CURRICULUM VITÆ

Dr. Malek Mouhoub

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Contents

1 Education

1996 PhD in Computer Science. University of H.P. Nancy 1, France

Thesis title: *Symbolic and Numeric Constraint Propagation Techniques for Temporal Reasoning*

Supervisors: Prof. Jean Paul Haton and Prof. François Charpillet

1992 MSc in Computer Science. University of H.P. Nancy 1, France

Thesis title: *Using Assumptions Truth Maintenance Systems for Qualitative Reasoning*

Supervisors: Prof. Jean Paul Haton and Prof. François Charpillet

1989 MEng in Computer Science. University of Constantine, Algeria

MEng dissertation title: *Developing a Natural Language Interface for Data Base Queries*

Supervisor: Prof. Nguyen Ba Hao

2 Employment

2021-2024 SaskPower Chair in Artificial Intelligence, University of Regina

2009-Present Professor in Computer Science, University of Regina

2016-2019 Head of the Department of Computer Science, University of Regina

2008-2009 Visiting Professor in Computer Science, Université de Caen, France

2002-2009 Associate Professor in Computer Science, University of Regina

1999-2002 Assistant Professor (Tenure Track) in Computer Science, University of Lethbridge

1998-1999 Research Scientist in Computer Science, Quadratec, France

1997-1998 Assistant Professor in Computer Science (Term Position), Université d'Auvergne, France

1996-1997 Postdoctoral Follow in Computer Science, LORIA - INRIA, Nancy, France

1995-1996 Assistant Professor in Computer Science (Term Position), Université H.P. Nancy 1, France

1992-1995 Sessional Lecturer in Computer Science, Université H.P. Nancy 1, France

1988-1991 Sessional Lecturer in Computer Science, University of Constantine, Algeria

3 Research

3.1 Research Interests

- Constraint Satisfaction
- Combinatorial Optimization
- Spatio-Temporal Reasoning

- Preference Reasoning
- Metaheuristics
- Constraint Acquisition
- Preference Learning
- Machine Learning
- Blockchain Technology
- Natural Language Processing
- Robot Motion Planning
- Scheduling, Planning, and Timetabling
- Internet of Things (IoT) Security
- Geographic Information Systems (GIS)
- Artificial Intelligence

3.2 Funding

- NSERC[1] Individual Discovery Grant. 2000 - 2005, 2005 - 2010, 2010 - 2016, 2016 - 2021, and 2021 - 2026.
- SaskPower Chair in Artificial Intelligence Research Grant, 2021 - 2024,"*Smart Homes for Efficient Grid-wide Energy Consumption*" (Collaborator: SaskPower).
- Mitacs Accelerate fund, 2021 - 2022. "*Unmanned Aerial Vehicle Swarm Collaboration for Weed Control in Field Crops*" (Collaborator: Precision.ai).
- Mitacs Accelerate fund, 2020 - 2021. "*Creative Artificial Intelligence in Interactive Mobile Systems*" (Collaborator: Ericsson Canada).
- Mitacs Research Training Award, 2020. "*Breast Cancer Diagnosis Using Deep Feedforward Neural Network and Mother Tree Optimization.*"
- Mitacs Accelerate fund, 2018 - 2021. "*Communication Aid for Non-English Speaking Newcomers*" (Collaborators: George Reed Foundation, Regina Public Library, United Way of Regina).
- NSERC Engage Grant, 2018. "*Blockchain Technology for Electric Utility Consumption*" (Collaborator: SaskPower).
- NSERC Engage Grant, 2016. "*Vehicle Routing in a Dynamic Environment*" (Collaborator: Infrastructure Data Solutions Inc.).
- University of Regina President Research Seed Grant, 2020. "*Preference-based multi-objective combinatorial optimization for healthcare personnel scheduling.*"

[1]Natural Sciences and Engineering Research Council of Canada.

- Distance and Distributed Learning Fund, 2020. "Development of an Online Course - Artificial Intelligence(CS 820)".
- Distance and Distributed Learning Fund, 2018. "Development of an Online Course - Data Structures and Algorithms(CS 340)"
- French Ministry of Foreign Affairs. Mobility Program of Science and Technology. 2009, 2010 and 2012.
- Innovation and Science Fund, Saskatchewan, 2009, (with Mohamed El-Darieby).
- Viterra Professor Grant. 2008.
- NSERC Research Tools and Instruments (RTI) Grant. 2005. Leader (with Terence Chan and Samira Sadaoui).
- Sun Microsystems Matching Grant. 2005.
- Technology Enhanced Learning Fund. 2003 - 2006.
- University of Regina Startup Fund. 2002 - 2004.
- University of Regina VP Research Fund. 2002.
- University of Lethbridge Research Fund. 2001.
- Research Excellence Envelope, University of Lethbridge. 2000.

3.3 Awards and Recognitions

- Distinguished Service Award, the Canadian Artificial Intelligence Association, 2022 [2].
- Review Board Award, International Journal of Applied Intelligence, 2020 [3].
- Review Recognition Certificate, Artificial Intelligence Journal, Elsevier [4].
- Distinguished Paper Award for the paper titled: *-A Preference-aware Interactive System for Online Shopping.* The International Conference on e-Commerce, e-Administration, e-Society, e-Education, and e-Technology (e-CASE & e-Tech 2012). Hong Kong, March 30 - April 1, 2012 (see publication 73 in Section 6.4).
- Viterra Professor. University of Regina, 2008[5].
- The World Academy of Sciences Achievement Award. Las Vegas, 2002.

[2] "In recognition of Malek Mouhoub's contributions to Canadian AI scene, CAIAC is delighted to award him the 2022 Distinguished Service Award"

[3] This award is given "In recognition of the excellent service to the International Journal of Applied Intelligence".

[4] Certificate of Reviewing awarded in recognition to the review contributed to the Artificial Intelligence journal, since July 2014

[5] This award is provided by the Saskatchewan Wheat Pool "to augment support to an outstanding professor in Computer Science to allow them to further develop their research program".

3.4 Tutorial Presentations

- "*Preference-Based Problem Solving for Combinatorial Applications* ". The 2023 IEEE Conference on Systems, Man, and Cybernetics (SMC 2023), October 1-4, 2023, Maui, Hawaii, USA
- "*Exact vs Metaheuristics for Solving Combinatorial Problems*". The 28th International Conference on Neural Information Processing (ICONIP 2021), December 8, 2021, Bali, Indonesia (virtual presentation)
- "*Metaheuristics for NP-hard Combinatorial Problems*". IEEE Congress on Evolutionary Computation (CEC 2021), June 28, 2021, Kraków, Poland (virtual presentation)
- "*Nature-Inspired Techniques for Combinatorial Problems*". IEEE World Congress On Computational Intelligence (WCCI 2020), July 19, 2020, Glasgow, United Kingdom (virtual presentation)

4 Academic Service

4.1 Grant Review

- Referee for Research Grant and Innovation Program Proposals, NSERC, 2002 to present.
- Expert Reviewer for Sustainable Development Technology Canada (SDTC), 2021.
- Member of the Ontario Research Fund-Research Excellence (ORF-RE) Peer Review Panel, 2019.
- Site Visit Committee Member, NSERC Industrial Research Chair (IRC) grant, 2017.
- Referee for MITACS Accelerate and Internship Proposals. 2013 to present.
- Member of the Alberta Ingenuity Fund Peer-Review Advisory Committee, 2005 to 2007.

4.2 Event Administration

- Co-organizer and Program Co-Chair for the 31st International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems (IEA/AIE 2018), Montreal, June 25 - 28, 2018.
- Program Co-Chair for the IFIP International Conference On Computational Intelligence And Its Applications (IFIP CIIA 2018), Oran, May 6 - 8, 2018.
- Program Co-Chair for the 30th Canadian Conference on Artificial Intelligence, Edmonton, May 16 - 19, 2017.
- **Session Chair**
  1. *Intelligent Systems.* The 4th International Conference on Robotics, Computer Vision and Intelligent Systems (ROBOVIS 2024). Rome - Italy, February 25 to 27, 2024.
  2. *Biology Applications.* The IEEE 2023 International Conference on Machine Learning and Applications (ICMLA 2023). Jacksonville, FL, December 15-17, 2023.

3. *Evolutionary Computation.* The 2023 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2023). Honolulu, October 1-4, 2023.
4. *Long Paper Session 11.* The 36th Canadian Conference on Artificial Intelligence, Montreal, June 5-9, 2023.
5. *Multi-Agent Systems.* The 15th International Conference on Security and Cryptography (ICAART 2023), Lisbon, February 22-24, 2023.
6. *Neural Networks.* The 15th International Conference on Security and Cryptography (ICAART 2023), Lisbon, February 22-24, 2023.
7. *Applied Cryptography and Privacy I.* The 19th International Conference on Security and Cryptography (SECRYPT 2022), Lisbon, July 11 - 13, 2022.
8. *Agent Systems and Robotics.* The 35th Canadian Conference on Artificial Intelligence, Toronto, May 30 - June 3, 2022.
9. *Evolutionary Computing.* The 14th International Conference on Agents and Artificial Intelligence (ICAART 2022), Held Online, February 3-5, 2022.
10. *Artificial Intelligence.* The 13th International Conference on Agents and Artificial Intelligence (ICAART 2021), Held Online, February 4-6, 2021.
11. *Machine Learning.* The 12th International Conference on Agents and Artificial Intelligence (ICAART 2020), Valletta, Malta, February 22-24, 2020.
12. *Swarm Intelligence.* The 2019 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2019), Bari, October 06-09, 2019.
13. *Knowledge Acquisition in Intelligent Systems.* The 2019 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2019), Bari, October 06-09, 2019.
14. *Swarm Intelligence and Autonomous Systems.* The 2019 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2019), Bari, October 06-09, 2019.
15. *Optimization.* The 32nd International Conference On Industrial, Engineering & Other Applications Of Applied Intelligent Systems (IEA/AIE 2019), Graz, July 9-11, 2019.
16. *Swarm Intelligence and Ant Colony Optimization.* The 2018 IEEE Congress on Evolutionary Computation (IEEE CEC 2018), Rio de Janeiro, July 08-13, 2018.
17. *Short Talks.* The 31st Canadian Conference on Artificial Intelligence, Toronto, May 8 - 11, 2018.
18. *Clustering and classification methods with applications.* The16th IEEE International Conference On Machine Learning And Applications, Cancun, December 18 - 21, 2017.
19. *Constraint, Planning and Optimization.* The 30th International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems (IEA/AIE 2017), Arras, June 27 - 30, 2017.
20. *Artificial Intelligence.* The 9th International Conference on Agents and Artificial Intelligence (ICAART 2017), Porto, February 24-26, 2017.
21. *Constraint Satisfaction.* The 25th International Joint Conference on Artificial Intelligence (IJCAI'2016), New York City, July 9 - 15, 2016.
22. *Algorithms.* The 28th International FLAIRS Conference, Hollywood, Florida, May 18 - 20, 2015.
23. *Doctoral Award.* The 28th Canadian Conference on Artificial Intelligence (AI'2015), Halifax, June 2 -5, 2015.

