

ALI OUNI — Curriculum Vitae

Department of Software Engineering and IT
Ecole de Technologie Supérieure (ETS), University of Quebec
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SUMMARY OF QUALIFICATIONS AND ACHIEVEMENTS

- International experience in funding and research in many countries including, Canada, USA, Japan, and UAE.
- Ranked among TOP-3 researchers in the field of search-based software refactoring, in terms of publications, according to a recent survey¹.
- Ranked among (1) Most Active Early Stage Software Engineering Researchers in Top-Quality Journals, and (2) TOP scholars in Emerging Topics - Search-based Software Engineering, according to a recent bibliometric assessment of software engineering scholars and institutions².
- Awarded the Outstanding Research Excellence Award from the University of Montreal, 2014. The highest University honor for PhD student excellence.
- Hold the most prestigious national scholarship award to pursue PhD studies in Canada, Government of Tunisia, 2011–2014.
- Strong publication record during the last four years at the top-tier venues for Software Engineering research: over 20 journal papers including TSE, TOSEM, TSC, ASE, EMSE, and over 30 conference papers including FSE, ASE, ICSME, GECCO, ICWS and ICSOC.
- Founder of the first International Workshop on Software Refactoring (IWorR) 2016.
- Broad network of academic collaborators from different institutions including the University of Michigan, University College Dublin, University of Victoria, Michigan-State University, Vienna University of Technology, Singapore Management University, University of Tunis, Rochester Institute of Technology, Osaka University, and University of Montreal.
- Regularly invited as PC member and reviewer for the leading conferences and journals in Software Engineering.

RESEARCH INTERESTS

My research interests span the areas of software engineering. I have a specific interest in software maintenance and evolution, refactoring, program analysis, software quality, service-oriented computing, software reuse, and search-based software engineering.

CURRENT AND PREVIOUS ACADEMIC EXPERIENCE

ETS Montreal, University of Quebec, QC, Canada	Associate Professor	<i>Sept. 2017 – current</i>
UAE University, UAE	Assistant Professor	<i>Aug. 2016 – July 2017</i>
Osaka University, Osaka, Japan	Research assistant professor	<i>Dec. 2014 – Aug. 2016</i>
University of Montreal, Montreal, QC, Canada	Research and Teaching Assistant	<i>Jan. 2011–Nov. 2014</i>
University of Sousse, Sousse, Tunisia	Graduate Instructor	<i>Jan. 2009–Dec. 2010</i>

¹Thainá Mariani, Silvia Regina Vergilio, “A systematic review on search-based refactoring”, Journal of Information and Software Technology, Elsevier, 2016. Available at: <http://dx.doi.org/10.1016/j.infsof.2016.11.009>

²D. Karanatsiou, Y. Li, E. M. Arvanitou, N. Misirlis, W. E. Wong, “A Bibliometric Assessment of Software Engineering Scholars and Institutions (2010-2017)”, Journal of Systems and Software, Elsevier, 2018. Available at: <https://doi.org/10.1016/j.jss.2018.10.029>

Visiting Graduate Student

University of Michigan, Dearborn, MI, USA	Visiting Researcher	<i>Jan. 2014–May. 2014</i>
Missouri University of Science and Technology, Rolla, Missouri, USA	Visiting Researcher	<i>Feb. 2013–June. 2013</i> and <i>Sept. 2012–Dec. 2012</i>

EDUCATION

Ph.D. in Computer Science University of Montreal <i>Topic: software quality, refactoring, search-based software engineering</i>	<i>Jan. 2011–Nov. 2014</i> Montreal, Canada
M.Sc. in Computer Science University of Kairouan	<i>July 2010</i> Kairouan, Tunisia
B.Sc. in Computer Science University of Sousse	<i>June 2008</i> Sousse, Tunisia

