

List of my publications

*** Students involved in the paper's work appear in bold characters ***

Journal Articles (peer reviewed)

1. **Robaczewski A**, Bouchard J, Bouchard B, Gaboury S, Socially Assistive Robots: The Specific Case of the NAO, *International Journal of Social Robotics* (2020), 1-37. DOI: 10.1007/s12369-020-00664-7
2. **Francillette Y, Boucher E**, Bier N, **Lussier M**, Bouchard K, Belchior P, Gaboury S, Modeling the Behavior of Persons with Mild Cognitive Impairment or Alzheimer's for Intelligent Environment Simulation, *User Modeling and User-Adapted Interaction* (2020), 1-54. DOI: 10.1007/s11257-020-09266-4.
3. **Chapron K**, Bouchard K, Gaboury S, Real-time Gait Speed Evaluation at Home in a multi residents context, *Multimedia Tools and Applications* (2020), 1-21. DOI: 10.1007/s11042-020-08962-y.
4. **Francillette Y**, Bouchard B, Bouchard K, Gaboury S, Modeling, Learning and Simulating Human Activities of Daily Living with Behavior Trees, *Knowledge and Information Systems* (2020), 1-30. DOI: 10.1007/s10115-020-01476-x.
5. **Lafontaine V, Lapointe P**, Bouchard K, **Gagnon J.-M., Dallaire M**, Gaboury S, Da Silva R, Beaulieu L.-D., An Open Vibration and Pressure Platform for Falls Prevention with a Reinforcement Learning Agent, *Personal and Ubiquitous Computing* (2020), 1-16. DOI: 10.1007/s00779-020-01416-0.
6. **Chapron K, Lapointe P**, Bouchard K, Gaboury S, Highly Accurate Bathroom Activity Recognition using Infrared Proximity Sensors, *IEEE Journal of Biomedical and Health Informatics* **24** (8) (2020), 10.1109/JBHI.2019.2963388, 1-10.
7. **Hao J**, Bouzouane A, Gaboury S, An Incremental Learning Method Based on Formal Concept Analysis for Pattern Recognition in Nonstationary Sensor-Based Smart Environments, *Pervasive and Mobile Computing* **59** (2019), 1-12. DOI: 10.1016/j.pmcj.2019.101045
8. **Arthur Lafond J-S, Kadri M, Lapointe P**, Bouchard K, Gaboury S, da Sylva R, Beaulieu L-D, Validation d'une plateforme vibratoire portative et peu coûteuse permettant d'évaluer la contribution des mécanorécepteurs cutanés sur le contrôle postural, *Neurophysiologie Clinique* **49** (2019), 456-456.
9. **Cousyn C**, Bouchard K, Gaboury S, Bouchard B, Towards Using Scientific Publications to Automatically Extract Information on Rare Diseases, *Mobile Networks and Applications* (2019), 1-12. <https://doi.org/10.1007/s11036-019-01237-3>
10. **Plantevin V**, Bouzouane A, Bouchard B, Gaboury S, Towards a More Reliable and Scalable Architecture for Smart Home Environments, *Journal of Ambient Intelligence and Humanized Computing* **10** (2019), 2645-2656.
11. **Lussier M**, Couture M, Moreau M, Laliberté C, Giroux S, Pigot H, Gaboury S, Bouchard K, Belchior P, Bottary C, Paré G, et al., Bier N, Integrating an Ambient Assisted Living monitoring system into clinical decision-making in home care: An embedded case study, *Gerontechnology* **19** (2019), 77-92.
12. **Hao J**, Bouzouane A, Gaboury S, Recognizing Multi-Resident Activities in Non-intrusive Sensor-Based Smart Homes using Formal Concept Analysis, *Neurocomputing* **318** (2018), 75-89.
13. **Yaddaden Y**, Adda M, Bouzouane A, Gaboury S, Bouchard B, User Actions and Facial Expressions Recognition for Error Detection System in an Ambient Assisted Environment, *Expert Systems with Applications* **112** (2018), 173-189.

