corrections and Correct REST Antipatterns. IEEE Transactions on Software Engineering (TSE). 48(11): 4319-4338. Published Refereed?: Yes
- Manel Abdellatif\*, Rafik Tighilt\*, Abdelkarim Belkhir, Naouel Moha, Yann-Gaël Guéhéneuc, and Éric Beaudry. (2021). A Multi-dimensional Study on the State of the Practice of REST APIs Usage in Android Apps. Springer Automated Software Engineering (AUSE). 27: 187-228. Published Refereed?: Yes
- 14. Cristiano Politowski\*, Fabio Petrillo, João Eduardo Montandon, Marco Tulio Valente, and Yann-Gaël Guéhéneuc. (2021). Are Game Engines Software Frameworks? A Three-perspective Study. Elsevier Journal of Software and Systems (JSS). 171 In Press Refereed?: Yes
- 15. Manel Abdellatif\*, Anas Shatnawi\*, Hafedh Mili, Naouel Moha, Ghizlane El Boussaidi, Geoffrey Hecht, Jean Privat, and Yann-Gaël Guéhéneuc. (2021). A Taxonomy of Service Identification Approaches for Legacy Software Systems Modernization. Elsevier Journal of Systems and Software (JSS). 173 Published Refereed?: Yes
- Maxime Lamothe, Yann-Gaël Guéhéneuc, and Weiyi Shang. (2021). A Systematic Review of API Evolution Literature. ACM Computing Surveys (CSUR). 54(8): 1-26. Published Refereed?: Yes

 João Eduardo Montandon, Cristiano Politowski\*, Luciana Lourdes Silva, Marco Tulio Valente, Fabio Petrillo, and Yann-Gaël Guéhéneuc. (2021). What Skills do IT Companies look for in New Developers? A Study with Stack Overflow Jobs. Elsevier Information and Software Technology (IST). 129: Short paper. In Press

Refereed?: Yes

- Gias Uddin, Fatima Sabir\*, Yann-Gaël Guéhéneuc, Omar Alam, and Foutse Khomh. (2021). An Empirical Study of IoT Topics in IoT Developer Discussions on Stack Overflow. Springer Empirical Software Engineering (EMSE). 26(6) In Press Refereed?: Yes
- Cristiano Politowski\*, Foutse Khomh, Simone Romano, Giuseppe Scanniello, Fabio Petrillo, Yann-Gaël Guéhéneuc, and Abdou Maiga\*. (2020). A Large Scale Empirical Study of the Impact of Spaghetti Code and Blob Anti-patterns on Program Comprehension. Elsevier Journal of Systems and Software (JSS). 122 In Press Refereed?: Yes
- Guilherme Lacerda, Fabio Petrillo, Marcelo Pimenta, and Yann-Gaël Guéhéneuc. (2020). Code Smells and Refactoring: A Tertiary Systematic Review of Challenges and Observations. Elsevier Journal of Systems and Software (JSS). 167 In Press Refereed?: Yes
- Antoine Barbez\*, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2020). A Machine-learning based Ensemble Method for Anti-patterns Detection. Elsevier Journal of Systems and Software (JSS). 161 In Press
   Beferead2: Yee