SELECTED AWARDS & RECOGNITIONS

- Best Paper Award from the *3rd International Workshop on Refactoring (IWor@ICSE)*. “Can Refactoring be Self-Affirmed? An Exploratory Study on How Developers Document Their Refactoring Activities in Commit Changes”, 2019.
- Paper selected as “Journal First” from the Empirical Software Engineering Journal (EMSE) – selected for presentation at the ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE’17), Paderborn, Germany, September 2017.
- Best Paper Award Runner-up, *23rd IEEE International Conference on Web Services (ICWS)*, 2016, San Francisco, USA.
- Paper selected as “Journal First” from the IEEE Transactions on Services Computing (TSC) – selected for presentation at the Special Track for TSC at the 12th IEEE World Congress on Services (SERVICES’16), San Francisco, USA, June 27 - July 2, 2016.
- Paper selected as “Journal First” from the ACM Transactions on Software Engineering and Methodology (TOSEM) – selected for presentation at presentation at the ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE’15), Bergamo, Italy, August 2015.
- Dean’s Honor List, University of Montreal, November 2014.
- Ph.D. Research Excellence Award, FESP, University of Montreal, November 2014 (\$10,000 + \$12,000). The highest University honor that PhD students engaged in research can receive (*Awarded to one graduate student selected among 130+ graduate students in DIRO in 2014*).
- Student Excellence Award, J. Armand Bombardier Foundation, Canada, 2014.
- Outstanding Graduate Student Excellence Award, Department of Computer Science and Operations Research (DIRO), University of Montreal, February 2013. (\$5,200). The highest departmental Award for excellent graduate students.
- Scholarship exemption of tuition fees for excellent international graduate students. Faculty of Graduate and Postdoctoral studies (FESP). University of Montreal, 2011–2014.
- Doctoral scholarship award, MESR, Government of Tunisia, 2011–2014, (*Only two candidates are selected among all universities in Tunisia*).

MENTORSHIP

I am supervising or co-supervising the following students:

Current graduate students

- *Islem Saidani*, PhD student.
Topic: *The impact of Continuous Integration on Software Quality*. (January 2019 - current)
- *Nuri Almarimi*, PhD student.
Topic: *The impact of community and social aspects on software maintenance and evolution*. (May 2018 - current)
- *Marwa Daagi*, PhD student.
Topic: *Quality assessment for Object and Service oriented software systems*. (Sept. 2016 - current)
Publications: 2*ICWS 2017.
- *Moataz Chouchen*, MSc student.
Topic: *On the value of seach-based software engineering in cross-projects defects prediction*. (January 2019 - current)
- *Sabrina Boukharata*, MSc Student.
Topic: *Identifying extract class refactoring opportunities*. (Sept 2017 - current)
- *Francener Alexy*, MSc Student.
Topic: *Towards an automated migration of Web applications*. (May 2019 - current)
- *Safouene Bani*, MSc Student.
Topic: *An empirical study of the mobile apps quality*. (January 2019 - current)

Alumni students

- *Hanzhang Wang*, Ph.D. candidate, (co-supervised with Dr. Marouane Kessentini).
Topic: *Refactoring of Service-based Software Systems*. (Jan. 2015 - Dec. 2017))
Publications: 1*ICWS 2016, 2*ICSOC 2016, 1*ICWS 2017, 1*TSC 2018.
- *Naoya Ujihara*, M.Sc. Student, Osaka University, (co-supervised with Dr. Takashi Ishio)
Topic: *Identification of move method refactoring opportunities in large scale software systems*. (April 2015 - March 2017)
Publications: SANER 2017.
- *Tsubasa Saika*, M.Sc. Student, Osaka University, (co-supervised with Dr. Norihiro Yoshida)
Topic: *The effect of code-smells and refactoring: An empirical study*. (Graduated, Winter 2016)
Publications: ICPC 2016.
- *Zouhour Salem*, M.Sc. Student, University of Gabes, (co-supervised with Dr. Makram Soui).
Topic: *Refactoring of god-object Web services*. (Graduated, Winter 2016)
Publications: ICWS 2016 (Best paper runner-up).
- *Soumaya Dhiab*, M.Sc. Student, University of Gabes, (co-supervised with Dr. Makram Soui).
Topic: *An Ontology-based Approach for User Interface Adaptation*. (Graduated, Winter 2016)
Publications: AISC 2016.
- *Patrice Koligheue*, M.Sc. student, University of Michigan, (co-supervised with Dr. Marouane Kessentini)
Topic: *Many-objective Software Re-modularization*. (Graduated, Winter 2014).
Publications: TOSEM 2015.

TEACHING EXPERIENCE

LECTURER

- MGL804 - Software Realisation and Maintenance. *Graduate course*, ETS Montreal, University of Quebec, Summer 2019, 18 students.