14. **Bilodeau J-S**, Bouzouane A, Bouchard B, Gaboury S, An Experimental Comparative Study of RSSI-Based Positioning Algorithms for Passive RFID Localization in Smart Environments, *Journal of Ambient Intelligence and Humanized Computing* **9** (5) (2018), 1327-1343.
15. **Bergeron F**, Bouchard K, Giroux S, Gaboury S, Tracking Objects Within a Smart Home, *Expert Systems with Applications* **113** (2018), 428-442.
16. **Hao J**, Bouchard B, Bouzouane A, Gaboury S, Activity Inference Engine for Real-time Cognitive Assistance in Smart Environments, *Journal of Ambient Intelligence and Humanized Computing* **9** (3) (2018), 679-698.
17. **Chapron K**, **Plantevin V**, **Thullier F**, Bouchard K, Duchesne E, Gaboury S, A More Efficient Transportable and Scalable System for Real-Time Activities and Exercises Recognition, *Sensors* **18** (268) (2018), 1-20.
18. **Boukhechba M**, Bouzouane A, Bouchard B, Gaboury S, Gouin-Vallerand C, Giroux S, Prediction of next destinations from irregular Patterns, *Journal of Ambient Intelligence and Humanized Computing* **9** (5) (2018), 1345-1357.
19. Couture M, Bandaly S, Giroux S, **Lussier M**, Bottari C, Pigot H, Paré G, Bouchard K, Gaboury S, Bier N, Expectations of stakeholders regarding technology in home care to optimise the functional autonomy of clients, *Gerontechnology* **17** (s) (2018), 12-12.
20. Bouchard B, et al., Reports of the 2018 AAAI Workshop Program, *AI Magazine* **39** (4) (2018), 45-56.
21. Tremblay R, Gaboury S, Well-Posed Fractional Calculus Operator: Obtaining New Transformations Formulas Involving Gauss Hypergeometric Functions with Rational Quadratic, Cubic and Higher Degree Arguments, *Math. Methods Appl. Sci.* (2018), 1-21. DOI 10.1002/mma.4945
22. **Maitre J**, Bouzouane A, Gaboury S, A Hierarchical Approach for the Recognition of Induction Machine Failures, *Journal of Control, Automation and Electrical Systems* **29** (1) (2018), 44-61.
23. Kim Y S, Gaboury S, Rathie A K, Applications of extended Watson's summation theorem, *Turk. J. Math.* **42** (2018), 418-443.
24. Srivastava H M, Gaboury S, Ghanim F, Coefficient estimates for a general subclass of analytic bi-univalent functions of Ma-Minda type, *Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas* **112** (4) (2018), 1157-1168.
25. **Francillette Y**, **Boucher E**, Bouzouane A, Gaboury S, The Virtual Environment for Rapid Prototyping of the Intelligent Environment, *Sensors* **17**, 2562, (2017), 1-27.
26. **Plantevin V**, Bouzouane A, Gaboury S, Light Node Communication Framework: a New Way to Communicate Inside a Smart Home, *Sensors* **17** (10), 2397, (2017), 1-19.
27. Ghanim F, Srivastava H M, Gaboury S, A study of Meromorphically univalent functions defined by a linear operator associated with the lambda-generalized Hurwitz-Lerch zeta, *Azerbaijan J. Math.* **8** (2018), 1-12.
28. **Boukhechba M**, Bouzouane A, Bouchard B, Gaboury S, Gouin-Vallerand C, Giroux S, A novel Bluetooth Low Energy Based System For Spatial Exploration In Smart Cities, *Expert Systems with Applications* **77** (2017), 71-82.
29. **Hao J**, Bouzouane A, Gaboury S, Complex Behavioral Pattern Mining in Non-intrusive Sensor-based Smart Homes using an Intelligent Activity Inference Engine, *J. Reliable Intell. Environ.* **3** (2) (2017), 99-116.

30. **Maitre J**, Gaboury S, Bouchard B, Bouzouane A, Classification algorithms comparison for inter-turn short circuit recognition in induction machine using best-fit 3D ellipse method, *IEEE Canadian Journal of Electrical and Computer Engineering* **40** (4) (2017), 255-265.
31. **Varvaressos S, Lavoie K**, Gaboury S, Hallé S, Automated Bug Finding in Video Games: A Case Study for Runtime Monitoring, *ACM Computers in Entertainment* **15** (1) (2017), 1-28.
32. Srivastava H M, Gaboury S, Ghanim F, Coefficient estimates for some general subclasses of analytic and bi-univalent functions, *Afr. Mat.* **28** (5) (2017), 693-706.
33. Gaboury S, Rathie A K, Evaluation of a new class of double definite integrals, *Comm. Korean Math. Soc.* **32** (4) (2017), 979-990. DOI 10.4134/CKMS.c170012.
34. Albrecht S, et al. Reports of the 2016 AAAI Workshop Program, *AI Magazine* **37** (3) (2016), 99-108.
35. Hallé S, **Xie K**, Gaboury S, Real-Time Streaming Communication With Optical Codes, *IEEE Access* **4** (2016), 284-298.
36. Srivastava H M, Gaboury S, Ghanim F, Initial coefficient estimates for some subclasses of m-fold symmetric bi-univalent functions, *Acta Math. Sci. Ser. B Engl. Ed.* **36** (3) (2016), 863-871.
37. Gaboury S, Rathie A K, Certain hypergeometric series identities deducible by fractional calculus, *Adv. Stud. Contemp. Math* **26** (2) (2016), 323-332.
38. **Belley C**, Gaboury S, Bouchard B, Bouzouane A, Nonintrusive system for Assistance and Guidance in Smart Homes based on Electrical Devices Identification, *Expert Systems with Applications.* **42** (19) (2015), 6552-6577.
39. **Maitre J**, Gaboury S, Bouchard B, Bouzouane A, A Black-Box Model for Estimation of the Induction Machine Parameters Based on Stochastic Algorithms, *International Journal of Monitoring and Surveillance Technologies Research* **3** (3) (2015), 44-67.
40. **Fortin-Simard D, Bilodeau J S, Bouchard K**, Gaboury S, Bouchard B, Bouzouane A, Exploiting Passive RFID Technology for Activity Recognition in Smart Homes, *IEEE Intelligent Systems* **30** (4) (2015), 7-15.
41. **Fortin-Simard D., Bilodeau J.-S.,** Gaboury S., Bouchard B., Bouzouane A. Method of Recognition and Assistance Combining Passive RFID and Electrical Load Analysis that Handles Cognitive Errors, *Int. J. Distr. Sensor Networks.* **2015** (2015), Article ID 643273, 1-18.
42. Srivastava H M, Gaboury S, Ghanim F, A unified class of analytic functions involving a generalization of the Srivastava-Attiya operator, *Appl. Math. Comput.* **251** (2015), 35-45.
43. Srivastava H M, Gaboury S, Ghanim F, Coefficient estimates for some subclasses of m-fold symmetric bi-univalent functions, *Acta Univ. Apulensis Math. Inform.* **41** (2015), 153-164.
44. Srivastava H M, Gaboury S, Ghanim F, Some Further Properties of a Linear Operator Associated with the lambda-Generalized Hurwitz-Lerch Zeta Function Related to the Class of Meromorphically Univalent Functions, *Appl. Math. Comput.* **259** (2015), 1019-1029.
45. Gaboury S, Tremblay R, Generalized multiple integral representations for a large family of polynomials with applications, *Appl. Math. Comput.* **261** (2015), 39-47.
46. Srivastava H M, Gaboury S, A new class of analytic functions defined by means of a generalization of the Srivastava-Attiya operator, *J. Inequal. Appl.* **2015** (2015), Article ID 39, 1-15.
47. Srivastava H M, Gaboury S, Ghanim F, Certain subclasses of meromorphically univalent functions defined by a linear operator associated with the lambda-generalized Hurwitz-Lerch zeta function, *Integral Transforms Spec. Funct.* **26** (2015), 258-272.

