Sarah Nadi

Curriculum Vitae

✉ nadi@ualberta.ca

www.sarahnadi.org

Overview

I am an Assistant Professor in the Department of Computing Science at the University of Alberta, and I hold a Tier II Canada Research Chair in Software Reuse. My research provides intelligent support for software reuse across three main themes: (1) developing ***variability analysis strategies*** to help developers deal with the complexity of highly configurable software systems designed to enable large-scale code reuse, (2) providing ***software integration support*** for consolidating changes from multiple versions of the same reused system as they evolve over time, and (3) creating ***code recommender systems*** to guide developers through correctly and securely reusing individual functionality from external libraries.

Academic Appointments

July 2016 - Present: **Assistant Professor**, *Department of Computing Science*, University of Alberta (UofA), Canada.

Oct. 2014 - June 2016: **Postdoctoral Researcher**, *Computer Science*, Technische Universität Darmstadt (TU Darmstadt), Germany.
Host: Mira Mezini

Education

2014 **PhD in Computer Science**, *University of Waterloo*, Canada.
Thesis: Variability Anomalies in Software Product Lines
Advisor: Richard C. Holt

2009 **MMath in Computer Science**, *University of Waterloo*, Canada.
Thesis: DRACA: Decision Support for Root Cause Analysis and Change Impact Analysis
Advisor: Richard C. Holt

2007 **BSc. in Computer Science**, *The American University in Cairo*, Egypt.

Industrial Experience

ITWorx: **Software Engineer**, *ITWorx*, Egypt, July 2007 - April 2008.
ITWorx: **Software Engineer Intern**, *ITWorx*, Egypt, June 2006 - July 2006.
Vodafone: **IT Support Intern**, *Vodafone*, Egypt, June 2005 - July 2005.

Students

Co-supervisions are explicitly mentioned and marked with an asterisk.

Current Students

PhD: **Moein Owhadi-Kareshk**, *Semantic Code Search* (*expected* 2022)
Masters: **Batyr Nurryev**, *Software Variability Implementation Mechanisms* (*expected* 2021)
Masters: **Max Ellis**, *Operation-based Software Merging* (*expected* 2021)

Graduated Students (Reverse Chronological Order)

Masters: **Fernando Lopez de la Mora**, UofA. *Providing Software Library Selection Assistance By Using Metric-Based Comparisons* (2018).
First Position: Software Development Engineer, Amazon Canada

Masters **Benyamin Noori**, UofA. *Leveraging Crowd-sourced Information to Guide Library Usage* (2018).
First Position: Software Developer, Desire 2 Learn

Masters **Samer Al Masri**, UofA. *Static Versus Dynamic Polymorphism When Implementing Variability in C++* (2018).
First Position: Software Developer, IBM Canada

Masters **Mehran Mahmoudi**, UofA. *An Empirical Investigation of Software Merging Challenges* (2018).
First Position: Software Engineer, Google Canada

PhD* **Ervina Cergani**, TU Darmstadt. *Machine Learning for Code Recommenders* (*expected* 2019) – co-supervised with Mira Mezini from Oct 2014 until May 2018

PhD* **Sven Amann**, TU Darmstadt. *A Systematic Approach to Benchmark and Improve Automated Static Detection of Java-API Misuses* (2018) – co-supervised with Mira Mezini.
First Position: Software Quality Consultant, CQSE GmbH

PhD* **Sebastian Proksch**, TU Darmstadt. *Capturing Enriched Event Streams: Towards a General Platform for In-IDE Experiments* (2017) – co-supervised with Mira Mezini.
First Position: Postdoctoral Researcher, University of Zurich. New Position starting Feb. 2020: Assistant Professor, TU Delft

Masters* **Marco Radavelli**, TU Darmstadt, *Simplifying Boolean Constraints from Highly Configurable Software* (2016) – co-supervised with Angelo Gargantini from University of Bergamo.
First Position: PhD Student, University of Bergamo

Masters **Hamza Zulfiqar**, TU Darmstadt. *Detecting Unintended Feature Interactions* (2016).
First Position: Software developer at Dtango, Berlin