- MGL843 - Advanced Topics in Software Design. *Graduate course*, ETS Montreal, University of Quebec, Winter 2019, 12 students.
- LOG530 - Software Reengineering. *Undergraduate course*, ETS Montreal, University of Quebec, Winter 2019, 36 students.
- LOG100 - Programming for Software Engineering. *Undergraduate course*, ETS Montreal, University of Quebec, Summer 2018, 41 students.
- LOG530 - Software Reengineering. *Undergraduate course*, ETS Montreal, University of Quebec, Winter 2018, 21 students.
- Search-Based Software Engineering. *Graduate course*, Osaka University, Winter 2015, Winter 2016, 9–11 students.
- Software Engineering Fundamentals, undergraduate course, UAEU, Spring 2017, 21 students.
- Data Structures. *Undergraduate course*, UAEU, Fall 2016, 24 and 15 students.
- Introduction to Programming c++. *Undergraduate course*, UAEU, Fall 2016, 24 students.
- Certification in Computer and Internet C2I. *Undergraduate course*, University of Sousse, Fall 2010, Winter 2010, 16–20 students.

TEACHING ASSISTANT

- Introduction to Computer Science. *Undergraduate course*, University of Montreal, Winter 2012, 15 students.
- Software Engineering 1. *Undergraduate course*, University of Montreal, Fall 2013, 12 students.
- Introduction to Programming C++. *Undergraduate course*, University of Montreal, Fall 2013, 21 students.
- Programming languages: Java. *Undergraduate course*, University of Montreal, Fall 2011, 16 students.
- Artificial Intelligence I: Basic concepts and Applications. *Undergraduate course*, University of Sousse, Fall 2010, 18 students.




PUBLICATIONS

BOOK CHAPTERS

- B1. Ali Ouni, Marouane Kessentini, Houari Sahraoui, “Multi-Objective Optimization for Software Refactoring and Evolution”, *Advances in Computers*, Elsevier, volume 94, pp. 103-167, 2014.

REFEREED JOURNAL PAPERS


- J1. [ASE 2019] Sabrine Boukharata, Ali Ouni, Marouane Kessentini, Salah Bouktif, Hanzhang Wang, “Improving Web Service Interfaces Modularity Using Multi-Objective Optimization”, *Journal of Automated Software Engineering (ASE)*, Springer, 2019. [Impact Factor: 2.2].
- J2. [ENERGIES 2019] Salah Bouktif, Ali Fiaz, Ali Ouni, M. Adel Serhani, “Single and Multi-sequence Deep Learning Models for Short and Medium Term Electric Load Forecasting”, *Journal of Energies*, 2019. [Impact Factor: 2.26].
- J3. [JSS 2018] Aymen Saied, Ali Ouni, Houari Sahraoui, Raula Gaikovina Kula, Katsuro Inoue, David Lo, “Improving Reusability of Software Libraries Through Usage Pattern Mining”, *Journal of Systems of Software (JSS)*, v. 145, pp. 164-179, 2018. [Impact Factor: 2.55].
- J4. [TOIT 2018] Ali Ouni, Hanzhang Wang, Marouane Kessentini, Salah Bouktif, Katsuro Inoue, “A Hybrid Approach for Improving the Design Quality of Web Service Interfaces”, *ACM Transactions on Internet Technology (TOIT)*, 4:1, pp. 4-24, 2019. [Impact Factor: 3.0].