24. *Optimization.* The 28th International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems (IEA/AIE 2015), Seoul, June 10-12, 2015.
25. *Multi-Objective Optimization.* The 27th International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems (IEA/AIE 2014), Kaohsiung, June 3-6, 2014.
26. *Intelligence Systems for E-Commerce and Logistics.* The 27th International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems (IEA/AIE 2014), Kaohsiung, June 3-6, 2014.
27. *Applications of AI.* The 27th Canadian Conference on Artificial Intelligence (AI'2014), Montreal, May 6th-9th, Montreal.
28. *Agents and Ontologies* and *Embedded and Ubiquitous Software Engineering.* International Conference on Software Engineering & Knowledge Engineering, SEKE 2013, Boston, June 27-29, 2013.
29. *Optimization.* The 26th International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems (IEA/AIE 2013), Amsterdam, June 18-20, 2013.
30. *Doctoral and Best Paper Awards.* The 26th Canadian Conference on Artificial Intelligence (AI 2013), Regina, May 2013.
31. *E-Commerce.* The International Conference on e-Commerce, e-Administration, e-Society, e-Education, and e-Technology (e-CASE & e-Tech 2012), March 30 − April 1, 2012, Hong Kong.
32. *Recommender Systems & Applications.* The 25th Canadian Conference on Artificial Intelligence (AI 2012), Toronto, May 2012.
33. *Constraint Satisfaction.* The 24th Canadian Conference on Artificial Intelligence (AI 2011), Saint John's, May 2011.
34. *Constraint Satisfaction.* The 23rd Canadian Conference on Artificial Intelligence (AI 2010), Ottawa, May 2010.
35. *Computational Intelligence and Soft Computing.* The 2008 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2008), Singapore, October 2008.
36. *Heuristic Search.* The Twenty First International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE'08). Wroclaw, Poland, June 2008.
37. *Constraint Satisfaction.* The 20th Canadian Conference on Artificial Intelligence (AI'2007), Montreal, May 2007.
38. *Modelling and Simulation Methodologies*, International Conference on Modelling and Simulation (MS 2005), May 2005, Cancun, Mexico.
39. *Neural Networks*, the Seventeenth Canadian Conference on Artificial Intelligence (AI'2004), London, Ontario, 2004.
40. *Genetic and Optimization Algorithms and Fuzzy Logic.* The 3rd International Conference on Artificial Intelligence and Applications (AIA 2003), Benalmadena, Spain.
41. *Neural Networks.* 7th International Conference on Artificial Intelligence and Soft Computing (ASC), 2003, Banff, Canada.
42. *Fuzzy Sets and Logic, Theory and Applications.* International Naiso Symposium on Information Science Innovations in Engineering of Natural and Artificial Intelligent Systems (ENAIS 2001), Dubai, 2001.

43. *Database and Information Systems.* IEEE International Conference on Tools with Artificial Intelligence (ICTAI'2000), Vancouver, 2000.
44. *Constraint Satisfaction and Optimization.* IEEE International Conference on Tools with Artificial Intelligence (ICTAI'2000), Vancouver, 2000.

4.3 Editorial Activities

- Action Editor, Computational Intelligence Journal, 2015 to 2020.
- Guest Editor, Applied Intelligence Journal, 2018.
- Member of the Review Board, Applied Intelligence Journal.
- Member of the editorial advisory board. IGI Global Book: Multidisciplinary Computational Intelligence Techniques: Applications in Business, Engineering and Medicine.
- Member of the Technical Committee on Artificial Intelligence and Expert Systems, 2003 to 2006.
- Participate to the creation of the research group KANEOU PRC on Temporal and Spatial Reasoning, Paris, France, 1996.

4.4 Committee Membership

- Treasurer and member of the executive committee, Canadian Artificial Intelligence Association (CAIAC), 2009 to 2015.
- **Conference Program Committee Member**

1. The 38th AAAI Conference on Artificial Intelligence (AAAI-24), February 20 - 27, 2024, Vancouver
2. The 37th AAAI Conference on Artificial Intelligence (AAAI-23), February 7 - 14, 2023, Washington DC, USA
3. The 29th International Joint Conference on Artificial Intelligence (IJCAI-20), July 11-17, 2020, Yokohama, Japan
4. The 28th International Joint Conference on Artificial Intelligence (IJCAI-19), August 10-16, 2019, Macao, China
5. The 2023 International Conference on Neural Information Processing (ICONIP2023), November 20-23, 2023, Changsha, China
6. The Canadian Conference on Artificial Intelligence: AI 2010, 2011, 2014, 2015, 2016, 2018, 2019, 2020, 2021, 2022, and 2023.
7. The International Florida Artificial Intelligence Research Society Conference: FLAIRS 2011, 2012, 2013, 2014, 1015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, and 2024.
8. The IEEE International Conference on Tools with Artificial Intelligence: ICTAI 2006, 2007, 2008, 2019, 2020, 2021, 2022, and 2023.
9. IJCAI 2015 Joint Workshop on Constraints and Preferences for Configuration and Recommendation and Intelligent Techniques for Web Personalization (CPCR+ITWP), 25-27 July 2015, Buenos Aires, Argentina
10. The International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems: IEA/AIE 2004, 2017 and 2019

11. The 17th International Conference on Artificial Intelligence: Methodology, Systems, Applications (AIMSA 2016), Varna, Bulgaria, September 7 - 9, 2016.
12. The 2012 IEEE World Congress on Computational Intelligence (IEEE WCCI 2012), special session in Social Network Analysis and Mining, June 10-15, 2012, Brisbane, Australia.
13. The IEEE International Conference on Information Reuse and Integration: IEEE IRI 2008, 2009 and 2010.
14. The 2010 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2010), October 10-13 2010, Istanbul,TURKEY.
15. The International Conference on Computational Aspects of Social Networks CASoN 2009 June 24 - 27, 2009, Fontainebleau, France.
16. The 14th International Symposium on Temporal Representation and Reasoning (TIME'2007), June 28-30, 2007, Alicante, Spain.
17. International Conference on Artificial Intelligence and Applications: AIA 2004, 2005, 2006 and 2007.
18. International Wireless Communications and Mobile Computing Conference (IWCMC 2006), Workshop on Mobile and Wireless Learning, Vancouver, July 3 - 6, 2006.
19. The Indian International Conference on Artificial Intelligence: IICAI 2005, 2007.
20. The International Workshop on AI Technologies for E-Learning, the 14th International Conference on Computers in Education (ICCE 2006), November 2006, Beijing.
21. The International Conference on Intelligent Systems and Control: ISC 2005 and 2006.
22. The International Conference on Computational Intelligence: CI 2005 and 2006.
23. International Conference on Artificial Intelligence & Soft Computing (ASC 2005). September 2005, Benidorm, Spain.
24. The 8th International Conference on Computer Science and Informatics (CSI 2005), Salt Lake city, July 20-26, 2005.
25. International Workshop on Advanced Technologies for E-Learning and E-Science (WI 2004), 2004, Beijing. China.

4.5 Journals, Books and Book Series Reviewer

1. Artificial Intelligence
2. Journal of Artificial Intelligence Research (JAIR)
3. IEEE Transactions on Systems, Man, and Cybernetics
4. IEEE Transactions on Evolutionary Computation (IEEE TEC)
5. IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)
6. IEEE Access journal
7. Data & Knowledge Engineering (DKE)
8. Information Sciences
9. Artificial Intelligence Communications (AICom)

10. Engineering Applications of Artificial Intelligence
11. Knowledge and Information Systems (KAIS)
12. The International Journal of Software Engineering and Knowledge Engineering (IJSEKE)
13. The International Journal of Artificial Intelligence Tools (IJAIT)
14. Computational Optimization and Applications
15. Studies in Computational Intelligence, Book Series, Springer
16. Universal Computer Science
17. The International Journal of Computational Intelligence and Applications (IJCIA)
18. Book Reviewer for Morgan & Claypool Publishers.

5 Highly Qualified Personnel (HQP) Training

5.1 Graduate Student Supervision

Completed

38. Aymen Ben Said, PhD (September 2020 - March 2024). *Implicit and explicit approaches for efficient healthcare scheduling*
37. Mehdi Sadeghilalimi, PhD (January 2021 - November 2023). *Discretization of Nature-Inspired Techniques for Combinatorial Problems*
36. Alkhiri, Hassan Agil, PhD (January 2017 - January 2022). *Conditional Preference Networks: Constraints and Similarity.*
35. Wael Korani, PhD (January 2020 - September 2021). *Mother Tree Optimization for Solving Continuous and Discrete Optimization Problems.*
34. Safa Alsafari, PhD (January 2017 - September 2021). *Hate and Offensive Speech Detection on Arabic Social Media*, (co-supervised with Dr. Samira Sadaoui). **Recipient of the 2022 Governor General's Academic Gold Meda, Univ. of Regina**.
33. Ayman Yafoz, PhD (January 2017 - December 2020). *Customer Sentiment Analysis in Arabic Social Media.*
32. Mahdi Bidar, PhD (September 2016 - January 2020). *Constraint Solving and Optimization using Nature-Inspired Techniques.* (Co-supervision)
31. Sultan Ahmed, PhD (September 2016 - December 2019). *Conditional Preference Networks: Constraints, Genuine Decision, and Aggregation.*
30. Bandar Mohammed, PhD (January 2012 - February 2017). *Handling Qualitative and Quantitative Preferences with Constraints in Interactive Applications.* (Co-supervision)
29. Eisa Alanazi, PhD (January 2013 - December 2016). *Conditional Preference Networks: Learning and Optimization.*

28. Munira Al-Ageili. PhD (January 2009 - December 2014). *Integrating Ontology-Based Information Extraction Systems and Spatial Modeling for Land Use Analysis and Simulation.*

27. Ali Hmer. PhD (September 2007 - April 2013). *A Parallel Hybrid Metaheuristic Approach for Timetabling.*

26. Amrudee Sukpan. PhD (September 2002 - July 2008). *Conditional and Composite (Temporal) Constraint Satisfaction Problems.*

25. Shahadet Hossain, MSc (January 2018 - February 2023). *Constraint Propagation and Variable Ordering Heuristics for Solving Constrained Partial CP-nets.*

24. Kushal Dave, MSc (January 2020 - November 2022). *An Interactive System For Capturing Users' Qualitative Preferences In Recommender Systems.*

23. Pablo Echavarria, MSc (January 2020 - November 2022). *A Web-based System with Preferences for Learning Qualitative Constraint Networks.*

22. Richmond Osei, MSc (September 2020 - October 2022). *An Efficient Internet of Things(IoT) Device Fingerprinting Approach Using Machine Learning.* (Co-supervision)

21. Olusowatun Falola, MSc (September 2018 - August 2020). *Internet of Things (IoT) Device Fingerprinting for Anomaly Detection.* (Co-supervision)

20. Farzana Anowar, MSc (September 2016 - November 2018). *Supervised Classification Of Imbalanced Bidding Fraud Data.* (Co-supervision)

19. Mustakim Al Hilal. MSc (May 2017 - August 2018). *Topic Modelling and Sentiment Analysis with the Bangla Language: A Deep Learning Approach Combined with the Latent Dirichlet Allocation.*

18. Yong Ket Wei, MSc (from September 2014 to January 2016). *Using Conflict and Support Counts for Variable and Value Ordering in CSPs.*

