3480 Av. University, Rm 527, Montréal, QC, Canada ©: (514) 398-2891 \similar shane.mcintosh@mcgill.ca \text{\text{\text{m}:} http://shanemcintosh.org/}

# **SUMMARY OF ACCOMPLISHMENTS**

- Recipient of the Governor General's Academic Gold Medal—one of Canada's most prestigious awards for PhD graduates (see SELECTED AWARDS).
- My early papers on build systems laid the groundwork for a rapidly-growing research community that has piqued industrial interest (see ICSE'11, EMSE'12, and MSR'10).
- Broad network of collaborators, which includes industrial practitioners and academics from institutions in Canada, Japan, Brazil, Austria, Germany, and USA.

### **CURRENT POSITION**

Asst. Professor, Dept. of Elec. & Computer Eng., McGill University, Canada, (Aug. 2015–Present)

## **EDUCATION**

**PhD** Queen's University, Canada (Sep. 2012–Jul. 2015)

Thesis: "Studying the Software Development Overhead of Build Systems"

Supervisors: B. Adams, A. E. Hassan

📱 Governor General's Academic Gold Medal 🝸

MSc Queen's University, Canada (Sep. 2009–Jan. 2011)

Thesis: "Studying the Evolution of Build Systems"

Supervisors: B. Adams, A. E. Hassan

f Y Distinguished thesis award f Y

**BAComp** University of Guelph, Canada (Sep. 2003–Dec. 2008)

## **FUNDING**

Mitacs Accelerate grant with Dell EMC (Sep. 2017–Dec. 2017), \$15,000 CAD.

FRQNT Nouveaux Chercheurs grant (Apr. 2017-Mar. 2019), \$40,000 CAD.

**NSERC** Discovery grant (May 2016–Apr. 2021), \$155,000 CAD.

### PAPERS IN REFEREED INTERNATIONAL JOURNALS

**TSE'18a** K. Gallaba, S. McIntosh. Use and Misuse of Continuous Integration Features: An Empirical Study of Projects that (mis)use Travis CI. *Transactions on Software Engineering* (IEEE), In press, 18 pages, May 2018.

**TSE'18b** S. McIntosh, Y. Kamei. Are Fix-Inducing Changes a Moving Target? A Longitudinal Case Study of Just-In-Time Defect Prediction. *Transactions on Software Engineering* (IEEE), 44(5):412–428. May 2018.

**EMSE'18a** D. A. da Costa, S. McIntosh, C. Treude, U. Kulesza, A. E. Hassan. The Impact of Rapid Release Cycles on the Integration Delay of Fixed Issues. *Empirical Software Engineering* (Springer), 23(2):835–904, Apr. 2018.

**EMSE'18b** D. A. da Costa, S. McIntosh, U. Kulesza, A. E. Hassan, S. L. Abebe. An Empirical Study of the Integration Time of Fixed Issues. *Empirical Software Engineering* (Springer), 23(1):334–383, Feb. 2018.

**TSE'18c** C. Tantithamthavorn, S. McIntosh, A. E. Hassan, K. Matsumoto. The Impact of Automated Parameter Optimization on Defect Prediction Models. *Transactions on Software Engineering* (IEEE), In press, 32 pages, Jan. 2018.

**EMSE'17a** C. Bezemer, S. McIntosh, B. Adams, D. M. Germán, A. E. Hassan. An Empirical Study of Unspecified Dependencies in Make-Based Build Systems. *Empirical Software Engineering* (Springer), 22(6):3117–3148, Dec. 2017.

**TSE'17a** D. A. da Costa, S. McIntosh, W. Shang, U. Kulesza, R. Coelho, A. E. Hassan. A Framework for Evaluating the Results of the SZZ Approach for Identifying Bug-Introducing Changes. *Transactions on Software Engineering* (IEEE), 43(7):641–657, July 2017.