- J5. [ENERGIES 2018] Salah Bouktif, Ali Fiaz, Ali Ouni, M. Adel Serhani, “Optimal Deep Learning LSTM Model for Electric Load Forecasting using Feature Selection and Genetic Algorithm: Comparison with Machine Learning Approaches”, *Journal of Energies*, 11(7), pp. 1636, 2018. [Impact Factor: 2.26].
- J6. [TSE 2018] Marouane Kessentini, Wiem Mkaouer, Mel Ó Cinnéide, Ali Ouni, Yuanfang Cai, “An Interactive and Dynamic Search-Based Approach to Software Refactoring Recommendations”, *IEEE Transactions on Software Engineering (TSE)*, 2018. [Impact Factor: 3.27].
- J7. [TSC 2018] Hanzhang Wang, Marouane Kessentini, Ali Ouni, “Interactive Refactoring of Web Service Interfaces Using Computational Search”, *IEEE Transactions on Services Computing (TSC)*, 2018. [Impact factor 5.7].
- J8. [IST 2017] Raula G. Kula, Ali Ouni, Daniel M. German, Katsuro Inoue, “An Exploratory Study on the Impact of Refactoring Activities on Evolving Client-Used APIs”, *Journal of Information and Software Technology (IST)*, 2017. [Impact Factor: 2.9].
- J9. [EMSE 2017] Raula Kula, Daniel M. German, Ali Ouni, Takashi Ishio, Katsuro Inoue, “Do Developers Update their Library Dependencies? An Empirical Study on the Impact of Security Advisories on Library Migration”, *Empirical Software Engineering Journal (EMSE)*, Springer, 2017. [Impact factor 3.27].
 **Selected as “Journal First” and invited for presentation at FSE 2017.**
- J10. [TOSEM 2016] Ali Ouni, Marouane Kessentini, Houari Sahraoui, Katsuro Inoue, Kalyanmoy Deb, “Multi-criteria Code Refactoring Suggestions: An Industrial Case Study”, *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 25(3): 23, pp. 1-53, 2016. [Impact factor 2.51].
- J11. [TSC 2016] Ali Ouni, Marouane Kessentini, Katsuro Inoue, Mel Ó Cinnéide, “Search-based Web Service Antipatterns Detection”, *IEEE Transactions on Services Computing (TSC)*, 2016. [Impact factor 5.7].
 **Selected as “Journal First” and invited for presentation at the IEEE Congress on SERVICES 2016.**
- J12. [IST 2016] Ali Ouni, Raula G. Kula, Marouane Kessentini, Takashi Ishio, Daniel M. German, Katsuro Inoue, “Search-Based Software Library Recommendation Using Multi-Objective Optimization”, *Journal of Information and Software Technology (IST)*, Elsevier, 2016. [Impact Factor: 2.9]
- J13. [EMSE 2016] Marouane Kessentini, Usman Mansoor, Manuel Wimmer, Ali Ouni, Kalyanmoy Deb, “Search-based Detection of Model Level Changes”, *Empirical Software Engineering Journal (EMSE)*, pp. 1-46, Springer, 2016. [Impact factor 3.27].
- J14. [JSEP 2016] Ali Ouni, Marouane Kessentini, Houari Sahraoui, Mel Ó Cinnéide, Kalyanmoy Deb, Katsuro Inoue, “MORE: A Multi-objective Refactoring Recommendation Approach to Introducing Design Patterns and Fixing Code Smells”, *Journal of Software: Evolution and Process (JSEP)*, John Wiley & Sons, 2016. [Impact factor: 1.03].
- J15. [JSS 2015] Ali Ouni, Marouane Kessentini, Houari Sahraoui, Katsuro Inoue, M. S. Hamdi, “Improving Multi-Objective Code-Smells Correction Using Development History”. *Journal of Systems and Software (JSS)*, Elsevier, volume 105, pp. 18-39, 2015. [Impact factor 2.44].
- J16. [TOSEM 2015] Wiem Mkaouer, Marouane Kessentini, Kalyanmoy Deb, Slim Bechikh, Ali Ouni, “Many-Objective Software Remodularization Using NSGA-III”, *ACM Transactions on Software Engineering and Methodology (TOSEM)*, volume 24, n. 3, 2015. [Impact factor 2.51].
 **Selected as “Journal First” and invited for presentation at ESEC/FSE 2015.**
- J17. [TSE 2014] Wael Kessentini, Marouane Kessentini, Houari Sahraoui, Slim Bechikh, Ali Ouni, “A Cooperative Parallel Search-Based Software Engineering Approach for Code-Smells Detection”, *IEEE Transactions on Software Engineering (TSE)*, volume 40, n. 9, pp. 841-861, 2014. [Impact factor 3.27].
- J18. [SQJ 2014] Ali Ouni, Marouane Kessentini, Houari Sahraoui, Slim Bechikh, “Prioritizing Software Refactoring Tasks Using Chemical Reaction Optimization”, *Journal of Software Quality (SQJ)*, Springer, vol. 23, n. 2, pp. 323-361, 2014. [Impact factor 1.8].