17. Xuegang Wang, MSc (September 2014 - April 2016). *A Dynamic Stage-Based Fraud Monitoring Framework For Multiple Live Auctions.* (Co-supervision)

16. Shu (Jessie) Zhang, MSc (September 2012 - Nov. 2014). *Managing Constraints and Preferences: Constrained Tradeoffs-Enhanced Conditional Preference Networks (CTCP-NETS).* (Co-supervision)

15. Ahmed Mobaraki, MSc (May 2011 - Dec. 2013). *A CSP Solver using GPUs.*

14. Reza Abbasian, MSc (September 2010 - April 2012). *A Hierarchical Parallel GA Based Approach for Constraint Problems.*

13. Bandar Mohammed, MSc (September 2009 - Dec. 2011). *Managing Constraints and Preferences in Interactive Applications.*

12. Eisa Alanazi, MSc (May 2009 - September 2011). *Managing Constraints with Preferences and Uncertainty.*

11. Farnaz Ghavamifar. MSc (Jan. 2008 - Oct. 2010). *A Novel Trustful Multi-Attribute Reverse Auction* (Co-supervision).

10. Bahareh Jafari. MSc (September 2007 - March 2010). *Using Non-Systematic Algorithms for Variable and Value Ordering in CSPs.*
9. Nurul Anwar. MSc (September 2003 - July 2008). *Aspect Oriented Programming (AOP) for Common Services.*
8. Rasem Rashid. MSc (September 2004 - June 2008). *Solving the Professor to Class Assignment Problem using CSPs.*
7. Roger Barbour. MSc (Jan. 2006 - April 2008). *Reduction of Complexity in Path Finding Using Grid Based Methods.*
6. Jia Liu. MSc (September 2005 - March 2008). *Managing Temporal Constraints with Uncertainty.*
5. Chang Feng. MSc (September 2005 - Dec 2007). *Solving Combinatorial Queries in Relational Database.* (Co-supervision)
4. Colin Witow. MSc (September 2004 - October 2006). *Multiple Robot Collaboration.*
3. Xiao Feng Li. MSc (September 2004 - October 2006). *A UML-Based Solver Tool for Combinatorial Problems.* (Co-supervision)
2. Xinkai Feng. MSc (September 2003 - July 2005). *A Study of Branch and Bound for Incremental Satisfiability Problem.*
1. Wang Chonghai. MSc (September 2003 - July 2005). *A Study of Approximation Techniques for Incremental SAT and MAX-SAT.*

In progress

1. Sifat Jahan, PhD (from May 2023). *Machine Learning for Combinatorial Optimization*
2. Sina Alireza, PhD (from September 2022). *A Self Adaptive Hybrid Framework for Combinatorial Problems*
3. Ali Bayeh, PhD (from September 2022). *Machine Learning for Electric Power Consumption*
4. Mofareh Waqdan, PhD (from September 2022). *IoT Security Risk Assessment*
5. Mandana Gholamigazafrudy, PhD (from January 2021). *Nature-Inspired Optimization Techniques for Feature Selection in Data Clustering*
6. Yong Ket Wei, PhD (from September 2018). *Managing Constraints and Preferences for Multi-Objective Optimization*
7. Stephanie Mensah Opoku, MSc (from January 2023). *Data Privacy and Security for AI Systems*
8. Riley Herman, MSc (from May 2020). *Preference-based Multi-Objective Portfolio Optimization*

5.2 Other HQP Supervision

Postdoctoral Students

1. Ali Farid, MITACS Accelerate (September 2021 - January 2023). *Unmanned Aerial Vehicle Swarm Collaboration for Weed Control in Field Crops.*

2. Fatma Ben Mesmia, MITACS Accelerate (July 2020 - October 2021). *Communication Aid for Non-English Speaking Newcomers.*

3. Bandar Mohammed. MITACS Accelerate (November 2019 - February 2020). *Communication Aid for Non-English Speaking Newcomers.*

4. Munira Al-Ageili. MITACS Accelerate (February 2019 - May 2019). *Communication Aid for Non-English Speaking Newcomers.*

Visiting Students

1. Atharva Mete, Undergraduate Student, Indian Institute of Technology Bombay, India. MITACS Globalink Research Internship. *Multiple Robot Motion Planning in a Dynamic Environment*, May - July, 2022.

2. Haifa Zaidi, Undergraduate Student, Higher School of Communication of Tunis (SUP 'COM), Tunisia. MITACS Globalink Research Internship. *Evolutionary Multi-objective Optimization for Vehicle Routing in a Dynamic Environment*, May - July, 2022.

3. Praveen Raj Mohanraj, Undergraduate Student, Vellore Institute of Technology, India. MITACS Globalink Research Internship. *Multi-Objective Optimization for University Timetabling*, May - August, 2022.

4. Saksham Gupta, Undergraduate Student, Vellore Institute of Technology, India. MITACS Globalink Research Internship. *Multi-Objective Optimization for University Timetabling*, May - July, 2021.

5. Arvind Srinivasan, Undergraduate Student, Birla Institute of Technology and Science, India, MITACS Globalink Research Internship. *Path Planning in a Dynamic Environment*, May - July, 2018.

6. Maha Moussa, Undergraduate Student, University of Sfax, Tunisia, MITACS Globalink Research Internship. *Multiple Robot Motion Planning in a Dynamic Environment*, May - July, 2017.

7. Rendon Miranda Juan Carlos, PhD student, National Center for Research and Technological Development (CENIDET), Mexico, *Recommender Systems*, May - July, 2017.

8. Alex Volnei Teixeira, PhD Student, Pontifical Catholic University of Paranà (PUCPR), Brazil, *Smart Cities: A Multidimensional Model for the Management of Urban Information Systems*, December 2016 - March 2017.

9. Slaheddine Elfidha, PhD Student, Institut Supérieur de Gestion, Tunisia, *Representing and Reasoning with Constrained Probabilistic CP-nets*, November 2015 - December 2015.

5.3 Thesis Defense Examination Committees

External Examiner

47. Karim Nadim, PhD, Polytechnique Montréal. *Dynamic Causality Analysis Approaches for Improved Industrial Systems Operational Performance.* April 4, 2024.

46. Ahmed Mustafa Balfagih, PhD, Dalhousie University. *Addressing Challenges of Twitter Feature Engineering for Machine Learning in Different Domains.* July 2023.

45. Sina Sajjadi. Faculty of Engineering, University of Regina. *Predictive Visual Servoing; Uncertainty Analysis And Probabilistic Robust Frameworks.* April 2023. (Internal-External Examiner)

44. Abdel-Latif Alshalalfah, PhD, Concordia University. *System-Level Analysis and Design of Safety-Critical Cyber-Physical Systems.* January 2023.

43. Ali Alarbah. Faculty of Engineering, University of Regina. *Novel synthesized transition metals liquid catalysts for heavy oil recovery.* December 2022. (Internal-External Examiner)

42. Hajra Masood, PhD, Bahria University, Pakistan. *Vision Based Gait Recognition Robust to View and Appearance Variance.* October 2022.

41. Coskun Sahin, PhD, University of Calgary. *Social Media Emergency Analysis and Realistic Evacuation Modeling.* July 2021.

40. Ayman Atallah, PhD, Concordia University. *Design Of Time-Sensitive Networks for Safety-Critical Cyber-Physical Systems.* March 2021.

39. Naveen Irtiza, PhD, Bahria University, Pakistan. *Assessment Of Neural Correlates Of Neuroception Using Machine Learning Techniques.* January 2021.

38. Ahmed Marwan Foda, Physics, University of Regina. *Photoproduction Of the $b_1(1235)$ Meson Off the Proton at E_γ = 6-12 GEV.* January 2021. (Internal-External Examiner)

37. Seyedehmehrnaz Mireslami. PhD, University of Calgary. *Cost and Performance Optimization for Cloud-based Web Applications Deployment.* August 2018.

36. Abdulaziz Alhubaishy. Faculty of Engineering. *Affect, Affective Contagion and Decisions in Agile Development.* August 2018. (Internal-External Examiner)

35. Taimoor Khan, PhD, Bahria University, Pakistan. *Lifelong machine learning topic modeling for large-scale aspect extraction.* February 2018.

34. Abdulmajeed Abdulrhman Aljuhani. PhD, Faculty of Engineering. *A Multiple-Criteria Approach to Support Complex Decisions In Extreme Programming.* December 2017. (Internal-External Examiner).

33. Suriya Jirasatitsin. PhD, Faculty of Engineering. *Modified Hopfield Networks For Integrated Process Planning And Scheduling.* October 2017. (Internal-External Examiner).

32. Ahmed Tunnish. PhD, Faculty of Engineering. *Study Of Ionic Liquids As Effective Solvents for Enhanced Heavy Oil Recovery.* December 2016. (Internal-External Examiner).

31. Etim Idorenyin. PhD, Faculty of Engineering. *A Semi-Analytical Model For Arbitrary-Shaped Composite Reservoirs With Complex Well Completions.* April 2016. (Internal-External Examiner).

30. Saleem Iqbal, PhD, National University of Sciences & Technology, Islamabad, Pakistan. *Computer Aided Lung Nodules Detection by Density Based Segmentation and Hybrid Features Set from CT Scan.* April 2015.

29. Jomu George Mani Paret, PhD, Concordia University. *A Functional Verification Methodology for an Improved Coverage of System-on-Chips.* April 2015.

28. Hamed Shafiee Hasanabadi. PhD, Faculty of Engineering, University of Regina. *An Application of Artificial Neural Networks in Forcasting Future Oil Price Return Volatilities*, April 2014. (Internal-External Examiner).

27. Sultan Alshehri. PhD, Faculty of Engineering, University of Regina. *AHPBased Methodology for a Complex Decision Support in Extreme Programming.* December 2013. (Internal-External Examiner).

26. Mamata Pandey. PhD, Dept. of Psychology, University of Regina. *Can Meaning Associated with Perceptual Grouping Modulate Attention?* April 2013. (Internal-External Examiner).

25. Mohamed Abu ElIla. PhD, Faculty of Engineering, University of Regina. *A Framework for Divisible Load E-Science Applications in Optical Grids.* April 2013. (Internal-External Examiner).

24. Lamia Belouaer. PhD, Dept. of Computer Science, University of Caen, France. *Spatial Knowledge Representation For Planning.* December 2011.

23. Tansel Ozyer. PhD, University of Calgary. *Alternative Approaches for Producing and Ranking Alternative Clustering.* August 2006.

22. Saber Elmabrouk. PhD, Faculty of Engineering, University of Regina. *Application Of Function Approximations To Reservoir Engineering.* January 2012. (Internal-External Examiner).

21. Abdullah Al-Ahmari. PhD, Mathematics, University of Regina. *Tracial and Rank Equivalence of Representations in Von Neumann Algebras.* October 2009. (Internal-External Examiner).

20. Yan Yang. PhD, Faculty of Engineering, University of Regina. *Multi Agents and CSPs.* May 2007. (Internal-External Examiner).

19. Amirhossein Motavali, MASc, Faculty of Engineering, University of Regina. *DSA-BEATS: Multi step, multi-variate dual self-attention N-BEATS model for forecasting COVID-19 hospitalization.* August 2023.

18. Fatimah Islam, MASc, Faculty of Engineering, University of Regina. *Quantification of crops' consistency on corn fields using robust deep learning models.* April 2023.