Refereed?: Yes

- 22. Diana El Masri\*, Fabio Petrillo, Yann-Gaël Guéhéneuc, Abdelwahab Hamou-Lhadj, and Anas Bouziane. (2020). A Systematic Literature Review on Automated Log Abstraction Techniques. Elsevier Information and Software Technology (IST). 122 In Press Refereed?: Yes
- Zohreh Sharafi\*, Bonita Sharif, Yann-Gaël Guéhéneuc, Andrew Begel, Roman Bednarik, and Martha E. Crosby. (2020). A Practical Guide on Conducting Eye Tracking Studies in Software Engineering. Springer Empirical Software Engineering (EMSE). 25: 3128-3174. Published Refereed?: Yes
- 24. Rodrigo Morales\*, Rubén Saborido\*, and Yann-Gaël Guéhéneuc. (2020). MoMIT: Porting a JavaScript Interpreter on a Quarter Coin. IEEE Transactions on Software Engineering (TSE). 47(12): 2771-2785. Published Refereed?: Yes
- 25. Mohab Aly, Foutse Khomh, Yann-Gaël Guéhéneuc, Hironori Washizaki, and Soumaya Yacout. (2019). Is Fragmentation a Threat to the Success of the Internet of Things?. IEEE Internet of Things Journal (IoTJ). 6: 472-487. Published Refereed?: Yes
- Fábio Petrillo\*, Yann-Gaël Guéhéneuc, Marcelo Pimenta, Carla Maria Dal Sasso Freitas, and Foutse Khomh. (2019). Swarm Debugging: The Collective Intelligence on Interactive Debugging. Elsevier Journal of Systems and Software (JSS). 153: 152-174. Published Refereed?: Yes

- Mahdis Zolfagharinia\*, Bram Adams, and Yann-Gaël Guéhéneuc. (2019). A Study of Build Inflation in 30 Million CPAN Builds on 13 Perl Versions and 10 Operating Systems. Springer Empirical Software Engineering (EMSE). 24: 3933-3971. Published Refereed?: Yes
- 28. Fatima Sabir\*, Francis Palma, Ghulam Rasool, Yann-Gaël Guéhéneuc, and Naouel Moha. (2019). A Systematic Literature Review on the Detection of Smells and their Evolution in Object-Oriented and Service-Oriented Systems. Wiley Journal of Software: Practice and Experience (JSPE). 49(1): 3-39. Published Refereed?: Yes
- Francis Palma\*, Naouel Moha, and Yann-Gaël Guéhéneuc. (2019). UniDoSA: The Unified Specification and Detection of Service Antipatterns. IEEE Transactions on Software Engineering (TSE). 45(10): 1024-1053. Published Refereed?: Yes
- 30. Hayet Brabra, Achraf Mtibaa, Fábio Petrillo\*, Philippe Merle, Layth Sliman, Naouel Moha, Walid Gaaloul, Yann-Gaël Guéhéneuc, Boualem Benatallah, and Faïez Gargouri. (2019). On Semantic Detection of Cloud API (Anti)Patterns. Elsevier Information and Software Technology (IST). 107: 65-82. Published Refereed?: Yes
- Hironori Washizaki, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2018). ProMeTA: A Taxonomy for Program Metamodels in Program Reverse Engineering. Springer Empirical Software Engineering (EMSE). 23(4): 2323-2358.
   Published Refereed?: Yes
- 32. Cristiano Politowski\*, Lisandra M. Fontoura, Fabio Petrillo, and Yann-Gaël Guéhéneuc. (2018). Learning from the Past: a Process Recommendation System for Video Game Projects using Postmortems Experiences. Elsevier Information and Software Technology (IST). 100: 103-118. Published Refereed?: Yes
- Rubén Saborido\*, Rodrigo Morales\*, Foutse Khomh, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. (2018).
   Getting the Most from Map Data Structures in Android. Springer Empirical Software Engineering (EMSE). 23(5): 2829-2864.
   Published Refereed?: Yes
- Jane Huffman Hayes, Alexander Dekhtyar, Jody Larsen, and Yann-Gaël Guéhéneuc. (2018). Effective Use of Analysts' Effort in Automated Tracing. Springer Requirements Engineering (REEN). 23(1): 119-143.
   Published Refereed?: Yes
- 35. Zéphyrin Soh\*, Foutse Khomh, Yann-Gaël Guéhéneuc, Giuliano Antoniol. (2018). Noise in Mylyn Interaction Traces and Its Impact on Developers and Recommendation Systems. Springer Empirical Software Engineering (EMSE). 23: 645-692. Published Refereed?: Yes
- 36. Le An, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2018). An Empirical Study of Crash-inducing Commits in Mozilla Firefox. Springer Software Quality Journal (SQJ). 26: 553-584.
   Published Refereed?: Yes

### **Journal Issues**

 Shinpei Hayashi, Yann-Gaël Guéhéneuc, and Michel R.V. Chaudron. (2023). Guest Editor's Introduction: Special Issue on Program Comprehension. Springer Empirical Software Engineering (EMSE). 3(28): 2. Published
 Befereed2: No.