- J19. [JSS 2014] Marouane Kessentini, Ali Ouni, Philip Langer, Manuel Wimmer, Slim Bechikh, “Search-based Metamodel Matching with Structural and Semantic Measures”, *Journal of Systems and Software (JSS)*, Elsevier, volume 97, pp. 1-14, 2014. [Impact factor 2.44].
- J20. [ASE 2013] Ali Ouni, Marouane Kessentini, Houari Sahraoui, Mounir Boukadoum, “Maintainability Defects Detection and Correction: A Multi-Objective Approach”, *Journal of Automated Software Engineering (ASE)*, Springer, vol. 20, n. 1, pp. 47-79, 2013. [Impact factor 2.62].

REFEREED INTERNATIONAL CONFERENCE PROCEEDINGS

- C1. [ICSME 2019] Hussein Alrubaye, Mohamed Wiem Mkaouer, Ali Ouni, “MigrationMiner: An Automated Detection Tool of Third-Party Java Library Migration at the Method Level”, *35th IEEE International Conference on Software Maintenance and Evolution (ICSME)*, Tool Track, 2019.
- C2. [ESEM 2019] Eman Abdullah Alomar, Mohamed Wiem Mkaouer, Ali Ouni and Marouane Kessentini, “On the Impact of Refactoring on the Relationship Between Quality Attributes and Design Metrics”, *ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)*, 2019. [Acceptance rate: 19%]
- C3. [ICPC 2019] Hussein Alrubaye, Mohamed Wiem Mkaouer, Ali Ouni, “On the Use of Information Retrieval to Automate the Detection of Third-Party Java Library Migration At The Function Level”, *27th IEEE/ACM International Conference on Program Comprehension (ICPC)*, 2019. [Acceptance rate: 25%]
- C4. [IWorR 2019] Eman A. Alomar, Mohamed Wiem Mkaouer and Ali Ouni, “Can Refactoring be Self-Affirmed? An Exploratory Study on How Developers Document Their Refactoring Activities in Commit Changes”, *3rd International Workshop on Refactoring (IWorR@ICSE)*, co-located with the International Conference on Software Engineering (ICSE), 2019.
- C5. [SANER 2019] Raula G. Kula, Ali Ouni, Daniel M. German, Katsuro Inoue, “An Exploratory Study on the Impact of Refactoring Activities on Evolving Client-Used APIs”, *26th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)*, Journal First Track, 2019.
- C6. [FSE 2017] Raula Kula, Daniel M. German, Ali Ouni, Takashi Ishio, Katsuro Inoue, “Do Developers Update their Library Dependencies? An Empirical Study on the Impact of Security Advisories on Library Migration”, *25th ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE)*, Journal First Track *Empirical Software Engineering Journal (EMSE)*, Springer, 2017.
- C7. [ICWS 2017] Ali Ouni, Marwa Daagi, Marouane Kessentini, Salah Bouktif, M. Mohsen Gammoudi, “A Machine Learning-Based Approach to Detect Web Service Design Defects”, *24th IEEE International Conference on Web Services (ICWS)*, Honolulu, Hawaii, USA, June 25-30, 2017. [Acceptance rate: 21%]
- C8. [ICWS 2017] Marwa Daagi, Ali Ouni, Marouane Kessentini, M. Mohsen Gammoudi, Salah Bouktif, “Web Service Interface Decomposition Using Formal Concept Analysis”, *24th IEEE International Conference on Web Services (ICWS)*, Honolulu, Hawaii, USA, June 25-30, 2017. [Acceptance rate: 21%]
- C9. [ICWS 2017] Marouane Kessentini, Josselin Troh Dea, Ali Ouni, “Improving Web Services Design Quality Using Heuristic Search and Machine Learning”, *24th IEEE International Conference on Web Services (ICWS)*, Honolulu, Hawaii, USA, June 25-30, 2017. [Acceptance rate: 21%]
- C10. [ICWS 2017] Hanzhang Wang, Marouane Kessentini, Taghreed Hassouna, Ali Ouni, “On the Value of Quality of Service Attributes for Detecting Bad Design Practices”, *24th IEEE International Conference on Web Services (ICWS)*, Honolulu, Hawaii, USA, June 25-30, 2017. [Acceptance rate: 21%]
- C11. [GECCO 2017] Josselin Troh Dea, Marouane Kessentini, Ali Ouni, “A Context-Based Refactoring Recommendation Approach Using Simulated Annealing: Two Industrial Case Studies” *The International ACM Genetic and Evolutionary Computation Conference (GECCO 2017)*, Berlin, Germany, July 15-19, 2017.
- C12. [MOBILESoft 2017] Marouane Kessentini, Ali Ouni, “Detecting Android Smells Using Multi-Objective Genetic Programming”, *4th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2017)*, Buenos Aires, Argentina, May 22-23, 2017. [Acceptance rate: 23%]