17. Kedist Sahlu, Master of Public Policy, *Public Acceptance of Facial Recognition Technology: Surveying Attitudes, Preferences, and Concerns to Inform Policy Development*, July 2022.

16. Mohana Das. MASc, Faculty of Engineering, University of Regina. *Deepveg: Deep Learning For Multiclass Segmentation Of Weed, Canola And Canola Damage.* April 2021.

15. Shahnaz Habibkhah. MSc, Faculty of Engineering, University of Regina. *Artificial Neural Networks for the Computation of the Inverse Kinematics of Redundant Manipulators.* May 2020.

14. Priyanka Guliani. MSc, Dept. of Math&Stat, University of Regina. *On the Classical Parameters of the Crack Distribution.* November 2018.

13. Nesma Mohamed Nasser Abdelhamid Keshta, MASc, Faculty of Engineering, University of Regina. *Secure Mobile Application Management Framework.* April 2018.

12. Amir Feizollahi, MASc, Faculty of Engineering, University of Regina. *(A-1) Collision Free And Energetically Optimized Motion Planning Of Manipulators In Partially-Known Environment Using Modified D* Lite Algorithm* . November 2016.

11. Sayed Kaes Maruf Hossain, MASc, Faculty of Engineering, University of Regina. *A Novel Algorithm for Solving the Multi-objective Assembly Line Balancing Problem.* September 2016.

10. Mohamed Shirif, MASc, Faculty of Engineering, University of Regina. *A New Steam Assisted Gravity Drainage Process Utilizing Vertical Wells.* March 2016.

9. Mahdi Fallahinejad Ghajari, MASc, Faculty of Engineering, University of Regina. *Trajectory Planning For Hyper-redundant Manipulators In Constrained Workspace.* March 2015.

8. Simerjit Gill. MSc, Faculty of Engineering, University of Regina. *Agent Modeling of Healthcare for Type-2 Diabetes.* 2010.

7. Miaomiao Chen, MSc, Dept. of Math, University of Regina. *Confidence Intervals Based on Dependent Bootstrap Procedure.* September 2009.

6. Lamia Belouaer. MSc, Dept. of Computer Science, University of Caen, France. *The Complex Temporal and Causal Relations in Causal Networks.* October 2008.

5. Mamata Pandey. MA, Dept. of Psychology, University of Regina. *Capacity Limited Resources and Task Switching: A Study of Human Ability to Carry Out Multiple Processes Concurrently.* July 2008.

4. Zhen Wang. MSc, Dept. of Mathematics, University of Regina. *A Study on the Hajek-Renyi Inequality and its Applications.* November 2007.

3. Bashar Rashid. MASc, Faculty of Engineering, University of Regina. *Service-Oriented Wireless Grid Architecture.* June 2007.

2. Mohamed Amin. MASc, Faculty of Engineering, University of Regina. *Resources Sharing Amongst Wireless Devices Using Wireless Grid.* September 2006.

1. Chaiyapol Kulpate. MASc, Faculty of Engineering, University of Regina. *A Novel Visual Servoing Structure for 3D Positioning of a Robotic Arm.* July 2005.

Internal Examiner, Dept. of Computer Science, University of Regina

44. Seyed Mohammad Mirbagheri Tabatabaei. PhD. Dept. of Computer Science. *Advances in Representation and Learning of Temporal Event Sequences.* August 2020.

43. Andre Evaristo dos Santos. PhD. Dept. of Computer Science. *Optimizing Inference in Bayesian Networks: From Join Tree Propagation to Deep Learning.* March 2020.

42. Yuan Xue. PhD. Dept. of Computer Science. *Lower Bounds and Algorithms for Searching Networks.* October 2019.

41. Rahim Samei. PhD. *Complexity Parameters For Learning Multi-Label Concept Classes.* November 2014.

40. Mehdi Sadeqi. PhD. *Mutex Pair Detection for Improving Abstraction-based Heuristics.* August 2014.

39. Sadra Abedinzadeh. PhD. *Agent Trust Management Based On Human Plausible Reasoning And Rough Sets.* November 2013.

38. Wen Yan. PhD. *d-Separation: Strong Completeness of Semantics in Bayesian Network Inference.* May 2013.

37. Shubhashis Kumar Shil. PhD. *Elicitation Of Constraints And Qualitative Preferences In Multi-Attribute Auctions* . November 2013.

36. Mondelle Simeon. PhD. *Discovering Group Differences from Qualitative and Quantitative Attributes Using Contrast Set Mining with Discretization and Measures of Interestingness.* September 2012.

35. Bing Zhou. PhD. *A Cost-Sensitive Approach to Ternary Classification.* July 2012.

34. Joseph Herbert. PhD. *Investigating Machine Learning Decision Problems with Game Theory.* November 2010.

33. Mahsa Sadat Razavi. MSc. *Precision-based Boosting for Regression.* May 2023.

32. Sebastian Romy Gomes. MSc. *Dilex: A Cross-Session Cross-Device Academic Digital Library Search Interface.* June 2022.

31. Mahedi Hasan. MSc. *Analysis of Model Aggregation Techniques in Federated Learning.* March 2021.

30. Mikhail Shchukin. MSc. *Classification, Quality Analysis And Development of Circuit Design and Simulation Software for Computing Education.* February 2021.

29. Abu Mohammad Hammad Ali. MSc. *Summarizing Conditional Preference Networks.* April 2019.

28. Darshan Nayak. MSc. *Time Series Forecasting Using Multiple Granularities and Multiple Forecast Models.* December 2018.

27. Kunal Dhingra. MSc. *A Rough Set Theory Analysis Of Healthcare Data.* March 2018.

26. Ryan Marcotte. MSc. *Modelling Artificial Intelligence in Games Using MindSet Behavior Trees.* April 2017.

25. Swati Ganguly. MSc. *Auction Shill Detection Framework Based on SVM.* December 2016.
24. Khulood Aimonami. MSc. *Auction Fraud Detection with Machine Learning.* November 2016.
23. Jhonatan Oliveira. MSc. *Bayesian Network Inference using Marginal Trees.* June 2016.
22. Maha El Meseery. MSc. *Geo-coordinated parallel coordinates: A case study of enviromental data analysis.* March 2016.
21. Moslema Jahan. MSc. *A Knowledge Acquisition System For Price Change Rules.* November 2015.
20. Credell Simeon. MSc (Project). *Evaluating the Effectiveness of Hashtags as Predictors of the Sentiment of Tweets.* June 2015.
19. Babar Majeed. MSc. *Pursuit Evasion in Simple Polygons.* March 2014.
18. Spoorthy Seenappa. MSc. *Procrustes: A Declarative Scene Modelling System.* September 2012.
17. Marian Moise. MSc. *A New Approach to Face Recognition Based on Generalized Hough Transform and Local Image Descriptors.* August 2012.
16. Shuo Wang. MSc. *Development Of Inexact Optimization Methodologies For Resources And Environmental Management Under Dual Uncertainties.* November 2010.
15. Xinglin Zhang. MSc. *Chord Recognition Using Ensemble Voicing Constrains.* Jan 2010.
14. Nima Sharifimehr. MSc. *Markovian Workload Modeling for Enterprise Application Servers.* May 2008.
13. Luo Ni. MSc. *Multicasting for Sources with Multiple Descriptions.* April 2008.
12. Jia Chen. MSc. *Performance Evaluation of Peer-to-Peer Networks.* December 2007.
11. Kenneth Konkel. MSc. Modern Bayesian Network Implementation. December 2007.
10. Simon Orr. MSc. *A Module System for Isolating Untrusted Software Extensions.* September 2006.
9. Siritorn Srisodsai. MSc. *A Multi-Language Information Searching Tool with Agent-Based Web Services.* September 2006.
8. Trevor Mansui. MSc. *Characterizing the Use of WORDNET in Text Classification.* July 2006.
7. Joseph Herbert. MSc. *A Game Theoretic Approach to Competitive Learning in Self Organizing Maps.* March 2006.
6. Wei Zeng. MSc. *Parallel Approach to Mining Summaries from Databases.* June 2005.
5. Bo Chen. MSc. *Formal Specifications of AIPs and CSPs.* April 2004.
4. Yin Pengzhou. MSC. *Component Generalization and Instantiation.* April 2004.

3. Honglan Zhong. MSc. *Integrated Approach for Database Security and Fault Tolerance.* May 2004.

2. Ming Zhang. MSc. *Study on Querying and Mining XML.* 2004.

1. Zhiyong Lu. MSc. *Mining Ordered Patterns in Sequences.* 2004.

Member of the Doctoral Supervisory Committee

1. Oluwasegun Makinde. Faculty of Engineering. *Machine Learning for Optimizing Full Field Development.* Internal-External Examiner.

2. Abbas Dehghan. Faculty of Engineering. *Inspection And Quality Control Of Pipes Using Optical Lasers.* Internal-External Examiner.

3. Farial Syed. Computer Science. *Granular Computing.* Internal Examiner.

4. Abu Mohammad Hammad Ali. Computer Science. *Conditional Preference Networks.* Internal Examiner.

Chair of Theses Defense Committees

5. Mammad Huseynov. MASc, Faculty of Engineering. *Thermodynamic and Experimental Studies of Ethane Solubility in Promising Ionic Liquids for CO2 Capture.* Faculty of Engineering, University of Regina. July 2014.

4. Yogesh Suman. MASc, Faculty of Engineering, December 2013.

3. Irfan W.N. Shaikh . MASc, Faculty of Engineering. *Molar Heat Capacities And Heats Of Mixing Of Aqueous Solutions Of 2-(Propylamino) Ethanol.* November 2012.

2. Mohammad Marufuzzaman. MASc, Faculty of Engineering. *Solubility and Diffusivity of Carbon Dioxide, Ethane and Propane in Heavy Oil and its SARA Fractions.* November 2010.

1. Mohammad Tuhinuzzaman. MASc, Faculty of Engineering. *The Role of Capillarity in the VAPEX Process.* July 2006.

5.4 Undergraduate Student Supervision

18. Barret Rennie (May 2014 - Aug 2014). *Evolutionary Techniques for the Exam Timetabling.* NSERC USRA.

17. Tim Sample (April 2010 - Aug 2010). *Extending Excel spreadsheet with CSPs.* NSERC USRA.

16. Peter Dowdy (April 2010 - Aug 2010). *Swimming the Polygon Soup: Improving D* Navigation Outcomes for Wheeled Sonar Robots* . NSERC USRA.