Masters* **Riadh Chtara**, TU Darmstadt. *Feedback Driven Development of Cloud Applications* (2015) – external student co-supervised with Anis Charfi from SAP.
First Position: Software developer at SAP in Potsdam

Masters **Irfan Musa**, TU Darmstadt. *Modeling of Cryptographic Components using Clafer* (2015)

Masters* **David Dahlen**, TU Darmstadt. *Identification of High-Quality Answers Containing Code Snippets on Stack Overflow* (2015) – co-supervised with Sebastian Proksch and Sven Amman.
First Position: IT Consultant in Germany

Masters* **Daniel Jonsson**, Chalmers University of Technology. *A Case Study of Interactive Conflict-Resolution Support* (June 2016) – co-supervised with Thorsten Berger.
First Position: Systems developer at Bit Addict, Sweden

Masters* **Isak Eriksson & Patrick Wallgren**, Chalmers University of Technology. *A Study of Merge-Conflict Resolutions in Open-Source Software* (June 2016) – co-supervised with Thorsten Berger and Julia Rubin

Research Assistants

Ugrad RA **Henry Tang**, *Investigating Crowd-sourced Answer Edits on Stack Overflow* (May - December 2019)

Ugrad RA **Ryan Shukla**, *Variability Aware Analysis for C++* (May - Dec 2019 with NSERC USRA)

Ugrad RA **Rehab El-Hajj**, *Metric-based Library Comparisons* (May - August 2019)

Ugrad RA **Lida Ling**, *Data Set of Task-code Pairs* (June - August 2019)

Ugrad RA **Aida Radu**, *Data Set of Non-functional Bugs* (May - August 2018 with NSERC USRA)

Ugrad RA **Jacob Reckhard**, *Variability Aware Analysis for C++* (May - Oct 2018)

Ugrad RA **Imtihan Ahmed**, *Designing new assignments for CMPUT 201* (Sept - Dec 2017)

Ugrad RA **Nazim Uddin Bhuiyan**, *Variability Aware Analysis for C++* (May - Dec 2017)

Grad RA **Ram Kammath**, *Implementing a Clafer Configurator for Cryptography Components* (May - Dec 2015)

Publications

(Co-)supervised student names are underlined. Author list in order of contribution.

Refereed Journal Papers

TSE '18 Sven Amann, Hoan A. Nguyen, **Sarah Nadi**, Tien N. Nguyen, and Mira Mezini. "A Systematic Evaluation of Static API-Misuse Detectors". In: *IEEE Transactions on Software Engineering* (2018).

TSE '17 Guido Salvaneschi, Sebastian Proksch, Sven Amann, **Sarah Nadi**, and Mira Mezini. "On the Positive Effect of Reactive Programming on Software Comprehension: An Empirical Study". In: *IEEE Transactions on Software Engineering* 43.12 (2017), pp. 1125–1143.

TSE '15 **Sarah Nadi**, Thorsten Berger, Christian Kästner, and Krzysztof Czarnecki. "Where do Configuration Constraints Stem From? An Extraction Approach and an Empirical Study". In: *IEEE Transactions on Software Engineering* 41.8 (2015), pp. 820–841.

JSEP '14 **Sarah Nadi** and Richard C. Holt. "The Linux Kernel: A Case Study of Build System Variability". In: *Journal of Software: Evolution and Process* 26.8 (2014), pp. 730–746. DOI: 10.1002/smr.1595.

Refereed Full (10+ pages) Conference Papers

ESEM '19 Moein Owhadi-Kareshk, **Sarah Nadi**, and Julia Rubin. "Predicting Merge Conflicts in Collaborative Software Development". In: *Proceedings of the ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)*. 2019. (Acceptance Ratio: 23/116 = 20%).

SANER '19 Mehran Mahmoudi, **Sarah Nadi**, and Nikolaos Tsantalis. "Are Refactorings to Blame? An Empirical Study of Refactorings in Merge Conflicts". In: *Proceedings of the 26th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)*. 2019. (Acceptance Ratio: 40/148 = 27%).