- **TSE'17b** F. Zhang, A. E. Hassan, S. McIntosh, Ying Zou. The Use of Summation to Aggregate Software Metrics Hinders the Performance of Defect Prediction Models. *Transactions on Software Engineering* (IEEE), 43(5):476–491, May 2017.
- **EMSE'17b** P. Thongtanunam, S. McIntosh, A. E. Hassan, H. Iida. Review Participation in Modern Code Review: An Empirical Study of the Android, Qt, and OpenStack Projects. *Empirical Software Engineering* (Springer), 22(2):768–817. Apr. 2017.
- **TSE'17d** C. Tantithamthavorn, S. McIntosh, A. E. Hassan, K. Matsumoto. An Empirical Comparison of Model Validation Techniques for Defect Prediction Models. *Transactions on Software Engineering* (IEEE), 41(1):1–18, Jan. 2017.
- **AUSE'16** S. McIntosh, B. Adams, M. Nagappan, A. E. Hassan. Identifying and Understanding Header File Hotspots in C/C++ Build Processes. *Automated Software Engineering* (Springer), 23(4):619–647, Dec. 2016.
- **TSE'16** C. Tantithamthavorn, S. McIntosh, A. E. Hassan, K. Matsumoto. Comments on "Researcher Bias: The Use of Machine Learning in Software Defect Prediction" *Transactions on Software Engineering* (IEEE), 42(11):1092–1094, Nov. 2016.
- **EMSE'16a** Y. Kamei, T. Fukushima, S. McIntosh, K. Yamashita, N. Ubayashi, A. E. Hassan. Studying Just-In-Time Defect Prediction using Cross-Project Models. *Empirical Software Engineering* (Springer), 21(5):2072–2106, Oct. 2016.
- **EMSE'16b** S. McIntosh, Y. Kamei, B. Adams, A. E. Hassan. An Empirical Study of the Impact of Modern Code Review Practices on Software Quality. *Empirical Software Engineering* (Springer), 21(5):2146–2189, Oct. 2016.
- **EMSE'15** S. McIntosh, M. Nagappan, B. Adams, A. Mockus, A. E. Hassan. A Large-Scale Empirical Study of the Relationship between Build Technology and Build Maintenance. *Empirical Software Engineering* (Springer), 20(6):1587–1633, Dec. 2015.
- **EMSE'12** S. McIntosh, B. Adams, A. E. Hassan. The evolution of Java build systems. *Empirical Software Engineering* (Springer), 17(4-5):578–608, Aug. 2012.

# FULL PAPERS IN REFEREED INTERNATIONAL CONFERENCE PROCEEDINGS

- **ESEM'18** F. El Zanaty, T. Hirao, S. McIntosh, A. Ihara, K. Matsumoto. An Empirical Study of Design Discussions in Code Review. *In proc. of the 12th Int'l Symposium on Empirical Software Engineering and Measurement* (ACM/IEEE), In press, 10 pages. Acceptance: 30/140 (21%).
- ICSME'18 M. Robillard, M. Nassif, S. McIntosh. Threats of Aggregating Software Repository Data. *In proc. of the 34th Int'l Conf. on Software Maintenance and Evolution* (IEEE), In press, 11 pages. Acceptance: 45/174 (26%).
- ICSME'18 Industry R. Wen, D. Gilbert, M. G. Roche, S. McIntosh. BLIMP Tracer: Integrating Build Impact Analysis with Code Review. *In proc. of the Industry track of the 34th Int'l Conf. on Software Maintenance and Evolution* (IEEE), In press, 10 pages. Acceptance: 15/32 (47%).
- **ASE'18** K. Gallaba, C. Macho, M. Pinzger, S. McIntosh. Noise and Heterogeneity in Historical Build Data: An Empirical Study of Travis CI. *In proc. of the 33rd Int'l Conf. on Automated Software Engineering* (ACM/IEEE). In press. 11 pages. Acceptance: 69/346 (20%).
- **SANER'18** C. Macho, S. McIntosh, M. Pinzger. Automatically Repairing Dependency-Related Build Breakage. *In proc. of the 25th Int'l Conf. on Software Analysis, Evolution and Reengineering* (IEEE), pp. 106–117, March 2018. Acceptance: 39/146 (27%).
- MSR'17a C. Macho, S. McIntosh, M. Pinzger. Extracting Build Changes with BuildDIFF. *In proc. of the 14th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 368–378, May 2017. Acceptance: 37/121 (31%).
- **MSR'17b** B. Ghotra, S. McIntosh, A. E. Hassan. A Large-Scale Study of the Impact of Feature Selection Techniques on Defect Classification Models. *In proc. of the 14th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 146–157, May 2017. Acceptance: 37/121 (31%).
- ICSME'16 J. Shimagaki, Y. Kamei, S. McIntosh, D. Pursehouse, N. Ubayashi. Why are Commits being Reverted? A Comparative Study of Industrial and Open Source Projects. *In proc. of the 32nd Int'l Conf. on Software Maintenance and Evolution* (IEEE), pp. 301–311, Oct. 2016. Acceptance: 35/127 (29%).