15. Xie Qi (Jan - April 2008). *An OCL-Based GUI Toolkit for solving CSPs and Temporal CSPs.*

14. Mike Berger (September- Dec 2006). *Multiple Robot Motion Planning.*

13. Wu Qiong (May - Aug 2006). *Multiple Robot Motion Planning.*

12. Kevin Bedel (May - September 2005). *Multiple Robot Motion Planning.* NSERC USRA.

11. Shanny Lu (September 2004 - April 2005). *Robot Motion Planning.*
10. Vili Bogdan (May 2004 - Aug 2004). *Robot Motion Planning.* NSERC USRA.
9. Ricky Sum (May 2004 - Aug 2004). *Robot Motion Planning.* NSERC USRA.
8. Jonathan Yip (April 2001 - Aug 2002). *Solving Temporal Constraints in Dynamic Environment.* NSERC USRA, George Ellis.
7. Mike Closson (April 2001 - Aug 2002). *Temporal Constraint Problems in CLP and CSP.* NSERC USRA.
6. Gage Klein (April 2001 - Aug 2001). *Using Neural Networks for Temporal CSPs.* Chinook RSA, George Ellis.
5. Corrine Cheng (Jan 2002 - Aug 2002). *Using Genetic Algorithms for Temporal Constraints.*
4. Ye Wang (April 2002 - Dec 2002). Dynamic Path Consistency for Temporal Constraints. Chinook RSA, George Ellis.
3. Jonathan Kovacs (Jan 2001 - April 2001). *Constraint Logic Programming for Temporal Constraints.*
2. Angela Mlynarski (Sept. 2001 - April 2002). *Robot Motion Planning under Temporal Constraints.*
1. Jeffrey Jacober (September 2001 - Dec 2001). *GUI for Solving Temporal Constraints.*

6 Refereed Publications

6.1 Edited Books/Proceedings

EB1. **M. Mouhoub, S. Sadaoui, O. Aït Mohamed and M. Ali**. **Recent Trends and Future Technology in Applied Intelligence - 31st International Conference on Industrial Engineering and Other Applications of Applied Intelligent Systems**, IEA/AIE 2018, Montreal, QC, Canada, June 25-28, 2018, Lecture Notes in Computer Science 10868, Springer 2018, ISBN 978-3-319-92057-3.

EB2. **A. Amine, M. Mouhoub, O. Aït Mohamed and B. Djebbar**. *Computational Intelligence and Its Applications - 6th IFIP TC 5 International Conference, CIIA 2018*, Oran, Algeria, May 8-10, 2018, IFIP Advances in Information and Communication Technology 522, Springer 2018, ISBN 978-3-319-89742-4.

EB3. **M. Mouhoub and P. Langlais**. *Advances in Artificial Intelligence - 30th Canadian Conference on Artificial Intelligence, Canadian AI 2017.* Edmonton, AB, Canada, May 16-19, 2017, Lecture Notes in Computer Science 10233, 2017, ISBN 978-3-319-57350-2.

6.2 Refereed Book Chapters

BC5. **O. Falola, H. Louafi and M. Mouhoub**. *Optimizing IoT Device Fingerprinting Using Machine Learning.* World Scientific Series in Digital Forensics and Cybersecurity, Innovations in Digital Forensics, pages 293-317, `https://doi.org/10.1142/9789811273209_0009`, 2023.

BC4. **M. Mouhoub and J. Liu**. *Probabilistic Temporal Network for Numeric and Symbolic Time Information*. Knowledge-Based Intelligent System Advancements: Systemic and Cybernetic Approaches, Advances in Artificial Intelligence Technologies series. J. Jozefczyk and D. Orski editors, pages 67-86, IGI Global, 2011.

BC3. **M. Mouhoub and C. Feng**. *CSP Techniques for Solving Combinatorial Queries within Relational Databases*. Intelligent Systems for Knowledge Management. Studies in Computational Intelligence, N. T. Nguyen and E. Szczerbicki editors, Springer, pages 131-151, 2009.

BC2. **S. Sadaoui, M. Mouhoub and X.F. Li**. *An OCL-based CSP Specification and Solving Tool*. New Challenges in Applied Intelligence Technologies, Studies in Computational Intelligence, pages 235-244, Vol. 134, Springer 2008.

BC1. **M. Mouhoub**. *Extending Allen Algebra to Manage Symbolic and Metric Temporal Information*. Planning and Scheduling. Frontiers in Artificial Intelligence and Applications Series, pages 59-68, Vol 117, IOS Press, L. Castillo, D. Borrajo, M.A. Salido & A. Oddi editors, 2004.

6.3 Articles in Refereed Journals

J37. **F. Ben Mesmia and M. Mouhoub**. *Semi-Automatic Building and Learning of a Multilingual Ontology*. ACM Transactions on Asian and Low-Resource Language Information Processing, ACM, Volume 22, Number 11, https://doi.org/10.1145/3615864, 2023.

J36. **M. Mouhoub, H. Al Marri and E. Alanazi**. *Exact Learning of Qualitative Constraint Networks from Membership Queries*. International Journal of Software Engineering and Knowledge Engineering, Vol. 32, No. 07, pp. 1019-1042, DOI: 10.1142/S0218194022500383, World Scientific Publishing, 2022. International Journal of Software Engineering and Knowledge Engineering, pp. 1-27, https://doi.org/10.1142/S0218194023500171, World Scientific Publishing, 2023.

J35. **M. Al-Ageili and M. Mouhoub**. *An Ontology-Based Information Extraction System for Residential Land Use Suitability Analysis* . International Journal of Software Engineering and Knowledge Engineering, Vol. 32, No. 07, pp. 1019-1042, DOI: 10.1142/S0218194022500383, World Scientific Publishing, 2022.

J34. **M. Bidar and M. Mouhoub**. *Nature-Inspired Techniques for Dynamic Constraint Satisfaction Problems*. Springer Nature Operations Research Forum, Vol. 3:28, pages 1-33, 2022.

J33. **W. Korani and M. Mouhoub**. *Review on Nature-Inspired Algorithms*. Springer Nature Operations Research Forum, vol. 2(3), pages 1-26, 2021.

J32. **E. Alanazi, M. Mouhoub and S. Zilles**. *The complexity of exact learning of acyclic conditional preference networks from swap examples*. Artificial Intelligence, Elsevier, Vol. 278, pages 1-52, 2020.

J31. **S. Ahmed and M. Mouhoub**. *Conditional Preference Networks with Users Genuine Decisions*. Computational Intelligence, Wiley, Vol. 36, Issue 3, pages 1-29, 2020.

J30. **Safa Alsafari, Samira Sadaoui and Malek Mouhoub**. *Hate and Offensive Speech Detection on Arabic Social Media*. Online Social Networks and Media, Elsevier, pages 1-15, 2020.

J29. **M. Bidar, M. Mouhoub, S. Sadaoui and H. Rashidy Kanan**. *A Novel Nature-Inspired Technique based on Mushroom Reproduction for Constraint Solving and Optimization.* The International Journal of Computational Intelligence and Applications. World Scientific Publishing, vol. 19, No 2, pages 1-21, 2020.

J28. **K. W. Yong and M. Mouhoub**. *Using Conflict and Support Counts for Variable and Value Ordering in CSPs.* Applied Intelligence, Springer, Vol. 48(8), pages 2487-2500, 2018.

J27. **S. Ahmed and M. Mouhoub**. *Representation and Reasoning with Probabilistic TCP-nets.* Computer and Information Science, Vol. 11(4), pages 9 - 28, 2018.

J26. **M. Mouhoub and M. Al Helal**. *Topic Modelling in Bangla Language: An LDA Approach to Optimize Topics and News Classification.* Computer and Information Science, Vol. 11(4), pages 77 - 83, 2018.

J25. **Mahdi Bidar, Samira Sadaoui, Malek Mouhoub and Mohsen Bidar**. *Enhanced Firefly Algorithm Using Fuzzy Parameter Tuner.* Computer and Information Science, Vol. 11(1), pages 26 - 51, 2018.

J24. **M. Al-Ageili, M. Mouhoub and J. Piwowar**. *Remote Sensing, GIS and Cellular Automata For Urban Growth Simulation.* Computer and Information Science; Vol. 10, No. 4; 2017.

J23. **A. Hmer and M. Mouhoub**. *A Multi-Phase Hybrid Metaheuristics Approach for the Exam Timetabling.* International Journal of Computational Intelligence and Applications (IJCIA). World Scientific Publishing, Vol. 15(4), pages 1-22, 2016.

J22. **R. Abbasian and M. Mouhoub**. *A New Parallel GA-Based Method for Constraint Satisfaction Problems.* International Journal of Computational Intelligence and Applications (IJCIA). World Scientific Publishing, Vol. 15(3), pages 1-22, 2016.

J21. **E. Alanazi and M. Mouhoub**. *Variable Ordering and Constraint Propagation for Constrained CP-Nets.* Applied Intelligence, Springer. Vol. 44(2), pages 437-448, 2016.

J20. **S. Zhang, S. Sadaoui and M. Mouhoub**. *An Empirical Analysis of Imbalanced Data Classification.* Computer and Information Science. Vol. 8(1), pages 151-162, 2015.

J19. **S. Zhang, M. Mouhoub and S. Sadaoui**. *3N-Q: Natural Nearest Neighbor with Quality.* Computer and Information Science. Vol. 7(1), pages 94-102, 2014.

J18. **R. Abbasian and M. Mouhoub**. A Hierarchical Parallel Genetic Approach for the Graph Coloring Problem. Applied Intelligence, Springer, Vol. 39(3), pages 510-528, 2013.

J17. **S. Sadaoui, M. Mouhoub and X.F. Li**. *An OCL-based Constraint Solver for Managing Symbolic and Numeric Temporal Information.* International Journal of Knowledge Based Intelligent Engineering Systems, IOS Press, Vol. 17(3), pages 209-217, 2013.

J16. **B. Mohammed, M. Mouhoub, E. Alanazi and S. Sadaoui**. *Data Mining Techniques and Preference Learning in Recommender Systems.* Computer and Information Science. Vol. 6(4), pages 88-102, 2013.

J15. **S. K. Shil, S. Sadaoui and M. Mouhoub**. *Evolutionary Techniques for Reverse Auctions.* Intelligent Control and Automation, Vol.4(4), pages 371-378, 2013.

J14. **M. Mouhoub and A. Sukpan**. *Managing Dynamic CSPs with Preferences.* Applied Intelligence, Vol. 37(3), pages 446-462, 2012.

J13. **M. Mouhoub and A. Sukpan**. *Conditional and Composite Temporal CSPs.* Applied Intelligence, Springer, Vol. 36(1), pages 90-107, 2012.

J12. **E. Alanazi, M. Mouhoub and B. Mohammed**. **A Preference-aware Interactive System for Online Shopping**. Computer and Information Science, Vol. 5(6), pages 33-42, 2012.

J11. **M. Mouhoub**. *Dynamic Arc Consistency for CSPs.* International Journal of Knowledge Based Intelligent Engineering Systems, IOS Press, Vol. 13(2), pages 45-58, 2009.

J10. **S. Sadaoui, M. Mouhoub and B. Chen**. *An Efficient Lotos-based Framework for Describing and Solving (Temporal) CSPs.* International journal of Software Engineering and Knowledge Engineering (IJSEKE), World Scientific, Vol. 19(6), pages 765-789, 2009.

J9. **M. Mouhoub**. *Systematic versus Local Search Techniques for Incremental SAT.* International Journal of Computational Intelligence and Applications (IJCIA). Imperial College Press, pages 77-96, Vol. 7, No. 1. 2008.

J8. **M. Mouhoub and A. Sukpan**. *Managing Temporal Constraints with Preferences.* Spatial Cognition and Computation, Taylor & Francis, Vol. 8, No. 1-2, pages 131-149, 2008.

J7. **M. Mouhoub and S. Sadaoui**. *Solving Incremental Satisfiability.* International Journal of Artificial Intelligence Tools (IJAIT), World Scientific Publishing. Vol. 16, No. 1, pages 139-147, 2007.