Refereed?: No

Editors: Shinpei Hayashi, Yann-Gaël Guéhéneuc, and Michel R.V. Chaudron

 Rodrigo Morales, Rubén Saborido, Shah Rukh Humayoun, and Yann-Gaël Guéhéneuc. (2020). Guest Editor's Introduction: Special Issue on Software Engineering Research and Practices for the Internet of Things. IEEE Internet of Things Journal (IoTJ). 7(10): 2. Published Refereed?: No Editors: Rodrigo Morales, Rubén Saborido, Shah Rukh Humayoun, and Yann-Gaël Guéhéneuc

### **Book Chapters**

 Yann-Gaël Guéhéneuc and Foutse Khomh. (2019). Empirical Software Engineering. Sungdeok Cha, Richard N. Taylor, and Kyo Chul Kang. Springer Handbook of Software Engineering. 1: 285-320. Published, Springer Refereed?: Yes

### Reports

- 1. Yann-Gaël Guéhéneuc, Shah Rukh Humayoun, Rodrigo Morales, and Rubén Saborido. (2021). SERP4IoT'21 Workshop Report. 2. ACM SIGSOFT Software Engineering Notes.
- 2. Kendra M. L. Cooper, Fabio Petrillo, Yann-Gaël Guéhéneuc, and Cristiano Politowski\*. (2021). ASE4Games'21 Workshop Report. 2. ACM SIGSOFT Software Engineering Notes.
- 3. Yann-Gaël Guéhéneuc, Foutse Khomh, and Federica Sarro. (2019). Proceedings of the 27th International Conference on Program Comprehension. 1. IEEE.

### **Conference Publications**

- Cristiano Politowski\*, Fabio Petrillo, Ghizlane El Boussaidi, Gabriel C. Ullmann\*, and Yann-Gaël Guéhéneuc. (2023). Assessing Video Game Balance using Autonomous Agents. ACM. 7th International Workshop on Games and Software Engineering (GAS'23), (25-32) Paper Published Refereed?: Yes, Invited?: No
- Gabriel C. Ullmann\*, Yann-Gaël Guéhéneuc, Fabio Petrillo, Nicolas Anquetil, and Cristiano Politowski\*. (2023). An Exploratory Approach for Game Engine Architecture Recovery. ACM. 7th International Workshop on Games and Software Engineering (GAS'23), (8-15) Paper Published Refereed?: Yes, Invited?: No
- Cristiano Politowski\*, Yann-Gaël Guéhéneuc, and Fábio Petrillo. (2022). Towards Automated Video Game Testing: Still a Long Way to Go. ACM. 6th International Workshop on Games and Software Engineering (GAS'22), (37-43)
   Paper Published Refereed?: Yes, Invited?: No