48. Srivastava H M, Gaboury S, Ghanim F, Coefficient estimates for a unification of some subclasses of analytic and bi-univalent functions of Ma-Minda type, *Acta Univ. Apulensis Math. Inform.* **44** (2015), 75-86.
49. Ghanim F, Darus M, Gaboury S, On new linear operator associated with Gaussian hypergeometric functions, *Journal of Informatics and Mathematical Sciences* **7** (3) (2015), 121-130.
50. Gaboury S, Rathie A K, Evaluation of a double integral, *Proc. Jangjeon Math. Soc.* **18** (3) (2015), 331-336.
51. Gaboury S, Bayad A, Further expansions formulas for a class of generalized Hurwitz-Lerch zeta functions obtained by means of a new Leibniz rule for fractional derivatives, *Adv. Stud. Contemp. Math.* **25** (2) (2015), 251-264.
52. Srivastava H M, Gaboury S, Ghanim F, Partial sums of certain classes of meromorphic functions related to the Hurwitz-Lerch zeta function, *Moroccan J. Pure Appl. Anal., Springer*, **1** (1) (2015), 38-50.
53. **Belley C**, Gaboury S, Bouchard B, Bouzouane A, Efficient and inexpensive method for activity recognition within a smart home based on load signatures of appliances, *Pervasive and Mobile Computing* **12** (2014), 58-78.
54. Srivastava H M, Gaboury S, Fugère B-J, Further results involving a class of generalized Hurwitz-Lerch zeta functions, *Russian J. Math. Phys.* **21** (4) (2014), 521-537.
55. Srivastava H M, Gaboury S, New Expansion Formulas for a Family of the lambda-Generalized Hurwitz-Lerch Zeta functions, *Int. J. Math. Math. Sci.* **2014** (2014), Article ID 131067, 1-13.
56. Gaboury S, Özarslan M A, Singular integral equation involving a multivariable analogue of Mittag-Leffler function, *Adv. Difference Equ.* **2014** (2014), Article ID 252, 1-10.
57. Gaboury S, Rathie A K, Further hypergeometric identities deducible by fractional calculus, *Comm. Korean Math. Soc.* **29** (3) (2014), 429-437.
58. Gaboury S, Tremblay R, Summation formulas obtained by means of the generalized chain rule for fractional derivatives, *J. Complex Anal.* **2014** (2014), Article ID 820951, 1-7.
59. Srivastava H M, Gaboury S, Bayad A, Expansion formulas for an extended Hurwitz-Lerch zeta function obtained via fractional calculus, *Adv. Difference Equ.* **2014** (2014), Article ID 169, 1-17.
60. Gaboury S, Tremblay R, Özarslan M A, Some Bilateral Generating Functions Involving the Erkus-Srivastava Polynomials and Some General Classes of Multivariable Polynomials, *Tamkang J. Math.* **45** (4) (2014), 341-356.
61. Srivastava H M, Gaboury S, Tremblay R, New relations involving an extended multiparameter Hurwitz-Lerch zeta function with applications, *Int. J. Anal.* **2014** (2014), Article ID 680850, 1-14.
62. Gaboury S, Further expansion and summation formulas involving the hyperharmonic function, *Comm. Korean Math. Soc.* **29** (2) (2014), 269-283.
63. Gaboury S, Tremblay R, Remark on certain transformations for multiple hypergeometric function, *Adv. Difference Equ.* **2014** (2014), Article ID 126, 1-12.
64. **Bouchard K, Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, Accurate Trilateration for Passive RFID Localization in Smart Homes, *International Journal of Wireless Information Networks* **21** (2014), 32-47.
65. Tremblay R, Gaboury S, A further investigation of generating functions related to pairs of inverse functions with applications to generalized degenerate Bernoulli polynomials, *Bull. Korean Math. Soc.* **51** (3) (2014), 831-845.
66. Gaboury S, Tremblay R, Fugère B-J, Some Explicit Formulas for Certain New Classes of Bernoulli, Euler and Genocchi Polynomials, *Proc. Jangjeon Math. Soc.* **17** (1) (2014), 115-123.
67. Gaboury S, Tremblay R, A note on some new series of special functions, *Integral Transforms Spec. Funct.* **25** (5) (2014), 336-343.