- **ESEM'16** K. Miura, S. McIntosh, Y. Kamei, A. E. Hassan, N. Ubayashi. The Impact of Task Granularity on Co-evolution Analyses. *In proc. of the 10th Int'l Symposium on Empirical Software Engineering and Measurement* (ACM/IEEE), no. 47, Sep. 2016. Acceptance: 27/122 (22%).
- ICSE'16a P. Thongtanunam, S. McIntosh, A. E. Hassan, H. Iida. Revisiting Code Ownership and its Relationship with Software Quality in the Scope of Modern Code Review. *In proc. of the 38th Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 1039–1050, May 2016. Acceptance: 101/530 (19%).
- ICSE'16b C. Tantithamthavorn, S. McIntosh, A. E. Hassan, K. Matsumoto. Automated Parameter Optimization of Classification Techniques for Defect Prediction Models. *In proc. of the 38th Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 321–332, May 2016. Accept: 101/530 (19%).
- ICSE'16 SEIP J. Shimagaki, Y. Kamei, S. McIntosh, A. E. Hassan, N. Ubayashi. A Study of the Quality-Impacting Practices of Modern Code Review at Sony Mobile. *In proc. of the Software Engineering in Practice (SEIP) track of the 38th Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 212–221, May 2016. Acceptance: 28/108 (26%).
- MSR'16a D. A. da Costa, S. McIntosh, U. Kulesza, A. E. Hassan. Studying the Impact of Switching to a Rapid Release Cycle on Integration Delay of Addressed Issues: An Empirical Study of the Mozilla Firefox Project. *In proc. of the 13th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 374–385, May 2016. Acceptance: 36/103 (35%).
  - $\P$  ACM SIGSOFT distinguished paper  $\P$
- **SANER'16a** M. Beller, R. Bholanath, S. McIntosh, A. Zaidman. Analyzing the State of Static Analysis: A Large-Scale Evaluation in Open Source Software. *In proc. of the 23rd Int'l Conf. on Software Analysis, Evolution and Reengineering* (IEEE), pp. 470–481, Mar. 2016. Acceptance: 52/140 (37%).
- SANER'16b C. Macho, S. McIntosh, M. Pinzger. Predicting Build Co-Changes with Source Code Change and Commit Categories. *In proc. of the 23rd Int'l Conf. on Software Analysis, Evolution and Reengineering* (IEEE), pp. 541–551, Mar. 2016. Acceptance: 52/140 (37%).