- C13. [SANER 2017] Naoya Ujihara, Ali Ouni, Takashi Ishio, Katsuro Inoue, “c-JRefRec: Change-Based Identification of Move Method Refactoring Opportunities”, *24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017)*, Tool track, Klagenfurt, Austria, February 20-24, 2017.
- C14. [SANER 2017] Raula Gaikovina Kula, Daniel German, Takashi Ishio, Ali Ouni, Katsuro Inoue, “An Exploratory Study on Library Aging by Monitoring Client Usage in a Software Ecosystem”, *24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017)*, ERA track, Klagenfurt, Austria, February 20-24, 2017. [Acceptance rate: 32%]
- C15. [ASE 2016] Rafi Almhana, Wiem Mkaouer, Marouane Kessentini, Ali Ouni, “Recommending Relevant Classes for Bug Reports Using Multi-Objective Search”, *31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016)*, Singapore, Singapore, September 3-7, 2016. [Acceptance rate: 16% (57/353)]
- C16. [FSE 2015] Wiem Mkaouer, Marouane Kessentini, Kalyanmoy Deb, Slim Bechikh, Ali Ouni, “Many-Objective Software Remodularization Using NSGA-III”, *23rd ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE)*, “Journal-First” presentation (TSE and TOSEM session), Bergamo, Italy, 2015. [Acceptance rate: 25% (74/291)]
- C17. [ICSME 2016] Ali Ouni, Raula Gaikovina Kula and Katsuro Inoue, “Search-Based Peer Reviewers Recommendation in Modern Code Review”, *32nd IEEE International Conference on Software Maintenance and Evolution (ICSME’16)*, Raleigh, North Carolina, USA, October 2-10, 2016. [Acceptance rate: 29% (37/127)]
- C18. [ICWS 2016] Ali Ouni, Zouhour Salem, Katsuro Inoue, Makram Soui, “SIM: An Automated Approach to Improve Web Service Interface Modularization”, *23rd IEEE International Conference on Web Services (ICWS’16)*, San Francisco, USA, June 27 - July 2, 2016. [Acceptance rate: 14% (30/230)]
 **Best Paper Award Runner-up.**
- C19. [ICWS 2016] Hanzhang Wang, Ali Ouni, Marouane Kessentini, Bruce Maxim, William I. Grosky, “Identification of Web Service Refactoring Opportunities as a Multi-Objective Problem”, *23rd IEEE International Conference on Web Services (ICWS’16)*, pp.586-593, San Francisco, USA, June 27 - July 2, 2016. [Acceptance rate: 14% (30/230)]
- C20. [SERVICES 2016] Ali Ouni, Marouane Kessentini, Katsuro Inoue, Mel Ó Cinnéide, “Search-Based Web Service Antipatterns Detection”, *12th IEEE World Congress on Services (SERVICES’16)*, Special Track for TSC, San Francisco, USA, June 27 - July 2, 2016.
- C21. [ICSOC 2016] Wang Hanzhang, Marouane Kessentini, Ali Ouni, “Prediction of Web Services Evolution” *14th International Conference on Service Oriented Computing (ICSOC 2016)*, pp.282-297, Banff, Alberta, Canada, October 10-13, 2016. [Acceptance rate: 21% (30/137)]
- C22. [ICSOC 2016] Wang Hanzhang, Marouane Kessentini, Ali Ouni, “Bi-Level Identification of Web Service Defects” *14th International Conference on Service Oriented Computing (ICSOC 2016)*, Banff, pp. 352-368, Alberta, Canada, October 10-13, 2016. [Acceptance rate: 21% (30/137)]
- C23. [ICPC 2016] Norihiro Yoshida, Tsubasa Saika, Eunjong Choi, Ali Ouni, Katsuro Inoue, “Revisiting the Relationship Between Code Smells and Refactoring”, *24th IEEE International Conference on Program Comprehension (ICPC’16)*, Austin, Texas, USA, 2016.
- C24. [AISC 2016] Makram Soui, Soumaya Diab, Ali Ouni, Aroua Essayeh, Mourad Abed, “An Ontology-Based Approach for User Interface Adaptation”, *Advances in Intelligent Systems and Computing*, pp.199-215, Springer, 2016.
- C25. [GECCO 2015] Ali Ouni, Raula Gaikovina Kula, Marouane Kessentini, Katsuro Inoue, “Web Service Antipatterns Detection Using Genetic Programming”, *24th ACM International Genetic and Evolutionary Computation Conference (GECCO)*, Madrid, Spain, 2015. [Acceptance rate 36% (182/505)]