- 4. Gabriel C. Ullmann\*, Cristiano Politowski\*, Yann-Gaël Guéhéneuc, and Fábio Petrillo. (2022). What Makes a Game High-rated? Towards Factors of Video Game Success. ACM. 6th International Workshop on Games and Software Engineering (GAS'22), (16-23) Paper Published Refereed?: Yes, Invited?: No
- Marcela G. dos Santos, Fábio Petrillo, Sylvain Hallé, and Yann-Gaël Guéhéneuc. (2022). An Approach to Apply Automated Acceptance Testing for Industrial Robotic Systems. IEEE. 6th International Conference on Robotic Computing (IRC'22), (336-337) Poster Published Refereed?: Yes, Invited?: No
- Gabriel C. Ullmann\*, Cristiano Politowski\*, Yann-Gaël Guéhéneuc, and Fábio Petrillo. (2022). Game Engine Comparative Anatomy. IFIP. 21st International Conference on Entertainment Computing (ICEC'22), (103-111) Paper Published Refereed?: Yes, Invited?: No
- Md Saidur Rahman\*, Foutse Khomh, Emilio Rivera, Yann-Gaël Guéhéneuc, and Bernd Lehnert. (2022). Challenges in Machine Learning Application Development: An Industrial Experience Report. ACM. 1st International Workshop on Software Engineering for Responsible Artificial Intelligence (SE4RAI'22), (21-28) Paper Published Refereed?: Yes, Invited?: No
- Gabriel C. Ullmann\*, Cristiano Politowski\*, Yann-Gaël Guéhéneuc, Fábio Petrillo, and João Eduardo Montandon. (2022). Video Game Project Management Anti-patterns. ACM. 6th International Workshop on Games and Software Engineering (GAS'22), (9-15) Paper Published Refereed?: Yes, Invited?: No
- Van Tuan Tran\*, Manel Abdellatif, and Yann-Gaël Guéhéneuc. (2021). Formalising Solutions to REST API Practices as Design (Anti)Patterns. Springer. 19th International Conference on Service Oriented Computing (ICSOC'21), (153-170) Paper Published Refereed?: Yes, Invited?: No
- Van Tuan Tran\*, Cheng Cheng, Fábio Petrillo, and Yann-Gaël Guéhéneuc. (2021). Analyzing and Visualizing Projects and their Relations in Software Ecosystems. IEEE. 9th Working Conference on Software Visualization (VISSOFT'21), (105-109) Paper Published Refereed?: Yes, Invited?: No
- Cristiano Politowski\*, Fábio Petrillo, and Yann-Gaël Guéhéneuc. (2021). A Survey of Video Game Testing. ACM. 2nd International Conference on Automation of Software Test (AST'21), (90-99) Paper Published Refereed?: Yes, Invited?: No

 Hironori Washizaki, Foutse Khomh, Yann-Gaël Guéhéneuc, Hironori Takeuchi, Satoshi Okuda, Naotake Natori, and Naohisa Shioura. (2020). Software Engineering Patterns for Machine Learning Applications (SEP4MLA) - Part 2. ACM. 27th Conference on Pattern Languages of Programs (PLoP'20), (1-10) Paper Published Refereed?: Yes, Invited?: No

- Rafik Tighilt\*, Manel Abdellatif, Naouel Moha, Hafedh Mili, Ghizlane El Boussaidi, Jean Privat, and Yann-Gaël Guéhéneuc. (2020). On the Study of Microservices Antipatterns: A Catalog Proposal. ACM. 25th European Conference on Pattern Languages of Programs (EuroPLoP'20), (1-13) Paper Published Refereed?: Yes, Invited?: No
- 14. Devansh Tiwari, Hironori Washizaki, Yoshiaki Fukazawa, Tomoyuki Fukuoka, Junji Tamaki, Nobuhiro Hosotani, Munetaka Kohama, Yann-Gaël Guéhéneuc, and Foutse Khomh. (2020). Commit, Defect, and Architectural Metrics-based Quality Assessment of C Language. Springer. 15th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE'20), (579-586) Paper Published Refereed?: Yes, Invited?: No
- 15. Manel Abdellatif\*, Rafik Tighilt\*, Naouel Moha, Hafedh Mili, Ghizlane El Boussaidi, Jean Privat, and Yann-Gaël Guéhéneuc. (2020). A Type-sensitive Service Identification Approach for Legacy-to-SOA Migration. Springer. 18th International Conference on Service Oriented Computing (ICSOC'20), (476-491) Paper Published
  Patrona de Legacy March 2010, March