68. Gaboury S, Some relations involving generalized Hurwitz-Lerch zeta function obtained by means of fractional derivatives with applications to Apostol type polynomials, *Adv. Difference Equ.* **2014** (2014), Article ID 361, 1-13.
69. Özarıslan M A, Gaboury S, Srivastava-Pintér Theorems for 2D-Appell Polynomials and Their Applications, *Math. Meth. Appl. Sci.* **37** (2014), 2198-2210.
70. Gaboury S, Rathie A K, On some further hypergeometric series identities obtained via fractional calculus, *J. Class. Anal.* **5** (2014), 71-80.
71. Gaboury S, Bayad A, Series representations at special values of generalized Hurwitz-Lerch zeta function, *Abstr. Appl. Anal.* **2013** (2013), Article ID 975615, 1-8.
72. Gaboury S, Tremblay R, Application of a Taylor-like Expansion Theorem involving fractional derivatives to multivariable H-function, *Adv. Stud. Contemp. Math.* **23 (2)** (2013), 287-299.
73. Gaboury S, Tremblay R, Fugère B-J, Some Relations Involving A Generalized Fractional Derivative Operator, *J. Inequal. Appl.* **2013** (2013), Article ID 167. 1-10.
74. Gaboury S, Özarıslan M A, Tremblay R, Some Bilateral Generating Functions Involving the Chan-Chyan-Srivastava Polynomials and Some General Classes of Multivariable Polynomials, *Comm. Korean Math. Soc.* **28 (4)** (2013), 783-797.
75. **Bouchard K, Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, Accurate RFID trilateration to learn and recognize spatial activities in ubiquitous environment, *International Journal of Distributed Sensor Networks* 2013 (2013), Article ID 936816, 1-16.
76. Blondin-Massé A, **Desmeules S**, Gaboury S, Hallé S, Multipseudoperiodic Words, *International Journal of Foundations of Computer Science* **24 (7)** (2013), 1153-1166.
77. Bayad A, Gaboury S, Generalized Dirichlet L-function of arbitrary order with applications, *Adv. Stud. Contemp. Math.* **23 (4)** (2013), 607-619.
78. Gaboury S, Tremblay R, Fugère B-J, Applications of a New Leibniz-Type Rule For Fractional Derivatives to Several Variables, *Panamer. Math. J.* **23 (3)** (2013), 15-25.
79. Tremblay R, Gaboury S, Fugère B-J, A new transformation formula for fractional derivatives with applications, *Integral Transforms Spec. Funct.* **24 (3)** (2013), 172-186.
80. Gaboury S, Tremblay R, An Expansion Theorem Involving H-function of Several Complex Variables, *Int. J. Anal.* **2013** (2013), Article ID 353547, 1-7.
81. Tremblay R, Gaboury S, Fugère B-J, A new Leibniz rule and its integral analogue for fractional derivatives, *Integral Transforms Spec. Funct.* **24 (2)** (2013), 111-128.
82. Tremblay R, Gaboury S, Fugère B-J, Taylor-like expansion in terms of a rational function obtained by means of fractional derivatives, *Integral Transforms Spec. Funct.* **24 (1)** (2013), 50-64.
83. Gaboury S, Tremblay R, Fugère B-J, Symmetry Properties for a Unified Class of Polynomials Attached to chi, *J. Appl. Math. Inform.* **31 (1-2)** (2013), 119-130.
84. Gaboury S, Tremblay R, Fugère B-J, Some Series Identities For Some Special Classes of Apostol-Bernoulli and Apostol-Euler Polynomials Related to Generalized Power and Alternating Sums, *Bull. Math. Anal. Appl.* **4 (4)** (2012), 76-90.
85. Tremblay R, Gaboury S, Fugère B-J, A Further Generalization of Apostol-Bernoulli Polynomials and related Polynomials, *Honam Math. J.* **34 (3)** (2012), 311-326.
86. Tremblay R, Gaboury S, Fugère B-J, Leibniz Rules and Integral Analogues for Fractional Derivatives Via a New Transformation Formula, *Bull. Math. Anal. Appl.* **4 (2)** (2012), 72-82.
87. Tremblay R, Gaboury S, Fugère B-J, Some New Classes of Generalized Apostol-Euler and Apostol-Genocchi Polynomials, *Int. J. Math. Math. Sci.* **2012** (2012), Article ID 182785, 1-14.

88. Tremblay R, Gaboury S, Fugère B-J, Integral Analogue of a New Leibniz-Type Rule for Fractional Derivatives and Its Applications to Functions of Several Variables, *Int. J. Contemp. Math. Sci.* **7 (38)** (2012), 1877-1887.
89. Gaboury S, Kurt B, Some Relations Involving Hermite-Based Apostol-Genocchi Polynomials, *Appl. Math. Sci.* **6 (82)** (2012), 4091-4102.
90. Gaboury S, Tremblay R, Fugère B-J, On Barnes multiple Hurwitz Zeta Functions and Dirichlet-Type Multiple L-Functions Related to Unified Class of Polynomials, *Far East J. Appl. Math.* **68 (1)** (2012), 1-19.
91. Tremblay R, Gaboury S, Fugère B-J, A new class of generalized Apostol-Bernoulli polynomials and some analogues of the Srivastava-Pintér addition theorem, *Appl. Math. Lett.* **24 (11)** (2011), 1888-1893.
92. Gaboury S, Tremblay R, Fugère B-J, Generalized Leibniz rule for an extended fractional derivative operator with applications to special functions, *Selçuk J. Appl. Math.* **12 (2)** (2011), 119-134.

