

University of Ottawa – uoCV Lifetime

Department/School: School of Electrical Engineering and Computer Science

25 September 2025

CURRICULUM VITAE

NAME:

LETHBRIDGE, Timothy, P.Eng, I.S.P., FCIPS Professor

DEGREES AND CREDENTIALS:

Degrees:

1994 PhD Computer Science, University of Ottawa, Ontario, Canada

1987 Masters of Computer Science Computer Science, University of New Brunswick, New Brunswick, Canada

1985 Bachelor of Computer Science Computer Science, University of New Brunswick, New Brunswick, Canada

Credentials:

Professional Engineer, Professional Engineers Ontario Information Systems Professional, Canadian Information Processing Society

EMPLOYMENT HISTORY:

Academic Work Experience:

2005 – Professor, Professor, Electrical Engineering and Computer Science, University of Ottawa, Ontario, Canada

2010 – 2023 Vice-Dean, Governance, Professor, Faculty of Engineering, University of Ottawa, Ontario, Canada

2005 – 2005 Acting Vice Dean (Academic), Professor, Faculty of Engineering, University of Ottawa, Ontario, Canada

2001-2005 Associate Professor, Associate Professor, School of Information Technology and Engineering, University of Ottawa, Ontario, Canada

1994 – 2001 Assistant Professor, Assistant Professor, School of Information Technology and Engineering, University of Ottawa, Ontario, Canada

1990 – 1994 Part Time Professor, Lecturer, Computer Science, University of Ottawa, Ontario, Canada

1986 – 1986 Part Time Professor, Lecturer, Computer Science, University of New Brunswick, New Brunswick, Canada

Non-academic Work Experience:

1987 – 1989 Member of Scientific Staff, Bell-Northern Research (Canada)

1982 – 1985 Programmer, Government of New Brunswick, New Brunswick, Canada

HONOURS:

2024 Faculty of Engineering 2023-2024 John V. Marsh Award for Excellence in Teaching, University of Ottawa, Ontario, Canada

2016 IEEE Computer Society TCSE Outstanding Educator Award, In recognition of his outstanding contributions to software engineering education through leadership roles in curriculum development, his dissemination of software engineering education ideas through conferences and committees, his chairing of the CSEET steering committee, and his advancing of software engineering education through accreditation processes and curriculum design, IEEE

2015 Best paper Award - SDL Forum 2015, For: *Braun, E., Amyot, D., Lethbridge, TC. "Generating Software Documentation in Use Case Maps from Filtered Execution Traces", SDL Forum, United Kingdom

2010 Cascon High Impact Paper Award for one of best 14 out of 425 papers published in the first decade of Cascon, for Singer, J., Lethbridge, T.C., Vinson, N, and Anquetil, N (1997) "An Examination of Software Engineering Work Practices, IBM Cascon, Canada

2010 Gary Hadford Professional Achievement Award, "[to] CIPS members ... recognized by their peers for their integrity, high degree of competence, and outstanding achievements in fields related to information technology, Canadian Information Processing Society, Canada

2009 WCRE Award for Most Influential Paper from 10 years before, for Anquetil, N., and Lethbridge, T.C. (1999), "Experiments with Clustering as a Software Remodularization Method", Working Conference on Reverse Engineering, pp 235-255, Working Conference on Reverse Engineering, France

2006 Outstanding Contribution Award, IEEE, For contributions to SE2004, IEEE, United States

2004 The Mather Premium, Prize given once a year for a paper published in an IEE Journal on computing. For J11. Anquetil, N., and Lethbridge, T.C. (2003), "A Comparative Study of Clustering Algorithms and Abstract Representations for Software Remodularization", IEE Proceedings - Software, pp. 185-201, IEE, United Kingdom

SCHOLARLY and PROFESSIONAL ACTIVITIES:

Event Administration

2020 – 2025 Co-General-Chair, International Conference on Software Engineering

Editorial Activities

2015 – 2025 Member of Editorial Board, Software and Systems Modeling (Springer)