J6. **M. Mouhoub**. *Stochastic Local Search for Incremental SAT.* International Journal of Knowledge Based Intelligent Engineering Systems, IOS Press, Vol. 9(3), pages 191-196, 2005.

J5. **M. Mouhoub**. *Stochastic Search versus Genetic Algorithms for Solving Real Time and Over-constrained Temporal Constraint Problems.* International Journal of Knowledge Based Intelligent Engineering Systems, IOS Press, Vol. 9(1), pages 22-33, 2005.

J4. **M. Mouhoub**. *Reasoning with Numeric and Symbolic Time Information.* Artificial Intelligence Review. Kluwer Academic Publishers. Vol. 21, pages 25-56, 2004.

J3. **M. Mouhoub**. *Systematic versus non systematic techniques for solving temporal constraints in a dynamic environment.* AI Communications, IOS Press, Vol. 17(4), pages 201-211, 2004.

J2. **M. Mouhoub**. *A Hopfield Type Neural Net Based Model for Temporal Constraints.* International Journal of Artificial Intelligence Tools (IJAIT), World Scientific Publishing, pages 533-545, Vol. 13(3), 2004.

J1. **M. Mouhoub, F. Charpillet and J.P. Haton**. *Experimental Analysis of Numeric and Symbolic Constraint Satisfaction Techniques for Temporal Reasoning.* Constraints: An International Journal, Vol. 2, pages 151-164, Kluwer Academic Publishers, June 1998.

6.4 Publications in Refereed Conference and Workshop Proceedings

C186. **A. Ben Said and M. Mouhoub and**. *Data-driven Learning for the Nurse Scheduling Problem.* The International Conference in Optimization and Learning (OLA2024), Dubrovnik, May 13-15, 2024, to appear.

C185. **S. Alizadeh and M. Mouhoub**. *Biologically-Inspired Algorithms for Adaptive Non-Player Character Behavior in Video Games.* The International Conference in Optimization and Learning (OLA2024), Dubrovnik, May 13-15, 2024, to appear.

C184. **S. E. Jahan, M. Mouhoub and M. Sadeghi**. *Nature-Inspired Techniques for Combinatorial Reverse Auctions in Electricity Consumption.* The International Conference in Optimization and Learning (OLA2024), Dubrovnik, May 13-15, 2024, to appear.

C183. **M. Gholami, M. Mouhoub and S. Sadaoui**. *Nature-Inspired Optimization Techniques for Feature Selection in Data Clustering.* Optimization Days, Montreal, May 6-8, 2024.

C182. **S. Alizadeh and M. Mouhoub**. *An improved Self-Adaptive Hybrid Approach based on History-Driven Methods.* Optimization Days, Montreal, May 6-8, 2024.

C181. **S. E. Jahan, M. Mouhoub and M. Sadeghi**. *Nature-Inspired Techniques for Reverse Energy Auctions.* Optimization Days, Montreal, May 6-8, 2024.

C180. **A. Ben Said and M. Mouhoub**. *Implicit and Explicit Approaches for Efficient Healthcare Scheduling.* The 27th International Conference On Multiple Criteria Decision Making (MCDM2024), Hammamet, June 2-7, 2024.

C179. **A. Farid , M. Mouhoub, Tony Arkles, and Greg Hutch**. *Multi-UAV Weed Spraying.* The 4th International Conference on Robotics, Computer Vision and Intelligent Systems (ROBOVIS 2024), Rome, February 25-27, 2024, to appear.

C178. **A. Ben Said and M. Mouhoub**. *Data-driven Learning for the Nurse Scheduling Problem.* The 13th International Conference on Operations Research and Enterprise Systems (ICORES 2023), Rome, February 24-26, 2024.

C177. **M. Sadeghilalimi, M. Mouhoub, and A. Ben Said**. *Evolutionary Techniques for the Nurse Scheduling Problem.* The 13th International Conference on Operations Research and Enterprise Systems (ICORES 2023), pages 333-340, Rome, February 24-26, 2024.

C176. **M. Sadeghilalimi, M. Mouhoub, H. Zaidi, and A. Ben Said**. *Solving the Electricity Technician Dispatch Problem.* The IEEE 2023 International Conference on Machine Learning and Applications (ICMLA 2023), pages 23-30, Jacksonville, FL, USA, December 15-17, 2023.

C175. **S. Alizadeh and M. Mouhoub**. *A New Self-Adaptive Hybrid Approach based on History-Driven Methods for Improving Metaheuristics* . The IEEE 2023 International Conference on Machine Learning and Applications (ICMLA 2023), pages 762-7670, Jacksonville, FL, USA, December 15-17, 2023.

C174. **M. Waqdan, H. Louafi and M. Mouhoub**. *An IoT Security Risk Assessment Framework for Healthcare Environment.* The International Symposium on Networks, Computers and Communications (ISNCC), 8 pages, DOI:10.1109/ISNCC58260.2023.10324002, Doha, Qatar, October 23-26, 2023.

C173. **M. Gholami, M. Mouhoub and S. Sadaoui**. *Feature Selection Using Evolutionary Techniques.* The 2023 IEEE Conference on Systems, Man, and Cybernetics (SMC 2023), pages 1162-1167, Honolulu, October 1-4, 2023.

C172. **M. Bidar and M. Mouhoub**. *Nature-Inspired Techniques for Dynamic Constraint Satisfaction Problems* . The IEEE 2023 Congress on Evolutionary Computation, Late Breaking paper, Chicago USA, July 1-5, 2023.

C171. **M. Sadeghilalimi, M. Mouhoub, H. Zaidi and A. Ben Said**. *Electricity Technician Dispatch Routing Optimization* . The IEEE 2023 Congress on Evolutionary Computation, Late Breaking paper, Chicago USA, July 1-5, 2023.

C170. **M. Waqdan, H. Louafi and M. Mouhoub**. *A Comprehensive Risk Assessment Framework for IoT-Enabled Healthcare Environment.* The 20th International Conference on Security and Cryptography (SECRYPT 2023), ISBN 978-989-758-666-8, ISSN 2184-7711, DOI: 10.5220/0012060900003555, pages 667-672, Rome, July 10-12, 2023.

C169. **A. Farid and M. Mouhoub**. *A Multi-Objective Approach for Unmanned Aerial Vehicle Mapping.* The International Conference on Unmanned Aircraft Systems (ICUAS 2023), pages 257-264, Warsaw, June 6-9, 2023.

C168. **A. Mete, M. Mouhoub and A. Farid**. *Coordinated Multi-Robot Exploration using Reinforcement Learning.* The International Conference on Unmanned Aircraft Systems (ICUAS 2023), pages 265-272, Warsaw, June 6-9, 2023.

C167. **A. Farid and M. Mouhoub**. *Swarm of Nanobots in Medical Applications, a Future Horizon.* International Conference on Mechanical, Automotive and Mechatronics Engineering (ICMAME 2023), https://doi.org/10.53375/icmame.2023.51, pages 27-32, Dubai, April 29-30, 2023.

C166. **M. Gholami, M. Mouhoub and S. Sadaoui**. *Biogeography-Based Optimization (BBO) for Dimensionality Reduction.* Optimization Days, Montreal, May 29-31, 2023.

C165. **M. Gholami, M. Mouhoub and S. Sadaoui**. *Biogeography-based optimization for feature selection.* The 36th International Florida Artificial Intelligence Research Society Conference (FLAIRS 2023), https://doi.org/10.32473/flairs.36.133230, Clearwater Beach, Florida, May 14 - 17, 2023.

C164. **M. Sadeghi, M. Mouhoub and A. Ben Said** . *Solving the Nurse Scheduling Problem Using the Whale Optimization Algorithm.* The International Conference in Optimization and Learning (OLA2023), Communications in Computer and Information Science, vol 1824, pages 62-73, Springer, Cham, https://doi.org/10.1007/978-3-031-34020-8_5, Malaga, May 3-5, 2023.

C163. **M. Bidar and M. Mouhoub**. *Nature-Inspired Algorithms for Solving Weighted Constraint Satisfaction Problems.* In Proceedings of the 15th International Conference on Agents and Artificial Intelligence, Lisbon, February 22-24, 2023, pages 63-72.

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C51. **M. Mouhoub and C. Feng**. *Efficient Handling of Relational Database Combinatorial Queries using CSPs*. The Twenty First International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE'08), pages 369-378, Wroclaw, Poland, June 18-20, 2008.

C50. **S. Sadaoui, M. Mouhoub and X.F. Li**. *An OCL-based CSP Specification and Solving Tool*. The Twenty First International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE'08). Wroclaw, Poland, June 18-20, 2008. *The revised and extended version of this paper is published in paper BC2 above.*

C49. **M. Mouhoub and A. Sukpan**. *Conditional and Composite Constraints with Preferences*. FLAIRS 2008, Association for the Advancement of Artificial Intelligence (AAAI), pages 77-82, Coconut Groove, May 15-17, 2008.

C48. **S. Sadaoui, M. Mouhoub and X.F. Li**. *Extending OCL to Handle Constraints of CSP*. Canadian Operational Research Society (CORS) & Optimization Days 2008. Quebec City, May 12-14, 2008.

C47. **M. Mouhoub and A. Sukpan**. *Conditional and Composite Temporal CSPs*. COPLAS, International Conference on Constraint Programming (CP 2008), pages 41-50, Sydney, September 14-18, 2008.

C46. **M. Mouhoub and A. Sukpan**. *Managing Conditional and Composite CSPs*. Canadian Conference on Artificial Intelligence (AI'2007), pages 216-227, Montreal, May 28 - 30, 2007.

C45. **M. Mouhoub and A. Sukpan**. *Solving Conditional and Composite Constraint Satisfaction Problems*. The 22nd Annual ACM Symposium on Applied Computing, pages 336-337, Seoul, Korea, March 11-15, 2007.

C44. **S. Sadaoui, M. Mouhoub and X.F. Li**. *UML-based Temporal Constraint Solver*. The 20th International Joint Conference on Artificial Intelligence (IJCAI-07). Workshop on Spatial and Temporal Reasoning, Hyderabad, India, Jan 6-12, 2007.

C43. **M. Mouhoub and Z. Wang**. *Ant Colony with Stochastic Local Search for the Quadratic Assignment Problem*. The 18th IEEE International Conference on Tools with Artificial Intelligence (ICTAI'06). pages 143-149, Washington, November 13-15, 2006.

C42. **M. Mouhoub and A. Sukpan**. *Conditional and Composite Temporal Constraints with Preferences*. The 13th International Symposium on Temporal Representation and Reasoning (TIME 2006), pages 95-102, Budapest, Hungary, June 15-17, 2006.

C41. **M. Mouhoub**. *Conditional and Composite Temporal Constraints*. Canadian Operational Research Society (CORS) & Optimization Days 2006. Montreal, May 8-10 2006.

C40. **M. Mouhoub and A. Sukpan**. *A New Temporal CSP Framework Handling Composite Variables and Activity Constraints*. The 17th IEEE International Conference on Tools with Artificial Intelligence (ICTAI'05), pages 143-149, Hong Kong, November 14-16, 2005.