Refereed?: Yes, Invited?: No

 Zeineb Baba-Cheikh, Ghizlane El Boussaidi, Julien Gascon-Samson, Hafedh Mili, and Yann-Gaël Guéhéneuc. (2020). A Preliminary Study of Open-source IoT Development Frameworks. ACM. 2nd International Workshop on Software Engineering Research and Practices for the Internet of Things (SERP4IoT'20), (679-686) Paper Published

Refereed?: Yes, Invited?: No

- Layan Etaiwi\*, Sylvie Hamel, Yann-Gaël Guéhéneuc, William Flageol\*, and Rodrigo Morales. (2020). Order in Chaos: Prioritizing Mobile App Reviews using Consensus Algorithms. IEEE. 44th International Conference on Computers, Software, and Applications (COMPSAC'20), (912-920) Paper Published Refereed?: Yes, Invited?: No
- Cristiano Politowski\*, Fábio Petrillo, Gabriel C. Ullmann\*, Josias de Andrade Werly, and Yann-Gaël Guéhéneuc. (2020). *Dataset of Video Game Development Problems*. ACM. 17th International Conference on Mining Software Repositories (MSR'20), Data Showcase, (553-557) Paper Published Refereed?: Yes, Invited?: No

 Cristiano Politowski\*, Fábio Petrillo, and Yann-Gaël Guéhéneuc. (2020). Improving Engagement Assessment in Gameplay Testing Sessions using IoT Sensors. ACM. 2nd International Workshop on Software Engineering Research & Practices for the Internet of Things (SERP4IoT'20), (655-659) Paper Published

Refereed?: Yes, Invited?: No

 Hironori Washizaki, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2020). Software Engineering Patterns for Machine Learning Applications (SEP4MLA). ACM. 9th Asian Conference on Pattern Languages of Programs (AsianPLoP'20), Paper

Published Refereed?: Yes, Invited?: No

- Rafik Tighilt\*, Naouel Moha, Manel Abdellatif, and Yann-Gaël Guéhéneuc. (2020). Towards a Tool-based Approach for Microservice Antipatterns Identification. IARIA. 10th International Conference on Service Oriented Computing (Service Computation'20), (1-6) Paper Published Refereed?: Yes, Invited?: No
- Guilherme Lacerda, Fabio Petrillo, Marcelo Soares Pimenta, and Yann-Gaël Guéhéneuc. (2020). Code Smells and Refactoring: A Tertiary Systematic Review of Challenges and Observations. IEEE. 36th International Conference on Software Maintenance and Evolution (ICSME'20), Journal First / Conference Second Track (J1C2), Abstract Published

Refereed?: Yes, Invited?: Yes

- 23. Benjamin Benni\*, Sébastien Mosser, Jean-Philippe Caissy, and Yann-Gaël Guéhéneuc. (2020). Can Microservice-based Online-retailers Be Used as an SPL? A Study of Six Reference Architectures. ACM. 4th International Systems and Software Product Line Conference (SPLC'20), (1-6) Paper Published Refereed?: Yes, Invited?: No
- Hironori Washizaki, Hiromu Uchida, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2019). Studying Software Engineering Patterns for Designing Machine Learning Systems. IEEE. 10th International Workshop on Empirical Software Engineering in Practice (IWESEP'19), (49-54)
   Paper Published Refereed?: Yes, Invited?: No
- 25. Mouna Abidi, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2019). Anti-patterns for Multi-language Systems. ACM. 24th European Conference on Pattern Languages of Programs (EuroPLoP'19), (1-14) Paper Published Refereed?: Yes, Invited?: No
- Mouna Abidi, Manel Grichi, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2019). Code Smells for Multilanguage Systems. ACM. 24th European Conference on Pattern Languages of Programs (EuroPLoP'19), (1-13)
   Paper
   Published