  \*\*Nominated for best paper\*\*
- **ESEC/FSE'15** M. Nagappan, R. Robbes, Y. Kamei, É. Tanter, S. McIntosh, A. Mockus, A. E. Hassan. An Empirical Study of goto in C Code from GitHub Repositories. *In proc. of the 10th joint meeting of the European Software Engineering Conf. and the Symposium on the Foundations of Software Engineering* (ACM/IEEE), pp. 404–414, Sep. 2015. Acceptance: 74/291 (25%).
- ICSE'15a C. Tantithamthavorn, S. McIntosh, A. E. Hassan, A. Ihara, K. Matsumoto. The Impact of Mislabelling on the Performance and Interpretation of Defect Prediction Models *In proc. of the 37th Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 812–823, May 2015. Acceptance: 84/452 (19%).
- ICSE'15b B. Ghotra, S. McIntosh, A. E. Hassan. Revisiting the Impact of Classification Techniques on the Performance of Defect Prediction Models. *In proc. of the 37th Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 789–800, May 2015. Acceptance: 84/452 (19%).
- MSR'15 P. Thongtanunam, S. McIntosh, A. E. Hassan, H. Iida. Investigating Code Review Practices in Defective Files. *In proc. of the 12th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 168–179, May 2015. Acceptance: 32/106 (30%).
- **SANER'15a** R. Morales, S. McIntosh, F. Khomh. Do Code Review Practices Impact Design Quality? A Case Study of the Qt, VTK, and ITK Projects. *In proc. of the 22nd Int'l Conf. on Software Analysis, Evolution and Reeng.* (IEEE), pp. 171–180, Mar. 2015. Acceptance: 46/144 (32%).
- **SANER'15b** X. Xia, D. Lo, S. McIntosh, E. Shihab, A. E. Hassan. Cross-Project Build Co-change Prediction. *In proc. of the 22nd Int'l Conf. on Software Analysis, Evolution and Reengineering* (IEEE), pp. 311–320, Mar. 2015. Acceptance: 46/144 (32%).
- ICSME'14a S. McIntosh, B. Adams, M. Nagappan, A. E. Hassan. Mining Co-Change Information to Understand when Build Changes are Necessary. *In proc. of the 30th Int'l Conf. on Software Maintenance and Evolution* (IEEE), pp. 241–250, Oct. 2014. Acceptance: 40/210 (19%).
- ICSME'14b D. A. da Costa, S. L. Abebe, S. McIntosh, Uirá Kulesza, A. E. Hassan. An Empirical Study of Delays in the Integration of Addressed Issues *In proc. of the 30th Int'l Conf. on Software Maintenance and Evolution* (IEEE), pp. 281–290, Oct. 2014. Accept: 40/210 (19%.) \*\*Nominated for best paper\*\*

- ASE'14 S. van der Burg, E. Dolstra, S. McIntosh, J. Davies, D. M. Germán, A. Hemel. Tracing Software Build Processes to Uncover License Compliance Inconsistencies. *In proc. of the 29th Int'l Conf. on Automated Software Engineering* (ACM/IEEE), pp. 731–741, Sep. 2014. Acceptance: 55/276 (20%).
- ICSE'14 SEIP S. McIntosh, M. Poehlmann, E. Juergens, A. Mockus, B. Adams, A. E. Hassan, B. Haupt, C. Wagner. Collecting and Leveraging a Benchmark of Build System Clones to Aid in Quality Assessments. *In proc. of the Software Engineering in Practice (SEIP) track of the 36th Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 145–154, Jun. 2014. Acceptance: 25/117 (21%).
- MSR'14a S. McIntosh, Y. Kamei, B. Adams, A. E. Hassan. The Impact of Code Review Coverage and Code Review Participation on Software Quality: A Case Study of the Qt, VTK, and ITK Projects. *In proc. of the 11th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 192–201, May 2014. Acceptance: 29/85 (34%).
  - 🝸 Distinguished paper award 🝸
- MSR'14b T. Fukushima, Y. Kamei, S. McIntosh, K. Yamashita, N. Ubayashi. An Empirical Study of Just-In-Time Defect Prediction Using Cross-Project Models. *In proc. of the 11th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 172–181, May 2014. Accept: 29/85 (34%).
  - 🝸 Nominated for distinguished paper award 🝸
- **WSE'11** S. McIntosh, B. Adams, A. E. Hassan, Ying Zou. Using Indexed Sequence Diagrams to Uncover the Behaviour of AJAX Applications. *In proc. of the 13th Int'l Symposium on Web Systems Evolution* (IEEE), pp. 1–10, Sep. 2011. Acceptance: 8/24 (33%).
- ICSE'11 S. McIntosh, B. Adams, T. H. D. Nguyen, Y. Kamei, A. E. Hassan. An Empirical Study of Build Maintenance Effort. *In proc. of the 33rd Int'l Conf. on Software Engineering* (ACM/IEEE), pp. 141–150, May 2011. Acceptance: 62/441 (14%).
- **MSR'10** S. McIntosh, B. Adams, A. E. Hassan. The Evolution of ANT Build Systems. *In proc. of the 7th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 42–51, May 2010. Acceptance: 16/51 (31%).
  - f Y Nominated for best paper award f Y