C39. **M. Mouhoub and S. Sadaoui**. *Improving Lotos Simulation Using Constraint Propagation*. The 17th IEEE International Conference on Tools with Artificial Intelligence (ICTAI'05), pages 137-142, Hong Kong, November 14-16, 2005.

C38. **M. Mouhoub and S. Sadaoui**. *Lotos Simulator for Constraint Satisfaction Problems*. International Conference on Modelling and Simulation (MS 2005), pages 393-397, Cancun, Mexico, May 18 - 20, 2005.

C37. **M. Mouhoub and A. Sukpan**. *Constraint Propagation versus Local Search for Conditional and Composite Temporal Constraints*. Eleventh International Conference on Principles and Practice of Constraint Programming (CP 2005), Workshop on Constraint Propagation and Implementation, pages 63-78, Sitges, Barcelona, Spain, October 1 - 5, 2005.

C36. **M. Mouhoub and A. Sukpan**. *A Study of Constraint Propagation versus SLS for Conditional and Composite Temporal Constraints*. Nineteenth International Joint Conference on Artificial Intelligence (IJCAI-05). Workshop on Spatial and Temporal Reasoning, pages 39-44, Edinburgh, July 30 - Aug 05, 2005.

C35. **M. Mouhoub and Amrudee Sukpan**. *Solving Conditional and Composite Temporal Constraints*. The 16th IEEE International Conference on Tools with Artificial Intelligence (ICTAI'04), pages 734-741, Boca Raton, Florida, November 15-17, 2004.

C34. **M. Mouhoub**. *Solving Dynamic CSPs*. The Seventeenth Canadian Conference on Artificial Intelligence (AI'2004), London - Ontario. Lectures Notes in Computer Science (LNCS) 3060, Advances in Artificial Intelligence, pages 504-509, May 17 - 19, 2004.

C33. **M. Mouhoub and S. Sadaoui**. *Systematic versus non Systematic Methods for Solving Incremental Satisfiability*. The 17th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE'04), Ottawa. Lectures Notes in Computer Science (LNCS) 3029, Innovations in Applied Artificial Intelligence, pages 543-551, May 17 - 20, 2004.

C32. **M. Mouhoub and C. Wang**. *Stochastic Local Search for Incremental SAT and Incremental MAX-SAT*. The 8th International Conference on Knowledge-Based Intelligent Information & Engineering Systems, Wellington, New Zealand. Lectures Notes in Computer Science (LNCS) 3215, pages 703-710, September 20 - 24, 2004.

C31. **M. Mouhoub, S. Sadaoui and A. Supkan**. *Formal Description Techniques for CSPs and TCSPs*. International Conference on Software Engineering & Knowledge Engineering, SEKE 04, Banff, pages 406-410, June 20 - 24, 2004.

C30. **M. Mouhoub**. *Solving Incremental MAX-SAT*. 13th International Conference on Intelligent & Adaptive Systems and Software Engineering (IASSE-2004), pages 46-51, July 1 - 3, Nice, 2004.

C29. **M. Mouhoub, S. Sadaoui and M. Istihad**. *Java with CREAM for Temporal Constraints.* 13th International Conference on Intelligent & Adaptive Systems and Software Engineering (IASSE-2004), pages 281-283, Nice, July 1 - 3, 2004.

C28. **M. Mouhoub, S. Sadaoui and X. Feng**. *A New Branch and Bound Method for Incremental Satisfiability Problem.* International Conference on Computational Intelligence (ICCI 2004), pages 424-427, Istanbul, Turkey, December 17 - 19, 2004.

C27. **M. Mouhoub**. *Extending Allen Algebra to Manage Numeric and Metric Temporal Information.* 16th European Conference on Artificial Intelligence (ECAI 2004). Workshop on Constraint Satisfaction Techniques for Planning and Scheduling Problems, pages 65-74, Valencia, August 22 - 27, 2004. *The revised and extended version of this paper is published in paper BC1 above.*

C26. **M. Mouhoub and A. Sukpan**. *Managing Conditional and Composite Temporal Constraints.* 16th European Conference on Artificial Intelligence (ECAI 2004). Workshop on Spatial and Temporal Reasoning, Valencia, August 22 - 27, 2004.

C25. **M. Mouhoub**. *Arc Consistency for Dynamic CSPs.* Seventh International Conference on Knowledge-Based Intelligent Information & Engineering Systems (KES'2003), Oxford, Lectures Notes in Computer Science (LNCS) 2773, pages 393-400, September 3 - 5, 2003.

C24. **M. Mouhoub**. *Maintaining Global Consistency of Temporal Constraints in a Dynamic Environment.* The 16th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE'03), Laughborough, Lectures Notes in Computer Science (LNCS) 2718, pages 779-788, June 23 - 26, 2003.

C23. **M. Mouhoub**. *Dynamic Path Consistency for Interval-based Temporal Reasoning.* 21st International Conference on Artificial Intelligence and Applications (AIA '2003). Innsbruck Austria, Feb 10-13, 2003.

C22. **M. Mouhoub**. *Using Neural Nets for Max-TCSPs.* 7th International Conference on Artificial Intelligence and Soft Computing (ASC), pages 357-362, Banff, Canada, July 14-16, 2003.

C21. **M. Mouhoub, S. Sadaoui and A. Supkan**. *Chronological Backtrack versus Formal Methods for solving CSPs.* CSREA International Conference on Artificial Intelligence, pages 270-275, Las Vegas, June 23 - 26, 2003.

C20. **M. Mouhoub**. *Constraint Propagation versus Local Search for Incremental Temporal Constraint Problems* . IEEE International Conference on Computer Systems and Applications (AICCSA'03), Tunis, July 14 - 18, 2003.

C19. **M. Mouhoub**. *Using Genetic Algorithms to Manage Metric and Symbolic Temporal Information.* The Third International Conference on Artificial Intelligence and Applications (AIA 2003), pages 112-117, Benalmadena, Spain, September 8 - 10, 2003.

C18. **M. Mouhoub**. *Handling Temporal Constrants in a Dynamic Environment.* The Eighteenth International Joint Conference on Artificial Intelligence (IJCAI'03), Workshop on Spatial and Temporal Reasoning, pages 11-15, Acapulco, Mexico, August 9 - 15, 2003. *The revised version of this paper is published in paper J4 above.*

C17. **G. Klein and M. Mouhoub**. *Solving Temporal Constraints using Neural Networks.* International Conference on Artificial Intelligence, Las Vegas, pages 978-985, CSREA Press, June 24-27, 2002.

C16. **M. Mouhoub and J. Yip**. *An Investigation into Maintaining Arc Consistency in a Dynamic Environment.* International Conference on Artificial Intelligence, Las Vegas, pages 973-977, CSREA Press, June 24-27, 2002.

C15. **M. Mouhoub and J. Yip**. *Dynamic Temporal constraint satisfaction techniques for solving scheduling and planning.* MCSEAI'02, Annaba, May 2002.

C14. **M. Mouhoub and J. Yip**. *Dynamic CSPs for Interval-based Temporal Reasoning* . The 15th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE'02). Published in Lectures Notes in Computer Science (LNCS) 2358, pages 575-585, Cairns, June 17 - 20, 2002.

C13. **M. Mouhoub**. *Solving Temporal Constraints in Real Time and in a Dynamic Environment.* AAAI-02 Workshop on Spatial and Temporal Reasoning, pages 35-42, Edmonton, July 28 - August 01, 2002.

C12. **M. Mouhoub and J. Yip**. *Dynamic Arc-Consistency for Interval-based Temporal Reasoning.* Sixth International Conference on AI Planning & Scheduling. Workshop on Online Planning and Scheduling, pages 75-80, Toulouse, April 23-27, 2002.

C11. **M. Mouhoub**. *A Study of Numeric and Symbolic Time Information.* Seventeenth International Joint Conference on Artificial Intelligence (IJCAI'01), Workshop on Learning from Temporal and Spatial Data, pages 8-15, Seattle, August 4-10, 2001.

C10. **M. Mouhoub**. *Analysis of Approximation Algorithms for Maximal Temporal Constraint Satisfaction Problems.* The 2001 International Conference on Artificial Intelligence, pages 165-171, CSREA Press, Las Vegas, June 25-28, 2001.

C9. **M. Mouhoub**. *Solving Temporal Constraint Satisfaction Problems.* 5th International Symposium on Programming and Systems, pages 321-326, Algiers, May 12-14, 2001.

C8. **M. Mouhoub**. *Managing Symbolic and Numeric Information for Scheduling and Planning.* International Naiso Symposium on Information Science Innovations in Engineering of Natural and Artificial Intelligent Systems (ENAIS'2001), Dubai, U.A.E, 2001.

C7. **M. Mouhoub**. *Reasoning about Numeric and Symbolic Time Information.* The Twelfth IEEE International Conference on Tools with Artificial Intelligence (ICTAI'2000), pages 164-171, Vancouver, Canada, 2000.

C6. **M. Mouhoub**. *Contribution au Raisonnement Temporel : Étude des Techniques de Satisfaction de Contraintes Numériques et Symboliques.* 3rd International Symposium on Programming and Systems, pages 151-171, Algiers, April 14-16, 1997.

C5. **M. Mouhoub, F. Charpillet and J.P. Haton**. *Étude des techniques de résolution de problèmes de satisfaction de contraintes temporelles.* 6th International Conference on Man-Machine Interaction and Intelligent Systems in Business (INTERFACES'97), pages 128-13, Montpellier, France, May 28-30, 1997.

C4. **M. Mouhoub, F. Charpillet and J.P. Haton**. *Résolution de problèmes de contraintes temporelles.* Troisièmes journées nationales sur la Résolution pratique des problèmes NP-Complets, pages 87-94, Rennes, France, April 21-22, 1997.

C3. **M. Mouhoub, F. Charpillet and J.P. Haton**. *Comparison of Constraint Propagation Techniques for Interval-based Temporal Reasoning.* AAAI-96 Workshop on Spatial and Temporal Reasoning, pages 127-134, Portland, August 04-08, 1996.

C2. **M. Mouhoub, F. Charpillet and J.P. Haton**. *Constraint Propagation techniques for Scheduling Problems.* ECAI-96 Workshop on Intelligent Scheduling of Production Processes, Budapest, Hungary, August 11-16, 1996.

C1. **M. Mouhoub, F. Charpillet and J.P. Haton**. *Comparison and Improvement of Constraint Propagation Techniques for Interval-based Temporal Reasoning.* 15th Workshop of the UK Planning and Scheduling, pages 264-277, Liverpool, November 21-22, 1996.