- C26. [NASBASE 2015] Ali Ouni, Marouane Kessentini, Houari Sahraoui, Mel Ó Cinnéide, Kalyanmoy Deb, Katsuro Inoue, “A Multi-Objective Refactoring Approach to Introduce Design Patterns and Fix Anti-Patterns”, *North American Search Based Software Engineering Symposium (NasBASE)*, Detroit, Michigan, USA, 2015. (invited for a special issue of the *Journal of Software: Evolution and Process*).
- C27. [NASBASE 2015] Mohamed Wiem Mkaouer, Marouane Kessentini, Slim Bechikh and Ali Ouni, “Many-Objective Software Engineering using Preference-based Evolutionary Algorithms: A Case Study in Software Refactoring”, *North American Search Based Software Engineering Symposium (NasBASE)*, Detroit, Michigan, USA, 2015.
- C28. [GECCO 2013] Ali Ouni, Marouane Kessentini, Houari Sahraoui and M. S. Hamdi, “The Use of Development History in Software Refactoring Using a Multi-Objective Evolutionary Algorithm”, *22nd ACM International Genetic and Evolutionary Computation Conference (GECCO)*, Amsterdam, The Netherlands, July 2013. [Acceptance rate: 36% (204/570)]
- C29. [CSMR 2013] Ali Ouni, Marouane Kessentini and Houari Sahraoui, “Search-based Refactoring Using Recorded Code Changes”, *17th IEEE European Conference on Software Maintenance and Reengineering (CSMR)*, Genova, Italy, March 2013. [Acceptance rate: 30% (24/80)]
- C30. [ICSM 2012] Ali Ouni, Marouane Kessentini, Houari Sahraoui and M. S. Hamdi, “Search-based Refactoring: Towards Semantics Preservation”, *28th IEEE International Conference on Software Maintenance (ICSM)*, September 23-30, 2012, Riva del Garda, Italy. [Acceptance rate: 25% (46/181)]
- C31. [ICPC 2011] Marouane Kessentini, Wael Kessentini, Houari Sahraoui, Mounir Boukadoum, and Ali Ouni, “Design Defects Detection and Correction by Example”, *19th IEEE International Conference on Program Comprehension (ICPC)*, 22-24 June 2011, pp 81-90, Kingston- Canada. [Acceptance rate: 24%]

TUTORIALS

- T1. [ASE 2016] Search-Based Software Engineering: Foundations, Challenges and Recent Advances, in *31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016)*, Singapore, Singapore, September, 2016. (20–25 attendees)

REFEREED NATIONAL CONFERENCES AND WORKSHOPS

- W1. [INFORSID 2011] Valerie Monfort, Ali Ouni, Slimane Hammoudi, and Mohamed Baccouche, “Vers une Plate Forme de Transformation de PIM vers PSM : Cas d’un Intergiciel Basé sur les Services et les Aspects”, *INFORSID*, 24-26 May 2011, Lille - France.
- W2. [WIA 2010] Valerie Monfort, Slimane Hammoudi, Afef Achour, Ali Ouni, and Arij Khelifa, “A Dynamic Meta Models Composition and Transformation according to Context and Mobility”, *Workshop en Informatique et Applications (WIA)*, February 2010, Tozeur - Tunisia.

DISSERTATIONS/OTHER REPORTS

- D1. Ali Ouni, “A Mono- and Multi-objective Approach for Recommending Software Refactoring”, Ph.D. thesis, University of Montreal, Defended on November 2014.
- D2. Ali Ouni, “Multi-Objective Optimization for Software Refactoring and Evolution”, Research proposal submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy (Ph.D.) in computer science, University of Montreal, December 2012.

PROFESSIONAL SERVICES

- Journal Editor
 - Guest Editor, *Journal of Information and Software Technology*, Elsevier, SI on “Software Refactoring”, 2016.