MSR '19 Sven Amann, Hoan Nguyen, **Sarah Nadi**, Tien Nguyen, and Mira Mezini. "Investigating Next-Steps in Static API-Misuse Detection". In: *Proceedings of the 16th ACM International Conference on Mining Software Repositories (MSR)*. 2019. (Acceptance Ratio: 32/126 = 25%).

PROMISE '18 Fernando Lopez de la Mora and **Sarah Nadi**. "An Empirical Study of Metric-based Comparisons of Software Libraries". In: *Proceedings of the 14th International Conference on Predictive Models and Data Analytics in Software Engineering (PROMISE)*. 2018. (Acceptance Ratio: 11/22 = 50%).

MSR '18 Mehran Mahmoudi and **Sarah Nadi**. "The Android Update Problem: An Empirical Study". In: *Proceedings of the 15th ACM International Conference on Mining Software Repositories (MSR)*. 2018. (Acceptance Ratio: 37/113 = 33%).

ICSOFT '18 Ervina Cergani, Sebastian Proksch, **Sarah Nadi**, and Mira Mezini. "Investigating Order Information in API-Usage Patterns: A Benchmark and Empirical Study." In: *Proceedings of the 13th International Conference on Software Technologies (ICSOFT)*. 2018, pp. 91–102.

SPLC '18 Industry Samer Al Masri, **Sarah Nadi**, Matthew Gaudet, Xiaoli Liang, and Robert W. Young. "Using Static Analysis to Support Variability Implementation Decisions in C++". In: *Proceedings of the 22nd International Systems and Software Product Line Conference (SPLC) – Industry Track*. 2018. (Acceptance Ratio: 9/18 = 50%).

ICSME '18 Industry John Businge, Openja Moses, **Sarah Nadi**, Engineer Bainomugisha, and Thorsten Berger. "Clone-Based Variability Management in the Android Ecosystem". In: *Proceedings of the 34th IEEE International Conference on Software Maintenance and Evolution (ICSME) – Industry Track*. 2018. (Acceptance Ratio: 15/32 = 47%).

GPCE '18 Larissa Rocha Soares, Jens Meinicke, **Sarah Nadi**, Christian Kästner, and Eduardo Santana de Almeida. "Exploring Feature Interactions Without Specifications: A Controlled Experiment". In: *Proceedings of the 17th ACM SIGPLAN International Conference on Generative Programming: Concepts and Experiences (GPCE)*. GPCE 2018. Boston, MA, USA: ACM, 2018, pp. 40–52. ISBN: 978-1-4503-6045-6. (Acceptance Ratio: 17/44 = 39%).

SANER '17 Sebastian Proksch, **Sarah Nadi**, Sven Amann, and Mira Mezini. "Enriching In-IDE Process Information with Fine-grained Source Code History". In: *Proceedings of the 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*. 2017. (Acceptance Ratio: 34/140 = 24%).

SANER '16 Sven Amann, Sebastian Proksch, **Sarah Nadi**, and Mira Mezini. "A Study of Visual Studio Usage in Practice". In: *Proceedings of the 23rd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*. 2016. (Acceptance Ratio: 52/140 = 37%).

ASE '16 Sebastian Proksch, Sven Amann, **Sarah Nadi**, and Mira Mezini. "Evaluating the Evaluations of Code Recommender Systems: A Reality Check". In: *Proceedings of the 31st IEEE/ACM International Conference on Automated Software Engineering (ASE)*. 2016. (Acceptance Ratio: 57/298 = 19%).

ICSE '16 **Sarah Nadi**, Stefan Krüger, Mira Mezini, and Eric Bodden. ""Jumping Through Hoops" Why do Java Developers Struggle with Cryptography APIs?" In: *Proceedings of the ACM/IEEE 38th International Conference on Software Engineering (ICSE)*. 2016. (Acceptance Ratio: 101/530 = 19%).

ONWARD! '15 Steven Arzt, **Sarah Nadi**, Karim Ali, Eric Bodden, Sebastian Erdweg, and Mira Mezini. "Towards Secure Integration of Cryptographic Software". In: *Proceedings of the 14th SIGPLAN Symposium on New Ideas in Programming and Reflections on Software at SPLASH (ONWARD)*. 2015, pp. 1–13. (Acceptance Ratio: 17/48 = 35%).