7 Media Interviews and other Publications

- *U of R, RPL partner on new app to help Arabic-speakers learn English*, Regina Leader-Post, May 7, 2019.
- *Library using Pictopages to teach English to Canadian newcomers*, CTV News, April, 25, 2019.
- *Funding (at the University of Regina)*, Discourse Magazine, April 16, 2019.
- *Computer co-pilot helps you navigate changing streets*, Mitacs, August, 2018.
- *Artificial intelligence takes over University of Alberta*, CBC News, May 19. 2017.
- M. Mouhoub, S. Sadaoui, O. A. Mohamed and M. Ali. Technological Advances in Applied Intelligence (IEA/AIE-2018). AI Magazine, 39(4), pages 27-28 (2018).
- M. Al-Ageili and M. Mouhoub. *An Ontology-Based Information Extraction System for Residential Land Use Suitability Analysis.* arXiv preprint arXiv:2109.07672 (2021).
- M. Al-Ageili and M. Mouhoub. *Communication Aid for Non-English Speaking Newcomers.* arXiv preprint arXiv:2101.08319 (2021).
- S. Alsafari, S. Sadaoui and M. Mouhoub. "Effect of Word Embedding Models on Hate and Offensive Speech Detection." arXiv preprint arXiv:2012.07534 (2020).
- S. Ahmed and M. Mouhoub. *Constrained Optimization with Qualitative Preferences.* arXiv preprint arXiv:2109.12179 (2021).
- M. Mouhoub, H. Al Marri, and E. Alanazi. *Exact Learning of Qualitative Constraint Networks from Membership Queries.* arXiv preprint arXiv:2109.11668 (2021).
- W. Korani, M. Mouhoub and S. Sadaoui. *Optimizing Neural Network Weights using Nature-Inspired Algorithms.* arXiv preprint arXiv:2105.09983 (2021).

8 Teaching Experience

8.1 Graduate Courses

- CS820 - Artificial Intelligence. Winter 2022, Summer 2021, Winter 2021, Winter 2020, Winter 2019, Winter 2018, Winter 2017, Winter 2015, Winter 2014, Winter 2013, Fall 2011, Fall 2009, Fall 2007, Fall 2005 and Winter 2004.

- CS900 - Graduate Seminars. Winter 2008, Fall 2007.
- Reading Courses
  - CS890CO - Heuristic Algorithms in Optimization. Fall 2021, Summer 2020.
  - CS890DE - Advanced Topics in Robotics. Fall 2012, Winter 2006.
  - CS890BR - Constraint Programming. Fall 2020, Summer 2019, Summer 2017, Fall 2016, Fall 2015, Spring/Summer 2012, Winter 2012, Fall 2011, Fall 2010, Winter 2008, Fall 2006, Summer 2006, Winter 2006, Fall 2003 and Fall 2002.
  - CS890CE - Constraint-Based Agents. Spring/Summer 2015, Fall 2014, Winter 2014, Summer 2006, Winter 2005, Fall 2004, Winter 2004 and Fall 2003.

8.2 Undergraduate Courses

University of Regina

- CS170 - Fundamentals of Computer Science I. Winter 2007 and Winter 2005.
- CS 201 - Introduction to Digital Systems. Fall 2014, Fall 2013, Fall 2012, Fall 2011, Fall 2010, Fall 2009.
- CS340 - Data Structures and Algorithm Analysis. Winter 2024, Winter 2021, Winter 2020, Winter 2019, Winter 2018, Fall 2016, Winter 2015, Fall 2013, Fall 2012, Winter 2012, Fall 2010, Winter 2010, Winter 2008, Fall 2007, Winter 2007, Fall 2006, Winter 2006, Fall 2005, Winter 2005, Fall 2004, Fall 2003 and Fall 2002.
- CS421 - Advanced Artificial Intelligence. Winter 2024, Winter 2022, 2021, 2020, 2019, 2018, 2017, 2015, 2014, 2011.
- Reading courses
  - CS490CA - Constraint Processing. Winter 2008, Winter 2005, Winter 2004 and Summer 2004.
  - CS490CD - Robot Motion Planning. Fall 2006, Summer 2006, Fall 2005, Summer 2005 and Fall 2004.

University of Lethbridge

- CS1620 - Introduction to a Programming Language. Winter 2000.
- CS2660 - File Processing. Fall 2001, Fall 2000 and Fall 1999.
- CS3620 - Data Structures. Winter 2002 and Winter 2000.
- CS3740 - Concepts of Programming Languages and their Implementations. Fall 2001 and Fall 2000.
- CS3750 - Artificial Intelligence. Winter 2002, Fall 2000 and Fall 1999.
- CS4625 - Advanced Algorithms. Winter 2001.
- CS4650 - Operating System. Fall 1999.
- Reading courses
  - CS3990 - Constraint Programming. Winter 2001.
  - CS3990 - GUI & Event Driven Programming. Fall 2001.
  - CS4990 - Robot Motion Planning. Fall 2001.

Université d'Auvergne, France

- Symbolic Computation. Fall 1997.
- Artificial Intelligence. Winter 1998.
- Programming and Data Structures in C. Winter 1998.
- Symbolic Computation. Winter 1998.

Université H.P. Nancy 1, France

- Introduction to Database Systems. Winter 1997, Fall 1996 and Fall 1994.
- Data Structures. Winter 1996.
- Introduction to Programming in C. Winter 1996.
- Introduction to Functional Programming. Fall 1995.
- Introduction to Object Oriented Programming in C++. Winter 1995.
- GUI & Event Driven Programming. Fall 1995.
- Introduction to Programming in Pascal. Fall 1994.
- Software Engineering. Winter 1994.
- Numerical Analysis. Fall 1993.
- Graph Theory and Operations Research. Winter 1993.

8.3 Honours Oral Examination Committees

- Shivam Patel, BSc Hon, April 2024. Chair of the Committee.
- Blake Coleman, BSc Hon, April 2024. Chair of the Committee.
- Sanjida Parvin, BSc Hon, March 2024. Chair of the Committee.
- Om Dalwadi, BSc Hon, March 2024. Chair of the Committee.
- Aleen Hasnani, BSc Hon, March 2024. Examiner.
- Kallin Kehrig, BSc Hon, December 2023. Examiner.
- Yug Shah, BSc Hon, April 2023. Chair of the Committee.
- Yunseok John Kim, BSc Hon, April 2023. Chair of the Committee.
- Mathew Mann, BSc Hon, November 2021. Chair of the Committee.
- Bennett Eidsness, BSc Hon, November 2021. Chair of the Committee.
- Corey Safinuk, BSc Hon, November 2021. Chair of the Committee.
- Rutvik Shah, BSc Hon, April 2021. Examiner.
- Jesse McLeod, BSc Hon, December 2020. Examiner.
- Mykyta Chernenky, BSc Hon, August 2020. Chair of the Committee.
- Matthew Colledge, BSc Hon, March 2019. Examiner.
- Kevin Peterson, BSc Hon, April 2019. Examiner.

- Ashley Herman, BSc Hon, September 2016. Examiner.
- Regan Meloche, BSc Hon, March 2015. Examiner.
- Barret Rennie, BSc Hon, March 2015. Examiner.
- Jordan Ubbens. BSc Hon, 2013. Chair of the Committee.
- Jordan Howlet. BSc Hon, 2013. Examiner.
- Steve Hooker. BSc Hon, 2010. Chair of the Committee.
- Jieshan Liu. BSc Hon, 2005. Examiner.
- Ricky Sum. BSc Hon, 2004. Examiner.
- James Ranson. BSc Hon, 2003. Chair of the Committee.

8.4 Other Teaching Activities

- Developed an on line course: *Data Structures (CS 340)*. This project was funded by Technology Enhanced Learning (TEL), Campus Saskatchewan. Amount: $32,700. 2003-2006.
- Faculty advisor for the following industrial projects (Applied Studies).
  - Optimizing the Unix Administration Duties
    Name of the student: Rahim Merahi.
    Company: Nortel, Texas.
  - Graphic User Interface for Data Base Queries
    Name of the student: Reka Silasi
    Company: Agriculture Research Centre, Lethbridge.
- Job site visit of an actuarial science student completing an internship at the American International Assurance (AIA) Company in Hong Kong, November 14, 2005.

9 Administration Activities

9.1 Council and Other Committees, University of Regina

- Member of the Search Committee, FNUC, 2020.
- Member of the Vanier Canada Graduate Scholarships Selection Committee, 2014.
- Member of the Faculty of Graduate Studies & Research Council, 2012-2013.
- Member of the Distinguished University Professor Committee, 2007 to 2009.
- Member of the Selection Committee for the NSERC Undergraduate Student Research Awards (USRA), 2003, 2004, 2006 and 2014.
- Member of the NSERC Postgraduate Scholarships (PGS) Selection Committee, 2005 and 2006.

- Member of the Student Appeals Council Committee, 2004 to 2007.
- Member of the Advisory Committee on Research and Instructional Computing, 2003 to 2006.
- Member of the Executive Committee, University of Regina Faculty Association (URFA), 2003 to 2006 and 2006 to 2008.
- Member of the Academic Freedom Committee, 2004 to 2007.
- Alternate Member of the Council Committee on Student Appeals, 2003-2004.

9.2 Faculty of Science, University of Regina

- Member of the Search Committee for Associate Dean, Student Experience and Engagement, 2020.
- Member of the COVID-19 Science Advisory Committee, 2020.
- Acting Dean, July 2017.
- Chair of the Faculty of Science Review Committee, 2015-2016.
- Member of the Faculty of Science Review Committee, 2007-2008, 2014-2015.

9.3 Dept. of Computer Science, University of Regina

- Undergraduate Honours/Scholarships Representative, 2013-2014, 2019-2020, 2020-2021, 2021-2022, and 2022-2024.
- Research Grants Advisor, 2021-2024.
- Member of the Search Committee, 2021.
- Member of the Curriculum Committee, 2010-2011, 2013-2014, 2019-2020, and 2020-2021.
- Member of the Web & Industry Advisory Committee, 2019-2020.
- Department Head, 2016-2019.
- Undergraduate Honours/Scholarships Representative, 2013-2014.
- Member of the Planning Committee, 2012-2013 and 2014-2015.
- Programming Stream Coordinator, 2010-2013.
- Chair of the Curriculum Committee, 2011-2012.
- Programming Stream Coordinator, 2010-2013.
- Graduate Coordinator, 2009-2010.
- Member of the NSERC CRC Tier 2 Search Committee, May 2008.
- Chair and Coordinator of the Seminars Committee, 2007-2008.
- Member of the Industry Advisory Committee, 2007-2008.

- Chair of the Industry Advisory Committee, 2006-2007.
- CS Dept. representative at the Western Chairs Meeting in Victoria, March 09-10 2006.
- Chair of the Social Committee, 2005-2006.
- Scholarships Representative, 2005-2006 and 2006-2007.
- Acting Head, Dept. of CS, May 09-13 and June 08-17 2005.
- Chair and Coordinator of the Graduate Committee, 2004-2005.
- Coordinator of Undergraduate Studies, 2003-2004.
- Member of the Graduate Committee, 2002-2004.
- Library Representative, Dept. of CS, University of Regina, 2002-2003.

9.4 University of Lethbridge

- External Member of the Chair Selection Committee. Dept. of Chemistry, 2001-2002.
- Credit Advisor, Dept. of Math & CS, 2000-2001.
- Elected Member of the Curriculum Committee, Dept. of Math & CS, 2000-2001.
- Elected Member of the Search Committee, Dept. of Math & CS, 2000-2001.

10 Public Service

- Judge in the Regina Regional Science Fair, University of Regina, 2014.
- Judge in the Graduate Student Conference, University of Regina, April 07-08 2006.
- Judge in the Regina Regional Science Fair, Miller High School, 2003, 2006 and 2008.
- Member of the judging team. Canadian National Taekwon-do Championship, Regina, 2007.
- Judge in the Exposciences Fransaskoise Science Fair, Ecole Montseigneur-de-Laval, April 2006.

11 Languages

Arabic, French, English, and German (basic).