Journal Review Activities

2015 – Reviewer, Science of Computer Programming

2015 – Reviewer, International Journal of Parallel, Emergent and Distributed Systems

2011 – Reviewer, Empirical Software Engineering

2009 – Reviewer, Journal of Systems and Software

2009 – Reviewer, Information and Software Technology

2009 – Reviewer, IEEE Software

2009 – Reviewer, Software and Systems Modeling

Conference Review Activities

2009 – Reviewer, Conference on Software Engineering and Training (CSEE&T)

2009 – Reviewer, Models Education Symposium

2009 – Reviewer, Cascon

2009 - Reviewer, ACM/IEEE Conference on Model-Driven Engineering Languages and

Systems (Models)

MEMBERSHIPS

Committee Memberships

2018 – Committee Member, *Vice Chair, Computer Science Accreditation Council*, Canadian Information Processing Society

2018 – 2023 Committee Member, *Member of Board of Driectors, CIPS National*, Canadian Information Processing Society

2018 – 2023 Committee Member, *Board of Directors Member*, CIPS Ontario

2010 – 2023 Committee Member, Senate, University of Ottawa, Ontario, Canada

Other Memberships

2008 – 2025 P. Eng, Professional Engineers Ontario, Canada

2006 – 2025 Certified Member and Fellow, Canadian Information Processing Society, Canada

1996 – 2025 Senior Member, ACM, United States

1989 – 2024 Senior Member, IEEE, United States

SUPERVISIONS:

Summary:

Completed

Principal Supervisor 16 Doctorate

12 Master's Thesis

6 Master's non-Thesis

3 Post-doctorate

Co-Supervisor 36 Bachelor's

4 Doctorate

6 Master's Thesis

Supervision detail:

Pathak, Parva (Master's Thesis), Masters of Computer Science Exploring How Well Llama3 can Generate State Machines Represented in Umple, Principal Supervisor, September 2024 - July 2025

Lovepreet Singh (Master's non-Thesis), Computer Science Safe Cloud-Based Java Code Execution in UmpleOnline, Principal Supervisor, September 2021 - May 2022

Shuvankar Saha (Master's non-Thesis), Computer Science *User Experience Analysis of UmpleOnline with real users*, Principal Supervisor, May 2021 - December 2021

Frédérik Laflèche (Master's non-Thesis), Computer Science Enhancement of External Technology for End-Users Working with Umple, Principal Supervisor, January 2021 - September 2021

Reyhaneh Kalantari (Doctorate), Electronic Business *Adoption of Software Modeling Tools: Modeler Experience, Barriers and Benefits*, Principal Supervisor, September 2020 - October 2024

Emmanuel Ayeleso (Doctorate), Computer Science Representation and Assisted Negotiation of Textual Agreements, Principal Supervisor, January 2019 - December 2022

Abdulaziz Algablan (Doctorate), Computer Science Mixsets: Combining Annotative and Compositional Approaches to Variability and Product Lines, Principal Supervisor, September 2016 - December 2021

Alvine Boaye Belle (Post-doctorate), Computer Science Reconstructing DoDAF (Department of Defense Architecture Framework) compliant high level views from information systems, Principal Supervisor, May 2016 - May 2018

Aliaa Alghamdi (Doctorate), PhD. in E-Business *Enterprise Architecture in Higher Education: Processes, Principles, Challenges, Success Factors and Agility*, Principal Supervisor, January 2016 - September 2020

Robert Weisman (Doctorate), PhD in E-Business A Leadership Approach to Successful Digital Transformation Using Enterprise Architecture, Principal Supervisor, September 2014 - December 2019

Sultan Eid Algmagthawi (Doctorate), Computer Science *Model-Driven Testing in Umple*, Principal Supervisor, September 2013 - April 2020

COURSES:

Undergraduate Courses

SEG2105 Introduction to Software Engineering University of Ottawa, Ontario:

January, 1991 - July, 2020

SEG4910/SEG4911 Capstone Project in Software Engineering University of Ottawa, Ontario:

September, 2000 - April, 2026

Graduate Courses

CSI5122 Software Usability University of Ottawa, Ontario:

January, 1999 - December, 2025

LIFETIME FUNDING:

- Total amount of funding received	\$2,686,348.00
As Principal Investigator	\$2,220,998.00

EXTERNAL RESEARCH FUNDING:

Date(s) Source	Type	Investigator	Amount	
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Date(s)	Source	Type	Investigator	Amount
2022/4 -	Natural Sciences and Engineering	Type:	My Role:	Funding Total:
2028/3	Research Council of Canada (NSERC)	Grant	Principal Investigator	\$120,000
	<u>Title:</u>	Purpose:		
	Identifying and Overcoming Obstacles to Effective Software Modeling	Operating		
	Program: NSERC Discovery Grant			
2016/5 -	Mitacs and KDM Analytics	Type:	My Role:	Funding Total:
2018/5	-	Grant	Principal Investigator	\$75,000
	<u>Title:</u>			
	Mitacs Accelerate: Reconstructing	Purpose:	Co-applicant:	(\$75,000 received)
	DoDAF (Department of Defense	Operating	Alvine Boaye-Belle	
	Architecture Framework) compliant high			
	level views from information systems			
	Program:			
	Mitacs Accelerate			
2016/4 -	Natural Sciences and Engineering	Type:	My Role:	Funding Total:
2021/3	Research Council of Canada (NSERC)	Grant	Principal Investigator	\$130,000
	Title:	Purpose:		(\$130,000
	Discovery Grant: Improving the	Operating		received)
	Capabilities and Applicability of Umple			
	Program:			
	Discovery Grants			

INTERNAL RESEARCH FUNDING:

Date(s)	Source	Type	Investigator	Amount
2018/7 -	University of Ottawa	Type:	My Role:	Funding Total:
2020/6		Grant	Principal Investigator	\$24,000
	<u>Title:</u>			
	Internal Stipend	Purpose:		(\$24,000 received)
		Operating		
	Program:			
	Research Stipend 12K per year			
2014/7 -	University of Ottawa	Type:	My Role:	Funding Total:
2017/6		Grant	Principal Investigator	\$22,500
	<u>Title:</u>			
	Internal Stipend	Purpose:		(\$22,500 received)
		Operating		
	Program:			

Date(s)	Source	Type	Investigator	Amount
	Research Stipend 7.5K per year			
2008/7 -	University of Ottawa	Type:	My Role:	Funding Total:
2014/6		Grant	Principal Investigator	\$15,000
	<u>Title:</u>			
	Internal Stipend	Purpose:		(\$15,000 received)
		Operating		
	Program:			
	Research Stipend 2.5K per year			

CONTRIBUTIONS:

Life-time summary count according to the following categories:

Books Authored	3
Refereed Journal Articles	32
Conference Publications	141
Refereed Chapters In Books	11
Reports	5
Intellectual Properties	1
Other Contributions	

PUBLICATIONS:

Refereed Chapters In Books

11. Lethbridge, TC and *Algablan, A. (2021). Umple: An Executable UML-Based Technology for Agile Model-Driven Development. In Y Rhazali (Ed.), *Advancements in Model-Driven Architecture in Software Engineering* (pp. 1-25). IGI Global. doi:10.4018/978-1-7998-3661-2.ch001