ECOOP '15 incl. artifact Flávio Medeiros, Christian Kästner, Márcio Ribeiro, **Sarah Nadi**, and Rohit Gheyi. "The Love/Hate Relationship with the C Preprocessor: An Interview Study". In: *Proceedings of the 29th European Conference on Object-Oriented Programming (ECOOP)*. 2015, pp. 495–518. (Acceptance Ratio: 31/136 = 23%).

ICSE '14 **Sarah Nadi**, Thorsten Berger, Christian Kästner, and Krzysztof Czarnecki. "Mining Configuration Constraints: Static Analyses and Empirical Results". In: *Proceedings of the 36th ACM/IEEE International Conference on Software Engineering (ICSE)*. 2014, pp. 140–151. (Acceptance Ratio: 99/495 = 20%).

MSR '13a **Sarah Nadi**, Christian Dietrich, Reinhard Tartler, Richard C. Holt, and Daniel Lohmann. "Linux Variability Anomalies: What Causes them and How do They Get Fixed?" In: *Proceedings of the 10th Working Conference on Mining Software Repositories (MSR)*. 2013, pp. 111–120. (Acceptance Ratio: 31/81 = 38%).

MSR '13b Hadi Hemmati, **Sarah Nadi**, Olga Baysal, Oleksii Kononenko, Wei Wang, Reid Holmes, and Michael W. Godfrey. "The MSR Cookbook: Mining a Decade of Research". In: *Proceedings of the 10th Working Conference on Mining Software Repositories (MSR)*. 2013, pp. 343–352. (Acceptance Ratio: 31/81 = 38%).

CSMR '12 **Sarah Nadi** and Richard C. Holt. "Mining Kbuild to Detect Variability Anomalies in Linux". In: *Proceedings of the 16th European Conference on Software Maintenance and Reengineering (CSMR)*. 2012, pp. 107–116. (Acceptance Ratio: 30/108 = 27%) ***Invited for a special issue of JSEP***.

WCRE '11 **Sarah Nadi** and Richard C. Holt. "Make it or Break it: Mining Anomalies from Linux Kbuild". In: *Proceedings of the 18th Working Conference on Reverse Engineering (WCRE)*. 2011, pp. 315–324. (Acceptance Ratio: 27/104 = 26%).

CSMR '10 **Sarah Nadi**, Richard C. Holt, and Serge Mankovskii. "Does the Past Say it All? Using History to Predict Change Sets in a CMDB". In: *Proceedings of the 14th European Conference on Software Maintenance and Reengineering (CSMR)*. 2010, pp. 97–106. (Acceptance Ratio: 21/80 = 26%).

CASCON '09 Best paper — **Sarah Nadi**, Richard C. Holt, Ian Davis, and Serge Mankovskii. "DRACA: Decision Support for Root Cause Analysis and Change Impact Analysis for CMDBs". In: *Proceedings of the 2009 Conference of the Center for Advanced Studies on Collaborative Research (CASCON)*. 2009, pp. 1–11. (Acceptance Ratio: 22/88 = 25%). ***Best Paper Award***.

Refereed Short Conference & Workshop Papers

MSR '19a Data — Aida Radu and **Sarah Nadi**. "A Dataset of Non-Functional Bugs". In: *Proceedings of the 16th ACM International Conference on Mining Software Repositories (MSR) – Data Showcase Track*. 2019.

MSR '19b Tool — Moein Owhadi-Kareshk and **Sarah Nadi**. "Scalable Software Merging Studies with MERGANSER". In: *Proceedings of the 16th ACM International Conference on Mining Software Repositories (MSR)*. 2019. (Acceptance Ratio: 15/44 = 34%).

MSR '19c Challenge — Abhishek Soni and **Sarah Nadi**. "Analyzing Comment-induced Updates on Stack Overflow". In: *Proceedings of the 16th ACM International Conference on Mining Software Repositories (MSR) – Challenge Track*. 2019. (Acceptance Ratio: 14/27 = 52%).