Conference Proceedings (peer reviewed)

93. Bouchard K, **Gonzales L**, Maître J, Gaboury S, Data mining for Students Progress Monitoring, 6th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2020), September 14-16 (2020), Anvers, Belgique, 1-6.
94. **Demongivert C**, Bouchard K, Gaboury S, Lussier M, Ngankam H, Couture M, Bier N, Giroux S, Fuzzy Features for Quality Estimation of Activity Instances in a Dataset, 6th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2020), September 14-16 (2020), Anvers, Belgique, 1-6.
95. Maître J, Bouchard K, Gaboury S, Classification Models for Data Fusion in Human Activity Recognition: Alternative Architectures, 6th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2020), September 14-16 (2020), Anvers, Belgique, 1-6.
96. Bouchard K, **Bertuglia C**, Maître J, Gaboury S, Activity Recognition in Smart Home Using UWB Radars, 11th International Conference on Ambient Systems, Networks and Technologies (ANT 2020), April 6-9 (2020), Warsaw, Poland, 10-17.
97. **Lapointe P**, **Chapron K**, Bouchard K, Gaboury S, A New Device to Track and Identify people in a Multi-Residents Context, 11th International Conference on Ambient Systems, Networks and Technologies (ANT 2020), April 6-9 (2020), Warsaw, Poland, 403-410.
98. **Bergeron F**, Giroux S, Bouchard K, Gaboury S, BMP: A Bounded Message Protocol for the IoT, 5th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2019), September 25-27 (2019), Valence, Espagne, 1-4.
99. **Maître J**, Hallé S, Bouchard K, Gaboury S, Electric Device Recognition and Recommendation in Real-Time Based on Complex Event Processing for Smart Homes, 5th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2019), September 25-27 (2019), Valence, Espagne, 1-6.
100. **Chapron K**, Bouchard K, Gaboury S, Real-time Gait Speed Evaluation at Home, 5th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2019), September 25-27 (2019), Valence, Espagne, 1-6.
101. **Glangine G**, Seguin S, Bouchard B, Bouchard K, Gaboury S, A Decision-Making Tool to Help Daycare Centers Plan Weekly Meal Schedule, 6th IEEE International Conference on Control, Decision and Information Technologies (Codit 2019), April 23-26 (2019), Paris, France. 1-3.

102. **Maître J, Rendu C**, Bouchard K, Bouchard B, Gaboury S, Basic Daily Activity Recognition with a Data Glove, 10th International Conference on Ambient Systems, Networks and Technologies, *Procedia Computer Science* **151** (2019), 108-115.
103. **Lafontaine V**, Bouchard K, **Gagnon J.-M., Dallaire M**, Gaboury S, Da Silva R, Beaulieu L.-D., An Open Vibration Platform to Evaluate Postural Control using a Simple Reinforcement Learning Agent, 10th International Conference on Ambient Systems, Networks and Technologies, *Procedia Computer Science* **151** (2019), 194-201.
104. **Yaddaden Y**, Adda M, Bouzouane A, Gaboury S, Bouchard B, Facial Sub-regions for Automatic Emotion Recognition using Local Binary Patterns, 4th IEEE International Conference on Signal, Image, Vision and their Applications (SIVA 2018), November 26-27 (2018), Guelma, Algeria, 1-6.
105. **Yaddaden Y**, Adda M, Bouzouane A, Gaboury S, Bouchard B, One-Class and Bi-Class SVM Classifier Comparison for Automatic Facial Expression Recognition, IEEE International Conference on Applied Smart Systems (ICASS 2018), November 24-25 (2018), Medea, Algeria, 1-6.
106. **Cousyn C**, Bouchard K, Bouchard B, Gaboury S, Automated Extraction of Symptoms related to Rare Diseases from Scientific Publications, 4th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2018), November 28-30 (2018), Bologne, Italie, 1-6.
107. **Boudreault M**, Bouchard B, Bouchard K, Gaboury S, Implementing Dynamic Difficulty Adjustment in Global Warming Sensitization Video Game, 4th EAI (ACM) International Conference on Smart Objects and Technologies for Social Good (GOODTECHS 2018), November 28-30 (2018), Bologne, Italie, 1-6.
108. **Thullier F, Plantevin V**, Bouzouane A, Hallé S, Gaboury S, A Comparison of Inertial Data Acquisition Methods for a Position-Independent Soil Types Recognition, 15th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), Guangzhou, Chine, October 8-12 (2018), 1-8.
109. **Plantevin V**, Bouzouane A, Bouchard B, Gaboury S, A Novel and Distributed Approach for Activity Recognition Inside Smart Homes, 15th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), Guangzhou, Chine, October 8-12 (2018), 1-8.
110. **Yaddaden Y**, Adda M, Bouzouane A, Gaboury S, Bouchard B, Hybrid-based Facial Expression Recognition Approach for Human-Computer Interaction, IEEE 20th International Workshop on Multimedia Signal Processing, August 29-31 (2018), Vancouver, Canada, 1-6.
111. **Francillette Y, Boucher E**, Bouchard B, Bouchard K, Gaboury S, Bernard P, Romain A J, Development of an Exergame on Mobile Phones to Increase Physical Activity for Adults with Severe Mental Illness, Proceedings of the 11th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'18), June 26-29 (2018), Corfu Island, Greece, 1-8.
112. Bouchard B, **Francillette Y**, Bouchard K, Gaboury S, Modeling Human Activities Using Behavior Trees in Smart Homes. Proceedings of the 11th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'18), June 26-29 (2018), Corfu Island, Greece, 1-8.
113. Bouchard B, Gaboury S, Bouchard K, Exploiting the Open Innovation Model in Assistive Technologies. Proceedings of the 11th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'18), June 26-29 (2018), Corfu Island, Greece, 1-8.
114. **Bouchard-Aubin M**, Bouchard J, Gaboury S, **Dolbec J, Chapron K**, NAO for cognitive screening in elderly, 23rd Annual CyberPsychology, CyberTherapy & Social Networking Conference (CYPSY23), June 26-28 (2018), Gatineau, Québec, Canada. 1-3.
115. Hallé S, Khoury R, Gaboury S, A Few Things We Heard About RV Tools, 17th International Conference on Runtime Verification (RV2017), September 13-16, 2017, Seattle, USA, 1-5.
116. Khoury R, Gaboury S, Hallé S, Event Stream Processing with Multiple Threads, 17th International Conference on Runtime Verification (RV2017), September 13-16, 2017, Seattle, USA, 1-15.