# SHORT PAPERS IN REFEREED INTERNATIONAL CONFERENCE PROCEEDINGS

- MSR'18a Challenge N. Rabbani, M. Harvey, S. Saquif, K. Gallaba, S. McIntosh. Revisiting "Programmers' Build Errors" in the Visual Studio Context: A Replication Study using IDE Interaction Traces. *In proc. of the Mining Challenge track of the 15th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 98–101, May 2018. Acceptance: 13/31 (42%).
- MSR'18b Challenge R. Amlekar, A. F. R. Gamboa, K. Gallaba, S. McIntosh. Do Software Engineers Use Autocompletion Features Differently Than Other Developers? *In proc. of the Mining Challenge track of the 15th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 86–89, May 2018. Acceptance: 13/31 (42%).
- ICSME'17 NIER Q. Cao, R. Wen, S. McIntosh. Forecasting the Duration of Incremental Build Jobs. *In proc. of the New Ideas and Emerging Results track of the 33rd Int'l Conf. on Software Maintenance and Evolution* (IEEE), pp. 524–528, Sep. 2017. Acceptance: 15/26 (58%).
- MSR'17a Challenge Y. Khan, Y. Gupta, K. Gallaba, S. McIntosh. The Impact of the Adoption of Continuous Integration on Developer Attraction and Retention. *In proc. of the Mining Challenge* track of the 14th Int'l Conf. on Mining Software Repositories (ACM/IEEE), pp. 491–494, May 2017. Acceptance: 14/29 (48%).
- MSR'17b Challenge M. Manglaviti, E. Coronado-Montoya, K. Gallaba, S. McIntosh. An Empirical Study of the Personnel Overhead of Continuous Integration. *In proc. of the Mining Challenge track of the 14th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 471–474, May 2017. Acceptance: 14/29 (48%).
- MSR'16a Challenge J. G. Barnett, C. K. Gathuru, L. S. Soldano, S. McIntosh. The Relationship between Commit Message Detail and Defect Proneness in Java Projects on GitHub. *In proc. of the Mining Challenge track of the 13th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 496–499, May 2016. Acceptance: 10/24 (42%).
  - 🍸 Mining challenge runner-up 🍸

- MSR'16b Challenge C. Désarmeaux, A. Pecatikov, S. McIntosh. The Dispersion of Build Maintenance Activity across Maven Lifecycle Phases. *In proc. of the Mining Challenge track of the 13th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 492–495, May 2016. Acceptance: 10/24 (42%).
- MSR'14 Challenge K. Yamashita, S. McIntosh, Y. Kamei, N. Ubayashi. Magnet or Sticky? An OSS Project-by-Project Typology. *In proc. of the Mining Challenge track of the 11th Int'l Conf. on Mining Software Repositories* (ACM/IEEE), pp. 344–347, May 2014. Acceptance: 9/19 (47%).
- CSMR-WCRE'14 ERA S. McIntosh, K. Legere, A. E. Hassan. Orchestrating Change: An Artistic Representation of Software Evolution. *In proc. of the Early Research Achievements (ERA) track of the 1st joint meeting of the Conf. on Software Maintenance and Reengineering and the Working Conf. on Reverse Engineering* (IEEE), pp. 353–357, Mar. 2014. Acceptance: 12/33 (36%).