ICSE '18 NIER — Fernando Lopez de la Mora and **Sarah Nadi**. "Which library should I use? A metric-based comparison of software libraries". In: *Proceedings of the 40th International Conference on Software Engineering New Ideas and Emerging Results Track (ICSE NIER)*. 2018. (Acceptance Ratio: 25/95 = 26%).

VaMoS '18 Workshop — Larissa Rocha Soares, Jens Meinicke, **Sarah Nadi**, Christian Kästner, and Eduardo Santana de Almeida. "VarXplorer: Lightweight Process for Dynamic Inspection of Feature Interactions". In: *Proceedings of the 12nd International Workshop on Variability Modelling of Software-Intensive Systems (VaMoS)*. 2018.

CASCON '17 Position — Samer Al Masri, Nazim Uddin Bhuiyan, **Sarah Nadi**, and Matthew Gaudet. "Software Variability Through C++ Static Polymorphsim: A Case Study of Challenges and Open Problems in Eclipse OMR". In: *Proceedings of the 27th Annual International Conference on Computer Science and Software Engineering (CASCON) – Position Paper*. 2017. (Acceptance Ratio: 10/22 = 53%).

ASE '17 Tool — Stefan Krüger, **Sarah Nadi**, Michael Reif, Karim Ali, Mira Mezini, Eric Bodden, Florian Göpfert, Felix Günther, Christian Weinert, Daniel Demmler, and Ram Kamath. "CogniCrypt: Supporting Developers in using Cryptography". In: *Proceedings of the 32nd IEEE/ACM International Conference on Automated Software Engineering (ASE) – Tool Demo Track*. 2017.

ICPC '16 Tool — Sven Amann, Sebastian Proksch, and **Sarah Nadi**. "FeedBaG: An Interaction Tracker for Visual Studio". In: *Proceedings of the 24th International Conference on Program Comprehension – Tool Track (ICPC)*. 2016.

MSR '16 Data — Sebastian Proksch, Sven Amann, **Sarah Nadi**, and Mira Mezini. "A Dataset of Simplified Syntax Trees for C#". In: *Proceedings of the 13th ACM International Conference on Mining Software Repositories – Data Showcase Track (MSR)*. 2016.

SWAN '16 Workshop — Ervina Cergani, Sebastian Proksch, **Sarah Nadi**, and Mira Mezini. "Addressing Scalability in API Method Call Analytics". In: *2nd International Workshop on Software Analytics (SWAN)*. 2016.

MSR '16 Data — Sven Amann, **Sarah Nadi**, Hoan A. Nguyen, Tien N. Nguyen, and Mira Mezini. "MUBench: A Benchmark for API-Misuse Detectors". In: *Proceedings of the 13th International Conference on Mining Software Repositories – Data Showcase Track (MSR)*. 2016.

VaMoS '16 Workshop — **Sarah Nadi** and Stefan Krüger. "Variability Modeling of Cryptographic Components (Clafer Experience Report)". In: *Proceedings of the 10th International Workshop on Variability Modeling of Software-intensive Systems (VaMoS)*. 2016.

SE '15 Long Abstract — Thorsten Berger and **Sarah Nadi**. "Variability Models in Large-scale Systems: A Study and a Reverse-engineering Technique". In: *Proceedings of the German Software Engineering Conference (SE)*. 2015.

RELENG '15 Workshop — Shuirui Zhou, Jafar Al-Kofahi, Tien N. Nguyen, Christian Kästner, and **Sarah Nadi**. "Extracting Configuration Knowledge from Build Files with Symbolic Analysis". In: *Proceedings of the 3rd International Workshop on Release Engineering (RELENG)*. 2015.

ICSE '13 Doct. Symp. — **Sarah Nadi**. "A Study of Variability Spaces in Open Source Software". In: *Proceedings of the 35th International Conference on Software Engineering (ICSE), Doctoral Symposium*. 2013, pp. 1353–1356.