Refereed Journal Articles

- 32. Odu, Oluwafemi, Belle, Alvine B, Wang, Song, Kpodjedo, Segla, Lethbridge, Timothy C, Hemmati, Hadi. (2025, April). Automatic instantiation of assurance cases from patterns using large language models. *Journal of Systems and Software*, 222, 112353 112353. doi:10.1016/j.jss.2025.112353
- 31. Kienzle, J., Zschaler, S., Barnett, W., Saglam, T., Bucchiarone, A., Abrahao, S., . . . Meacham, S. (2024, July). Requirements for Modelling Tools for Teaching. *Software and Systems Modeling*. https://doi.org/10.1007/s10270-024-01192-y
- 30. Shahandashti, K.K., Belle, A.B., Lethbridge, T.C., Odu, O., and Sivakumar, M. (2024, May). A Prisma-driven systematic mapping study on system assurance weakeners. *Information and Software Technology*. doi:10.1016/j.infsof.2024.107526 (*In Press*)
- 29. *Kalantari, R. & Lethbridge, T.C. (2022, November). Characterizing UX Evaluation in Software Modeling Tools: A Literature Review. *IEEE Access*, 10, 131509-131527. https://doi.org/10.1109/ACCESS.2022.3227504
- 28. Lethbridge, T.C., *Forward, A., *Badreddin, O., *Brestovansky, D., *Garzon, M., *Aljamaan, H., . . . *Zakariapour, A. (2021, April). Umple: Model-Driven Development for Open Source and Education. *Science of Computer Programming*, 208, 1-10. https://doi.org/10.1016/j.scico.2021.102665

- 27. Badreddin, O., Rahad, K., Forward, A., and Lethbridge T. (2021). The Evolution of Software Design Practices Over a Decade: A Long-Term Study of Practitioners. *Journal of Object Technology*, 20(2), 1. https://doi.org/10.5381/jot.2021.20.2.a1
- 26. *Husseini, Orabi M, *Husseini, Orabi A & Lethbridge, TC. (2020, January). Umple-TL: A Model-Oriented, Dependency-Free Text Emission Tool. *Communications in Computer and Information Science*, 1161, 127-155. https://doi.org/10.1007/978-3-030-37873-8 6

Extended version of Modelsward Article

- 25. Agner, L.T.W., Lethbridge, T.C. & Soares, I.W. (2019, September). Student experience with software modeling tools. *Software & Systems Modeling*, 18(5), 3025-3047. https://doi.org/10.1007/s10270-018-00709-6
- 24. *Husseini, Orabi M., *Husseini, Orabi A. & Lethbridge, T.C. (2019, February). A Textual Notation for Modeling and Generating Code for Composite Structure. *Communications in Computer and Information Science*, 991, 355-379. https://doi.org/10.1007/978-3-030-11030-7 16

Extended version of Modelsward Article

- *Adesina, O, Lethbridge, T.C., Somé, S., *Abdelzad, V. & *Boaye Belle, A. (2018, December). Improving Formal Analysis of State Machines with Particular Emphasis on And-Cross Transitions. *Computer Languages, Systems and Structures*, 54. https://doi.org/10.1016/j.cl.2017.12.001
- *Boaye Belle, A, Lethbridge, T.C., *Garzón, M., *Adesina, O. (2018, April). Design and implementation of distributed expert systems: on a control strategy to manage the execution flow of rule activation. *Expert Systems with Applications*, 96, 129-148. https://doi.org/10.1016/j.eswa.2017.11.033
- 21. *Abdelzad V., Lethbridge T.C. (2015, October). Promoting Traits into Model-Driven Development. *Systems and Software Modeling*. doi:http://rdcu.be/mSAc
- *Forward, A, *Badreddin, O, Lethbridge, TC, *Solano, J. (2012, June). Model-driven rapid prototyping with Umple. *Software: Practice and Experience*, 42(7), 781-797. doi:http://dx.doi.org/10.1002/spe.1155
- 19. *Fatolahi, A, Somé, SS, Lethbridge, TC. (2012, June). A Meta-Model for Model-Driven Web Development. *International Journal of Software and Informatics*, 6(2), 125-162.
- *Nojoumian, M, Lethbridge, TC. (2011, June). Reengineering PDF-based documents targeting complex software specifications. *Int. J Knowledge and Web Intelligence*, 2(4), 292-319. doi:10.1504/IJKWI.2011.045165
- 17. *Fatolahi, A, Somé, S, Lethbridge, TC. (2011, June). Model-driven web development for multiple platforms. *Journal of Web Engineering*, 10(2), 109-152. doi:https://www.riverpublishers.com/journal/journal_articles/RP_Journal_1540-9589_1022.pdf
- *Hamou-Lhadj, A, Lethbridge, TC. (2010, June). A metamodel for the compact but lossless exchange of execution traces. *Software & Systems Modeling*, 11(1), 77-98. doi:10.1007/s10270-010-0180-x
- *Hamou-Lhadj, A, Lethbridge, TC. (2010, June). Understanding the complexity embedded in large routine call traces with a focus on program comprehension tasks. *IET software*, 4(2), 161-177. doi:10.1049/iet-sen.2009.0031
- 14. Lethbridge, TC, LeBlanc Jr, RJ, Kelley-Sobel, AE, Hilburn, T B, Diaz-Herrera, TL. (2006, June). SE2004: Recommendations for undergraduate software engineering curricula. *Software, IEEE*, 23(6), 19-25. doi:10.1109/MS.2006.171
- 13. Lethbridge, TC, Sim, SE, Singer, J. (2005, June). Studying software engineers: Data collection techniques for software field studies. *Empirical software engineering*, 10(3), 311-341. doi:10.1007/s10664-005-1290-x