# **NOTABLE INVITED PAPERS AND TALKS**

- **MICROSOFT'18** S. McIntosh. (Mis)use of Continuous Integration Features. *Microsoft Continuous Deployment Workshop*, Redmond, USA, Aug. 2018.
- **GERRIT'17** S. McIntosh. Mining Gerrit Repositories for Contentious Reviews and Community Evolution. *Gerrit User Summit*, London, UK, Oct. 2017.
- **SHONAN'17a** S. McIntosh. Building on an unsound foundation: How release pipelines can impact our predictive models. *Mining Software Repositories: Accomplishments, Challenges and Future Trends*, National Institute of Informatics (NII) Shonan Meeting #95, Shonan, Japan. Mar. 2017. *Invited lecture*.
- **NUANCE'16** S. McIntosh. Understanding and Supporting Modern Software Development and Release Teams. *Nuance Communications nCode Summit*, Montréal, Canada. Sep. 2016. *Keynote address*.
- **SANER'16 FOSE** B. Adams, S. McIntosh. Modern Release Engineering in a Nutshell: Why Researchers should Care. *In proc. of the Future of Software Engineering (FOSE) track of the 23rd Int'l Conf. on Software Analysis, Evolution, and Reeng.* (IEEE), pp. 78–90, May 2016.
- **GERRIT'15** S. McIntosh. Mining Gerrit Repositories to Study the Impact of Modern Code Review Practices *Gerrit User Summit*, Mountain View, USA, Nov. 2015.
- **COW'15** S. McIntosh. Building on an Unsound Foundation: How Release Pipelines can Impact our Predictive Models. *44th CREST Open Workshop, Predictive Modelling for Software Engineering*, UCL, London, UK, Nov. 2015.
- **UdeM'15** S. McIntosh. Software Build Systems: Enabling the Rapid Release Cycle of Modern Software Systems. *Université de Montréal*, Montréal, Canada, Oct. 2015.
- **UQAM'15** S. McIntosh. Software Build Systems: Enabling the Rapid Release Cycle of Modern Software Systems. *Université de Québec à Montréal*, Montréal, Canada, Oct. 2015.
- **PolyMtl'15** S. McIntosh. Software Build Systems: Enabling the Rapid Release Cycle of Modern Software Systems. *Polytechnique Montréal*, Montréal, Canada, Sep. 2015.

## INVITATION-BASED WORKSHOPS AND SEMINARS

- **DAGSTUHL'18** Automatic Quality Assurance and Release. *Schloss Dagstuhl Seminar #18122*, Wadern, Germany. Mar. 2018.
- **VSS'17** On the Relation of Software Architecture and DevOps/Continuous Delivery. *1st Vienna Software Seminar*, University of Vienna, Vienna, Austria. Dec. 2017.
- **SHONAN'17b** Data-Driven Search-Based Software Engineering. *National Institute of Informatics* (NII) Shonan Meeting #105, Shonan, Japan. Dec. 2017.
- **CREST'15** Predictive Modelling for Software Engineering. *44th CREST Open Workshop*, University College London, London, UK. Nov. 2015.

#### **SELECTED AWARDS**

- Peter Silvester Award Dept. of Elec. & Computer Eng., McGill University (Oct. 2016)
- Governor General's Academic Gold Medal https://www.gg.ca/document.aspx?id= 15008 (June 2016)
- Vanier Canada Graduate Scholarship http://vanier.gc.ca/(Sep. 2012-Aug. 2015.)

#### **GRADUATE STUDENT MENTORSHIP**

#### **Doctoral Students**

• K. Gallaba (Sep. 2016-Present)

Co-authored papers: ASE'18, TSE'18a, MSR'18a Challenge, MSR'18b Challenge, MSR'17a Challenge, MSR'17b Challenge

• T. Hirao (Apr. 2016-Present)

Co-advised with A. Ihara, K. Matsumoto

Co-authored papers: ESEM'18

• C. Macho (Aug. 2015-Present)

Co-advised with M. Pinzger

Co-authored papers: ASE'18, SANER'18, MSR'17a, SANER'16b

• K. Yamashita (Sep. 2013–February 2017)

Co-advised with Y. Kamei, N. Ubayashi

Co-authored papers: EMSE'15a, IWPSE'15, MSR'14b, MSR'14c

Most recent position: Researcher at Fujitsu Japan, Ltd.

D. A. da Costa (Feb. 2014–Feb. 2017)

Co-advised with Uirá Kulesza

Co-authored papers: EMSE'18a, EMSE'18b, TSE'17a, MSR'16a, ICSME'14b Most recent position: Post-doctoral fellow at Queen's University, Canada

• C. Tantithamthavorn (Jun. 2014-Sep. 2016)

Co-advised with A. E. Hassan, K. Matsumoto

Co-authored papers: TSE'18c, TSE'17d, TSE'16, ICSE'16b, ICSE'15a Most recent position: Asst. Professor at the University of Adelaide, Australia

• P. Thongtanunam (Aug. 2014–Sep. 2016)