Teaching

CMPUT 402 — **Software Quality**, UofA (Winter 2019, Winter 2020)

CMPUT 663 — **Software Analytics**, UofA, Canada (Fall 2019)

CMPUT 201 — **Practical Programming Methodology**, UofA (Winter 2017, Winter 2018, Winter 2019)

CMPUT 663 — **Software Maintenance and Reuse**, UofA (Fall 2017)

CMPUT 663 — **Software Product Lines: Implementation, Analysis, & Maintenance**, UofA (Fall 2016)

Seminar — **Software Product Lines Seminar**, TU Darmstadt (Winter 2015)

Research Funding

CRC — **Research stipend from Canada Research Chairs Program** ($90,000, 2018 - 2022)

Samsung — **Samsung GRO Project** (USD $70,000 as Co-PI with Julia Rubin from UBC, 2017 - 2019)

UofA — **Faculty of Science Research Support for CRC** ($175,000, 2017 - 2022)

NSERC — **NSERC Discovery Grant** ($140,000, 2017 - 2022)

IBM CAS — **IBM CAS Grant** ($90,000, 2017 - 2021)

UofA — **Faculty of Science Startup** ($92,000, 2016 - 2020)

Recognition

Selected Honors and Awards

Teaching — **Instructor of the Month**, October 2019, Faculty of Science, UofA

Service — **Distinguished Reviewer Award**, IEEE/ACM International Conference on Automated Software Engineering (ASE), 2019

Research — **Special Mention, Free, Open Source Software (FOSS) Impact Award,** ACM International Conference on Mining Software Repositories (MSR), 2019

Research — **Honorable Mention, IBM CAS Faculty Fellow of the Year**

Service — **Distinguished Reviewer Award**, IEEE/ACM International Conference on Automated Software Engineering (ASE), 2018

Service — **Distinguished Reviewer Award**, IEEE International Conference on Software Maintenance and Evolution (ICSME), 2017

Research — **Best Paper Award**, Annual International Conference on Computer Science and Software Engineering (CASCON), 2010

Supervised Student Awards

Institutional — Moein Owahdi-Kareshk, **PhD Early Achievement Award**, Department of Computing Science, University of Alberta, 2019

Institutional — Mehran Mahmoudi, **Runner up for Master's Early Achievement Award**, Department of Computing Science, University of Alberta, 2017

Previous Scholarships

National — **NSERC Alexander Graham Bell Canada Graduate Scholarship-Doctoral (CGS-D)**, University of Waterloo, Canada ($70,000, 2013 - 2014)

Institutional **University of Waterloo President's Graduate Scholarship**, University of Waterloo, Canada ($20,000, 2013 - 2014)

Provincial **Ontario Graduate Scholarship (OGS)**, University of Waterloo, Canada ($15,000) – declined to accept CGS-D

Institutional **J. Alan George Student Leadership Award**, University of Waterloo, Canada ($1,000)

Institutional **David R. Cheriton Scholarship, University of Waterloo**, Canada ($20,000, 2010 - 2012)

Institutional **University of Waterloo Provost Doctoral Entrance Scholarship for Females** ($10,000, 2010)

Institutional **University of Waterloo Graduate Entrance Scholarship** ($3,000, 2008)

Invited Talks, Seminars, and Panels

Keynote **Navigating your PhD & the World Beyond**, Doctoral Symposium, IEEE/ACM International Conference on Automated Software Engineering (ASE 2019)

Panelist **Reviewer Experience Panel**, Celebration of ASE, IEEE/ACM International Conference on Automated Software Engineering (ASE 2019)

Panelist **Panel for Mentoring of Faculty and Graduate Students**, ACM Canadian Celebration of Women in Computing (CAN-CWiC 2019)

Panelist **Panel of Recent PhDs**, ICSE 2019 Student Mentoring Workshop (SMeW)

Panelist **Panel of Recent PhDs**, SPLASH 2018 Programming Languages Mentoring Workshop (PLMW)

Talk **What Lies Beyond a PhD**, Doctoral Symposium, European Conference on Object-Oriented Programming (ECOOP '17)

Seminar **From the Linux Kernel to Cryptography APIs: Supporting and Leveraging Software Product Lines**. University of Alabama, Univrsity of Houston, University of Alberta, Concordia University, Rochester Institute of Technology, Iowa State University, University of Colorado Boulder, Colorado State University, George Mason University, and McGill University. 2016.