117. **Bérubé M**, Bouchard K, Gaboury S, Scalable Indoor Navigation System Based on Proximity Bluetooth Beacons using Tools of AI, 14th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), San Francisco, August 4-8 (2017), 1-4.
118. **Yaddaden Y**, Adda M, Bouzouane A, Gaboury S, Bouchard B, Facial Expression Recognition from Video using Geometric Features, 8th International Conference on Pattern Recognition Systems, July 11-13 (2017), Madrid, Spain, 1-6.
119. **Francillette Y, Boucher E**, Bouzouane A, Gaboury S, A 3D Simulator for Intelligent Environment Experiments, 14th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), San Francisco, August 4-8 (2017), 1-4.
120. **Chapron K**, Bouchard K, Duchesne E, Gaboury S, Transportable and Scalable System for Activities and Exercises Recognition in Real-Time, 14th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), San Francisco, August 4-8 (2017), 1-7.
121. **Bergeron F**, Bouchard K, Giroux S, Gaboury S, RFID based activities of daily living recognition, 14th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), San Francisco, August 4-8 (2017), 1-6.
122. **Thullier F, Plantevin V**, Bouzouane A, Hallé S, Gaboury S, A Position-Independent Method for Soil Types Recognition Using Inertial Data from a Wearable Device, 14th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), San Francisco, August 4-8 (2017), 1-10.
123. **Yaddaden Y**, Adda M, Bouzouane A, Gaboury S, Bouchard B, Facial Expressions based Error Detection for Smart Environments Using Deep Learning, 14th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), San Francisco, August 4-8 (2017), 1-7.
124. Hallé S, Gaboury S, Khoury R, A Glue Language for Event Stream Processing, IEEE, Workshop on Real-time & Stream Analytics in Big Data (BigData2016), December 5-8 (2016), Washington D. C., USA, 1-6.
125. Khoury R, Gaboury S, Hallé S, Three Views of Log Trace Triaging, Springer, 9th International Symposium on Foundations & Practice of Security (FPS2016), October 24-26 (2016), Québec, Canada, 1-16.
126. **Boukhechba M**, Bouzouane A, Bouchard B, Gaboury S, Gouin-Vallerand C, Giroux S, Battery-Aware Mobile Solution for Online Activity Recognition from Users' Movements, 5th IEEE International Conference on Mobile Services (MS 2016), June 27- July 2 (2016) , San Francisco, CA, USA, 1-8.
127. **Hao J**, Bouzouane A, Bouchard B, Gaboury S, Real-time Activity Prediction and Recognition in Smart Homes by Formal Concept Analysis, 12th IEEE International Conference on Intelligent Environments (IE'16), September 12-16 (2016), London, UK, 1-8.
128. **Francillette Y**, Gaboury S, Bouzouane A, Bouchard B, Towards an adaptation model for smart homes, 14th International Conference On Smart homes and health Telematics (ICOST'16), LNCS 9677, May 25-27 (2016), Wuhan, China, 83-94.
129. **Hao J**, Gaboury S, Bouchard B, Cognitive Error Detection: Mining Behavioral Data Stream of People with Cognitive Impairment, Proceedings of the 9th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'16), June 29th to July 2nd (2016), Corfu Island, Greece, 1-8.
130. Hallé S, Gaboury S, Bouchard B, Towards User Activity Recognition Through Energy Usage Analysis And Complex Event Processing, Proceedings of the 9th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'16), June 29th to July 2nd (2016), Corfu Island, Greece, 1-8.
131. **Boukhechba M**, Bouzouane A, Bouchard B, Gaboury S, Gouin-Vallerand C, Giroux S, Hybrid battery-friendly mobile solution for extracting users' visited places, 13th International Conference on Mobile Systems and Pervasive Computing (MobiSPC2016), August 15-18 (2016), Montréal, Canada, 1-8.