Co-advised with A. E. Hassan, H. Iida

Co-authored papers: ICSE'16a, MSR'15, EMSE'17b

Most recent position: Asst. Professor at the University of Adelaide, Australia

# Master's Students

• F. El Zanaty (Jan. 2018–Present)

Co-authored papers: ESEM'18

- C. Rezk (Sep. 2017–Present)
- R. Wen (Sep. 2016–Present)

Co-authored papers: ICSME'18 Industry, ICSME'17 NIER

• T. Fukushima (Sep. 2013-Mar. 2015)

Co-advised with Y. Kamei, N. Ubayashi

Co-authored papers: EMSE'16a, MSR'14b

Most recent position: Software Engineer at Toshiba Japan, Ltd.

B. Ghotra (Jan. 2014–May 2017)

Co-advised with A. E. Hassan

Co-authored papers: MSR'17b, ICSE'15b

Most recent position: Software Engineer at Blackberry Canada, Ltd.

### **UNDERGRADUATE TEACHING**

#### **Course Instructor**

- ECSE 611: Software Analytics (Winter 2017, 2018)
- ECSE 437: Software Delivery (Fall 2018)
- ECSE 429: Software Validation (Fall 2017)
- ECSE 321: Introduction to Software Engineering (Fall 2015, 2016, 2017)

## ACADEMIC SERVICE

#### Associate Editor

Journal of Systems and Software (JSS)

# **Program Committee Chair**

- Int'l Conf. on Predictive Models and Data Analytics in Software Engineering (PROMISE'18)
- Early Research Achievements track of the Int'l Conf. on Software Analytics, Evolution, and Reengineering (SANER'18 ERA)
- Int'l Workshop on Release Engineering (RELENG'16)
- Int'l Workshop on Empirical Software Engineering in Practice (IWESEP'16)

## **Program Committee**

- Int'l Conf. on Software Maintenance and Evolution (ICSME'18)
- Int'l Working Conf. on Source Code Analysis and Manipulation (SCAM'18)
- Int'l Symposium on Empirical Software Engineering and Measurement (ESEM'18)
- Int'l Conf. on Automated Software Engineering (ASE'18)
- Int'l Conf. on Mining Software Repositories (MSR'18)
- Int'l Conf. on Program Comprehension (ICPC'18)
- Int'l Conf. on Software Analysis, Evolution, and Reengineering (SANER'18)
- Int'l Conf. on Predictive Models and Data Analytics in Software Engineering (PROMISE'17)
- Int'l Symposium on Empirical Software Engineering and Measurement (ESEM'17)
- Int'l Conf. on Software Maintenance and Evolution (ICSME'17)
- Int'l Conf. on Object-Oriented Programming, Systems, Languages, and Applications (OOP-SLA'17)
- Int'l Conf. on Mining Software Repositories (MSR'17)
- Int'l Conf. on Evaluation and Assessment in Software Engineering (EASE'17)
- Int'l Conf. on Data Science and Advanced Analytics (DSAA'16)
- Int'l Conf. on Software Maintenance and Evolution (ICSME'16)
- Int'l Conf. on Mining Software Repositories (MSR'16)

# **Early Research Achievements Committee**

• Int'l Conf. on Program Comprehension (ICPC'17)

# **Formal Tool Demonstrations Committee**

- Int'l Symposium on the Foundations of Software Engineering (FSE'17)
- Int'l Conf. on Program Comprehension (ICPC'16)
- Int'l Conf. on Software Analysis, Evolution, and Reengineering (SANER'16)
- Int'l Conf. on Program Comprehension (ICPC'15)
- Int'l Conf. on Software Maintenance and Evolution (ICSME'14)
- Int'l Conf. on Program Comprehension (ICPC'14)

# **Data Showcase Committee**

- Int'l Conf. on Mining Software Repositories (MSR'16)
- Int'l Conf. on Mining Software Repositories (MSR'15)
- Int'l Conf. on Mining Software Repositories (MSR'13)

#### Reviewer

- Transactions on Software Engineering (TSE)
- Empirical Software Engineering (EMSE)
- IEEE Software
- Journal of Software: Evolution and Process (JSEP)
- Journal of Information and Software Technology (IST)