Seminar **Towards Configurable Security: Bridging the Gap Between Application Developers and Cryptography Experts**, University of Alberta. 2015

Seminar **Variability is the Law of Life: Extracting Configuration Constraints and Detecting Variability Anomalies**, University of Lethbridge and McGill University. 2015

Service

Organizing Committee Member

MSR '20 **Program Committee Co-chair**, 17th ACM International Conference on Mining Software Repositories

SPLC '20 **Program Committee Co-chair**, 24th International Systems and Software Product Line Conference

ASE '19 **Workshops Track Co-chair**, 34th IEEE/ACM International Conference on Automated Software Engineering

ICSE '19 **Social Media Co-chair**, 41st IEEE/ACM International Conference on Software Engineering

PLMW '18 **Co-organizer**, Programming Languages Mentoring Workshop (PLMW), SPLASH '18 edition

SPLC '18 **Challenge Track Co-chair**, 22nd International Systems and Software Product Line Conference

MSR '18 **Challenge Track co-chair & Data track co-chair**, 15th ACM International Conference on Mining Software Repositories

WAPI '18 **Co-organizer**, 2nd International Workshop on API Usage and Evolution, co-located with ICSE '18

WAPI '17 **Main Organizer**, 1st International Workshop on API Usage and Evolution, co-located with ICSE '17

SANER '17 **Poster Session Co-Chair**, 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering

CSER '17 **Organizing Co-Chair**, Spring 2017 Consortium of Software Engineering Research (CSER) meeting

Program Committee Member

ICSE ACM/IEEE International Conference on Software Engineering: 2019

ASE ACM/IEEE International Conference on Automated Software Engineering: 2017, 2018, 2019

MSR ACM International Conference on Mining Software Repositories: 2014 (Challenge Track), 2016 (Challenge Track), 2017, 2018, 2019 (Challenge Track)

VaMoS International Workshop on Variability Modelling of Software-intensive Systems: 2017, 2018, 2019

GPCE International Conference on Generative Programming: Concepts & Experiences: 2017, 2018

ICSME IEEE International Conference on Software Maintenance and Evolution: 2017

SPLC International Systems and Software Product Line Conference: 2017

OOPSLA ACM international conference on Object Oriented Programming Systems Languages and Applications: 2017

ICPC IEEE/ACM International Conference on Program Comprehension 2018: 2017 (Tool Demo Track)

SANER IEEE International Conference on Software Analysis, Evolution and Reengineering: 2017 (Early Research Achievements Track)

SWAN International Workshop on Software Analytics: 2016

CSED International Workshop on Continuous Software Evolution and Delivery: 2016

MODULARITY International Conference on Modularity: 2016 (Visions Track)

RELENG International Workshop on Release Engineering: 2013, 2014, 2015

Reviewer

NSERC NSERC Discovery Grant Program (2018-2020)

IEEE SW IEEE Software (2016)

TSE IEEE Transactions on Software Engineering (2016-2019)

EMSE Empricial Software Engineering Journal (2017, 2019)

CompJournal The Computer Journal (2015)

JSS Journal of Systems and Software (2015)

IEEE SWSI IEEE Software Special Issue on Release Engineering (2014)

Editorial Team Member

EMSE **Associate Editor**, Empirical Software Engineering Journal, 2019 - current

IEEE S/W **Associate Editor**, IEEE Software Magazine Blog, 2016-2018

Departmental

UofA **Admissions committee member**, Department of Computing Science, UofA, 2017-2019

UofA **NSERC scholarships' adviser**, Department of Computing Science, University of Alberta, 2019 - current

Outreach Activities

UA-WISE **Keynote speaker**, University of Alberta Women in Science & Engineering Black Tie Event, 2019

Technovation **Mentor**, Technovation Edmonton 2018

Ada's Team **Panelist**, Diversity Panel, Ada's Team at UofA, 2017