132. **Bergeron F, Bouchard K**, Giroux S, Bouchard B, Gaboury S, Qualitative Tracking of Objects in a Smart Home: A Passive RFID Approach Based on Decision Trees, Proceedings of the 9th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'16), June 29th to July 2nd (2016), Corfu Island, Greece, 1-8.
133. **Sainjeon F**, Gaboury S, Bouchard B, Real-Time Indoor Localization in Smart Homes Using Ultrasound Technology, Proceedings of the 9th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'16), June 29th to July 2nd (2016), Corfu Island, Greece, 1-4.
134. **Boudreault A**, Bouchard J, Gaboury S, Bouchard B, Blind Sight Navigator: A New Orthosis for People with Visual Impairments, Proceedings of the 9th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'16), June 29th to July 2nd (2016), Corfu Island, Greece, 1-4.
135. **Maitre J**, Gaboury S, Bouchard B, Bouzouane A, A New Computational Approach for Inter-Turn Short Circuit Recognition in Induction Machines Using currents analysis and the Multi-Class Support Vector Machine, 8th IET international conference on Power Electronics, Machines and Drives (PEMD 2016), April 19-21 (2016), Glasgow, Scotland, UK, 1-6.
136. **Bergeron F, Bouchard K**, Giroux S, Bouchard B, Gaboury S, Real-Time Constraints for Activities of Daily Living Recognition, Proceedings of the 9th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'16), June 29th to July 2nd (2016), Corfu Island, Greece, 1-2.
137. **Bergeron F, Bouchard K**, Giroux S, Bouchard B, Gaboury S, Indoor Positioning System for Smart Homes based on Decision Trees and Passive RFID, 20th Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2016), April 19-22 (2016), Auckland, New Zealand, 1-12.
138. **Bergeron F, Bouchard K**, Giroux S, Bouchard B, Gaboury S, Qualitative RFID Tracking for ADL Recognition, Proc. of the AAAI 3rd Workshop on Artificial Intelligence Applied to Assistive Technologies and Smart environments (ATSE'16), February 12th (2016), Phoenix, Arizona, USA, 1-2.
139. Hallé S, Gaboury S, Bouchard B, Activity Recognition Through Complex Event Processing: First Findings, Proc. of the AAAI 3rd Workshop on Artificial Intelligence Applied to Assistive Technologies and Smart environments (ATSE'16), February 12th (2016), Phoenix, Arizona, USA, 1-6.
140. **Maitre J**, Gaboury S, Bouchard B, Bouzouane A, 9 Parameters Estimation of an Extended Induction Machine Model Using Genetic Algorithms, IEEE 9th International Conference on Electrical and Electronics Engineering (ELECO 2015), November 26-28 (2015), Bursa, Turkey, 1-5.
141. **Bergeron F, Bouchard K**, Giroux S, Bouchard B, Gaboury S, Simple Objects Tracking System for Smart Homes, IEEE International Conference on Bioinformatics and Biomedicine (BIBM2015), November 9-12 (2015), Washington D. C., USA, 1-4.
142. **Bouchard K., Fortin-Simard D., Lapalu J.**, Gaboury S., Bouchard B., Bouzouane A. Unsupervised Spatial Data Mining for Smart Homes. IEEE Workshop on Spatial and Spatio-Temporal Data Mining, International Conference on Data Mining, (ICDM-SSTDM 2015), November 14th (2015), Atlantic City, NJ, USA, 1-10.
143. **Bilodeau J-S, Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, A practical comparison between filtering algorithms for enhanced RFID localization in smart environments, 6th IEEE International Conference on Information, Intelligence, Systems and Applications (IISA 2015), July 6-8 (2015), Corfu, Greece, 1-6.
144. **Maitre J**, Gaboury S, Bouchard B, Bouzouane A, An effective and realistic identification of the induction machine parameters using classic genetic algorithm, NSGA II and theta-NSGA III. 6th IEEE International Conference on Information, Intelligence, Systems and Applications (IISA 2015), July 6-8 (2015), Corfu, Greece, 1-6.

145. **Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, Frequent Pattern clustering for ADLs Recognition in Smart Environments, Proceedings of the 8th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'15), July 1-3 (2015), Corfu, Greece, 1-4.
146. **Varvaressos S, Lavoie K**, Gaboury S, Hallé S, A Generalized Monitor Verdict for Log Trace Triaging, 6th IEEE International Workshop on Program Comprehension through Dynamic Analysis, March 2nd (2015), Montréal, Canada, 1-8.
147. Hallé S, **La Chance E**, Gaboury S, Graph Methods for Generating Test Cases with Universal and Existential Constraints, 27th International Conference on Testing Software and Systems (ICTSS2015), November 23-25 (2015), Dubai, UAE, 1-16.
148. **Maitre J**, Gaboury S, Bouchard B, Bouzouane A, A New Computational Method for Stator Faults Recognition in Induction Machines Based on Hyper-Volumes, IEEE International Conference on Electro/Information Technology (EIT 2015), May 21-23 (2015), DeKalb, IL, USA.
149. **Maitre J, Glon G**, Gaboury S, Bouchard B, Bouzouane A, Efficient appliances recognition in smart homes based on active and reactive power, fast Fourier transform and decision trees. Proc. of the AAAI 2nd Workshop on Artificial Intelligence Applied to Assistive Technologies and Smart environments (ATSE'15), January 25th (2015), Austin, Texas, USA, 1-6.
150. **Tremblay S, Fortin-Simard D, Blackburn-Verreault E**, Gaboury S, Bouchard B, Bouzouane A. Exploiting Environmental Sounds for Activity Recognition in Smart Homes. Proc. of the AAAI 2nd Workshop on Artificial Intelligence Applied to Assistive Technologies and Smart environments (ATSE'15), January 25th (2015), Austin, Texas, USA, 1-6.
151. **Fortin-Simard D, Bilodeau J S**, Gaboury S, Bouchard B, Bouzouane A, Human Activity Recognition in Smart Homes: Combining Passive RFID and Load Signatures of Electrical Devices, IEEE Symposium on Intelligent Agents (IA 2014), December 9-12 (2014), Orlando, Florida, USA, 1-8.
152. **Bilodeau J S, Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, Assistance in Smart Homes : Combining Passive RFID Localization and Load Signature of Electrical Devices, IEEE International Conference Bioinformatics and Biomedecine (BIBM2014), November 2-5 (2014), Belfast, UK, 1-8.
153. **Belley C**, Gaboury S, Bouchard B, Bouzouane A, A new system for assistance and guidance in smart homes based on electrical devices identification, Proceedings of the 7th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'14), May 27-30 (2014), Rhodes Island, Greece, 1-8.
154. **Bouchard K, Bilodeau J-S, Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, Human Activity Recognition in Smart Homes Based on Passive RFID Localization, Proceedings of the 7th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'14), May 27-30 (2014), Rhodes Island, Greece, 1-8.
155. **Bouchard K**, Gaboury S, **Moutacalli M**, Bouchard B, Bouzouane A, Analysis and Knowledge Discovery of Moving Objects Equipped with RFID Tags. Proc. of the AAAI Workshop on Artificial Intelligence Applied to Assistive Technologies and Smart Environments (ATSE'14), Association for the Advancement of Artificial Intelligence (AAAI), July 27-31 (2014), Québec City, Quebec, Canada, 1-6.
156. **Lavoie K, Leplongeon C, Varvaressos S**, Gaboury S, Hallé S, Portable Runtime Verification with Smartphones and Optical Codes, ACM International Conference on Runtime Verification (RV2014), September 22-25 (2014), Toronto, Ontario, Canada, 1-6.
157. **Varvaressos S, Lavoie K**, Gaboury S, Hallé S, Multiple Ways to Fail: Generalizing a Monitor's Verdict for the Classification of Execution Traces, ACM International Conference on Runtime Verification Verification (RV2014), September 22-25 (2014), Toronto, Ontario, Canada, 1-5.
158. Hallé S, **Le Breton G, Maronnaud F**, Blondin-Massé A, Gaboury S Exhaustive Exploration of Ajax Web Applications with Selective Jumping, 7th IEEE International Conference on Software Testing, Verification and Validation (ICST2014), March 31-April 4 (2014), Ohio, Cleveland, Ohio, U.S.A., 1-6.