- 12. Lethbridge, TC, Singer, J, *Forward, A. (2003, June). How software engineers use documentation: The state of the practice. *Software, IEEE*, 20(6), 35-39. doi:10.1109/MS.2003.1241364
- *Anquetil, N, Lethbridge, TC. (2003, June). Comparative study of clustering algorithms and abstract representations for software remodularisation. *IEE Proceedings-Software*, 150(3), 185-201. doi:10.1049/ip-sen:20030581
- 10. *Liu, H, Lethbridge, TC. (2002, June). Intelligent search methods for software maintenance. *Information Systems Frontiers*, 4(4), 409-423. doi:10.1023/A:10208398
- 9. Lethbridge, TC. (2001, June). Mixing Software Engineering Research and Development-What Needs Ethical Review and What Does Not?. *Empirical Software Engineering*, 6(4), 319-321. doi:10.1023/A:10119746
- 8. Lethbridge, TC. (2000, June). What knowledge is important to a software professional?. *Computer*, 33(5), 44-50. doi:10.1109/2.841783
- 7. Lethbridge, TC. (2000, June). Priorities for the education and training of software engineers. *Journal of Systems and Software*, 53(1), 53-71. doi:10.1016/S0164-1212(00)00009-1
- 6. Lethbridge, TC. (2000, June). Evaluating a domain-specialist-oriented knowledge management system. *International Journal of Human-Computer Studies*, 52(6), 961-990. doi:10.1006/ijhc.1999.0380
- 5. *Anquetil, N, Lethbridge, TC. (1999, June). Recovering software architecture from the names of source files. *Journal of Software Maintenance*, 11(3), 201-221. doi:10.1002/(SICI)1096-908X(199905/06)11:33.0.CO;2-1
- 4. Lethbridge, TC. (1998, June). The relevance of software education: A survey and some recommendations. *Annals of Software Engineering*, 6(1-4), 91-110. doi:10.1023/A:10189177
- 3. Lethbridge, TC. (1998, June). Metrics for concept-oriented knowledge bases. *International Journal of Software Engineering and Knowledge Engineering*, 8(02), 161-188. doi:10.1142/S021819409800011X
- 2. Skuce, D, Lethbridge, TC. (1995, June). CODE4: A unified system for managing conceptual knowledge. *International Journal of Human-Computer Studies*, 42(4), 413-451. doi:10.1006/ijhc.1995.1019
- 1. Lethbridge, TC, Ware, C. (1989, June). A simple heuristically-based method for expressive stimulus-response animation. *Computers & Graphics*, 13(3), 297-303. doi:10.1016/0097-8493(89)90077-0