- Conference Organization:
 - Publicity co-chair, International Symposium on Search Based Software Engineering (SSBSE), 2019.
 - General Chair of the 2nd International Workshop on Refactoring (IWor 2018), co-located with ASE 2018.
 - PC co-chair of the 9th IEEE International Conference on Management of Digital EcoSystems (MEDES) 2017.
 - Founder of the International Workshop on Refactoring (IWor), 2016.
 - General Chair of the International Workshop on Refactoring (IWor 2016), co-located with ASE 2016.
 - Chair of the PhD Track, International Symposium on Search Based Software Engineering (SSBSE), 2016.
 - Local organization committee, SSBSE 2016, Raleigh, NC, USA.
 - Local organization committee, SANER 2016, Osaka, Japan.
 - Organization committee, 1st North American Symposium on SBSE (NASBase) 2015, Dearborn, MI, USA.
- Program Committee Member:
 - IEEE International Workshop on Software Engineering Intelligence (SEI), co-located with ASE, 2019.
 - 19th IEEE Int. Working Conf. on Source Code Analysis and Manipulation (SCAM), Engineering Track, 2019.
 - 23rd International Computer Science and Engineering Conference (ICSEC), 2019.
 - IEEE International Workshop on Refactoring (IWor), 2019.
 - IEEE International Conference on Web Services (ICWS), 2019.
 - IEEE 13th International Conference on Innovations in Information Technology (IIT), 2018.
 - ACM Genetic and Evolutionary Computation Conference (GECCO), 2018.
 - International Conference on Advanced Service Computing (SERVICE COMPUTATION), 2018.
 - IEEE Working Conference on Software Visualization (VISSOFT), NIER and Tool tracks, 2017.
 - ACM Genetic and Evolutionary Computation Conference (GECCO), 2017.
 - International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017 Tool Track), 2017.
 - ACM Genetic and Evolutionary Computation Conference (GECCO), 2016.
 - International Conference on Software Analysis, Evolution, and Reengineering (SANER 2016 Tool Track), 2016.
 - International Symposium on Search Based Software Engineering (SSBSE), 2016.
 - International Conference on Model and Data Engineering (MEDI), 2015.
 - ACM Genetic and Evolutionary Computation Conference (GECCO), 2015.
 - North American Search Based Software Engineering Symposium (NasBASE), 2015.
 - ACM Genetic and Evolutionary Computation Conference (GECCO), 2014.
 - Workshop on Combining Modelling with Search- and Example-Based Approaches (CMSEBA), 2014.
- Journal Referee:
 - IEEE Transactions on Software Engineering (TSE), IEEE Computer Society.
 - IEEE Transactions on Evolutionary Computation (TEVC), IEEE Computer Society.
 - ACM Transactions on Software Engineering and Methodology (TOSEM), ACM.
 - IEEE Transactions on Services Computing (TSC), IEEE Computer Society.
 - Empirical Software Engineering (EMSE), Springer.
 - Journal of Systems and Software (JSS), Elsevier.
 - Journal of Automated Software Engineering (ASE), Springer.
 - Journal of Information and Software Technology (IST), Elsevier.
 - Journal of Software Quality (SQJ), Springer.
 - IEEE Transactions on Reliability, IEEE Computer Society.
 - Journal of Software: Evolution and Process (JSEP), John Wiley & Sons.
 - Journal Applied Soft Computing (ASOC), Elsevier.
 - Computer Standards & Interfaces Journal (CSI), Elsevier.
 - Journal of Intelligent Systems (JISYS).
 - IEEE Transactions on Emerging Topics in Computational Intelligence, IEEE Computer Society.
 - IEEE Access, IEEE Computer Society.
 - IET Software, IEEE Computer Society.
 - Journal of Reliable Intelligent Environments, Elsevier.
- Research Grants Referee:
 - Natural Sciences and Engineering Research Council, Canada (NSERC), 2018.

MEMBERSHIPS AND OTHER QUALIFICATIONS

MEMBERSHIPS

- Institute of Electrical and Electronic Engineers (*IEEE*)
- Association for Computing Machinery (*ACM*)
- Special Interest Group on Software Engineering (*SIGSOFT*)

OTHER QUALIFICATIONS

- Qualification for the functions of Assistant Professor (*maître de conférences*), Section 27–Computer Science, National Council of Universities (CNU), France Ministry of National Education, Higher Education and Research, France, February 2015.

LANGUAGES

Proficient in English, French, and Arabic.