159. **Varvaressos S, Vaillancourt D, Lottmann A**, Gaboury S, Hallé S, Automated bug finding in video games with runtime monitoring, 7th IEEE International Conference on Software Testing, Verification and Validation (ICST2014), March 31-April 4 (2014), Ohio, Cleveland, Ohio, U.S.A., 1-8.
160. Blondin-Massé A, Gaboury S, Hallé S, **Larouche M**, Solving Equations on Words with Morphisms and Antimorphisms. Proceeding of the International Conference on Language and Automata Theory and Applications (LATA 2014), March 10-14 (2014), Madrid, Spain.
161. **Varvaressos S, Vaillancourt D**, Blondin-Massé A, Gaboury S, Hallé S, Runtime monitoring of temporal logic properties in infinite Mario bros, ACM International Conference on Runtime Verification Verification (RV2013), September 24-27 (2013), Rennes, France, **LNCS 8174**, 346-351.
162. **Belley C**, Gaboury S, Bouchard B, Bouzouane A, Activity Recognition in Smart Homes Based on Electrical Devices Identification, Proceedings of the 6th ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'13), May 29-31 (2013), Rhodes Island, Greece, 1-8.
163. Blondin-Massé A, Gaboury S, Hallé S, **Larouche M**, Solving of Equations on Words through Boolean Satisfiability, Proceedings of the 28th Annual ACM Symposium on Applied Computing (SAC2013), March 18-22 (2013), Coimbra, Portugal, 104-106.
164. **Fortin-Simard D, Bouchard K**, Gaboury S, Bouchard B, Bouzouane A, Accurate Passive RFID Localization System for Smart Homes, 3rd IEEE International Conference on Networked Embedded Systems for Every Application (NESEA 2012), December 13-14 (2012), Liverpool, UK, 1-8.
165. Blondin-Massé A, Gaboury S, Hallé S, Pseudoperiodic Words, 16th International Conference on Developments in Language Theory (DLT2012), August 14-17 (2012), Taipei, Taiwan, **LNCS 7410**, 308-319.

Accepted Journal Articles (peer reviewed)

166. **Bergeron F**, Bouchard K, Giroux S, Gaboury S, RFID Indoor Localization Using Statistical Features, *Cybernetics and Systems* (2019), 1-22.
167. Maître J, Bouchard K, Gaboury S, Fall detection with UWB radars and CNN-LSTM architecture, *IEEE Journal of Biomedical and Health Informatics* (2020), 1-8.

Book Chapters (peer reviewed)

168. Bier N, **Lussier M**, Couture M, Moreau M, Laliberté C, Aboujaoudé A, Giroux S, Pigot H, Gaboury S, Bouchard K, Belchior P, Bottari C, Paré G, Consel C, Les Environnements Intelligents aux Services des Intervenants en Soutien à Domicile : Quel est leur Potentiel pour les Personnes Âgées Atteintes de Troubles Cognitifs ?, (2020), 1-17.
169. Bouchard B, Bouchard K, Gaboury S, Bouzouane A, Smart Senior Residences: How to Improve Service Efficiency and Quality by Exploiting Big Data and the Internet of Things, Handbook of Research on Big Data Management and the Internet of Things for Improved Health Systems, IGI Global (2018), 65-85. DOI 10.4018/978-1-5225-5222-2.ch005.
170. Bouchard K, **Hao J**, Bouchard B, Gaboury S, *et al.*, The Cornerstones of Smart Homes for Healthcare, Advanced Data Analytics in Health, Springer, *Smart Innovation, Systems and Technologies* **93** (2018), 185-200.
171. **Bouchard K, Bilodeau J S, Fortin-Simard D**, Gaboury S, Bouchard B, Bouzouane A, Exploiting Passive RFID Technology for Indoor Localization in Smart Environments, Opportunistic networking: Vehicular, D2D and Cognitive Radio Networks, CRC press, Taylor & Francis (2017), pp. 168-200.

172. **Bouchard K**, Bouchard B, Bouzouane A, Gaboury S, Giroux S, Smart Homes in the Era of Big Data, Trends in Ambient Intelligent Systems : Role of Computational Intelligence, Springer, Studies in Computational Intelligence 633 (2016), 117-137.