Refereed?: Yes, Invited?: No

 Abdelkarim Belkhir, Manel Abdellatif\*, Rafik Tighilt\*, Naouel Moha, Yann-Gaël Guéhéneuc, and Éric Beaudry. (2019). An Observational Study on the State of REST API Uses in Android Mobile Applications. ACM. 6th International Conference on Mobile Software Engineering and Systems (MOBILESoft'19), (66-75) Paper Published

Refereed?: Yes, Invited?: No

- 28. Rafik Tighilt\*, Manel Abdellatif\*, Nader Abu Saad, Naouel Moha, and Yann-Gaël Guéhéneuc. (2019). Collection and Identification of Microservices Patterns and Antipatterns. RNTI. 13e Conférence francophone sur les Architectures Logicielles (CAL'19), (1-8) Paper Published Refereed?: Yes, Invited?: No
- 29. Antoine Barbez\*, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2019). Deep Learning Anti-Patterns from Code Metrics History. IEEE. 35th International Conference on Software Maintenance and Evolution (ICSME'19), (114-124) Paper Published Refereed?: Yes, Invited?: No
- Manel Grichi, Mouna Abidi, Yann-Gaël Guéhéneuc, and Foutse Khomh. (2019). State of Practices of Java Native Interface. ACM. 29th IBM Center for Advanced Studies Conference (CASCON'19), (274-283) Paper Published Refereed?: Yes, Invited?: No
- 31. Manel Abdellatif\*, Geoffrey Hecht, Hafedh Mili, Ghizlane El Boussaidi, Naouel Moha, Anas Shatnawi\*, Jean Privat, and Yann-Gaël Guéhéneuc. (2018). State of the Practice in Service Identification for SOA Migration in Industry. ACM. 16th International Conference on Service Oriented Computing (ICSOC'18), (634-650) Paper Published

Refereed?: Yes, Invited?: No

- 32. Foutse Khomh and Yann-Gaël Guéhéneuc. (2018). Design Patterns Impact on Software Quality: Where are the Theories?. IEEE. 25th International Conference on Software Analysis, Evolution, and Reengineering (SANER'18), (15-25) Paper Published Refereed?: Yes, Invited?: Yes
- 33. Geoffrey Hecht, Hafedh Mili, Ghizlane El Boussaidi, Anis Boubaker, Manel Abdellatif\*, Yann-Gaël Guéhéneuc, Anas Shatnawi\*, Jean Privat, and Naouel Moha. (2018). Codifying Hidden Dependencies in Legacy J2EE Applications. IEEE. 25th Asia-Pacific Software Engineering Conference (APSEC'18), (305-314) Paper Published

Refereed?: Yes, Invited?: No

34. Fabio Petrillo, Philippe Merle, Francis Palma\*, Naouel Moha, and Yann-Gaël Guéhéneuc. (2018). A Lexical and Semantical Analysis on REST Cloud Computing APIs. Springer. 8th International Conference on Cloud Computing and Services Science (CLOSER'18), (308-332) Paper Published Refereed?: Yes, Invited?: No

- 35. Cristiano Politowski\*, Lisandra M. Fontoura, Fabio Petrillo, and Yann-Gaël Guéhéneuc. (2018). Learning from the Past: A Process Recommendation System for Video Game Projects using Postmortems Experiences. ACM. 12th International Symposium on Empirical Software Engineering and Measurement (ESEM'18), Journal First Presentation, Abstract Published Refereed?: Yes, Invited?: Yes
- Aiko Yamashita, Fabio Petrillo, Foutse Khomh, and Yann-Gaël Guéhéneuc. (2018). Developer Interaction Traces backed by IDE Screen Recordings from Think-aloud Sessions. ACM. 15th International Conference on Mining Software Repositories (MSR'18), Data Showcase, (50-53) Paper Published Refereed?: Yes, Invited?: No