Conference Publications

- 141. Shahandashti, K.K., Belle, A.B., Mohajer, M., Odu, O., Lethbridge. T.C.. Hemmati, H., Wang, S. (2024). Using GPT-4 Turbo To Automatically Identify Defeaters In Assurance Cases. In *AIRE 2024 International Workshop on Artificial Intelligence and Requirements Engineering* (p. 46-56) IEEE. doi:10.1109/REW61692.2024.00011
- 140. Shahandashti, K.K., Sivakumar, M., Mohajer, M.M., Belle, A., Wang, S., Lethbridge, T.C. (2024). Assessing the Impact of GPT-4 Turbo in Generating Defeaters for Assurance Cases. In *AI Foundation Models and Software Engineering (FORGE 2024) in ICSE 2024* (p. 52-56) IEEE. doi:10.1145/3650105.3652291
- 139. Lethbridge, T.C. (2024). TAMVE: Properties of Design Technologies to Address Challenges to Software Design in the Era of Agility and Frameworks. In *Designing 2024 at ICSE 2024* IEEE.
- Boaye Belle, A., Hemmati, H. & Lethbridge, T.C. (2023, September). Position paper: a vision for the dynamic safety assurance of ML-enabled autonomous driving systems. In *MoDRE 2023: Model Driven Requirements Engineering* IEEE. https://doi.org/10.1109/REW57809.2023.00056

- *Kalantari, R and Lethbridge, T.C. (2023). Unveiling Developers' Mindset Barriers to Software Modeling Adoption. In *HuFaMo at Models* 2023 (p. 737-746) IEEE. https://doi.org/10.1109/MODELS-C59198.2023.00120
- *Ayeleso, E., and Lethbridge, T.C. (2022, November). Requirements Analysis Using Grounded Theory: A Case Study in the Domain of Textual Negotiation Tools. In *Cascon* (p. 199-206) ACM. Retrieved from https://dl.acm.org/doi/abs/10.5555/3566055.3566080
- *Singh, L. and Lethbridge, T.C. (2022, November). Safe Cloud-Based Java Code Execution in UmpleOnline. In *Cascon* (p. 207-212) ACM. Retrieved from https://dl.acm.org/doi/abs/10.5555/3566055.3566081
- *Kalantari, R., Lethbridge, T.C. (2022, November). Preliminary results of measuring flow experience in a software modeling tool: UmpleOnline. In *HuFaMO 2022* (p. 923-928) ACM. https://doi.org/10.1145/3550356.3559099
- 133. Lethbridge, T.C. (2021, October). Low-Code Is Often High-Code, So We Must Design Low-Code Platforms to Enable Proper Software Engineering. In *ISoLA 2021: Leveraging Applications of Formal Methods, Verification and Validation* (p. 202-212) Springer. https://doi.org/10.1007/978-3-030-89159-6_14

Research Type: Scientific Research

- 132. Lethbridge, T, and *Alghamdi, A. (2019). Framework, Model and Tool Use in Higher Education Enterprise Architecture: An International Survey. In *Cascon* (p. 138-147) ACM. Retrieved from https://dl.acm.org/doi/abs/10.5555/3370272.3370287
- *Adesina, O., Lethbridge, T.C., Somé, S. (2019). Optimizing Hierarchical, Concurrent State Machines in Umple for Model Checking. In *16th Workshop on Model Driven Engineering, Verification and Validation (MoDeVVa)* 2019 (p. 523-531) IEEE. https://doi.org/10.1109/MODELS-C.2019.00082
- 130. Lethbridge. TC. (2019). UmpleOnline as a Testbed for Modeling Empirical Studies: A Position Paper. In *Fourth International Workshop on Human Factors in Modeling (HuFaMo) 2019* (p. 412-413) IEEE. https://doi.org/10.1109/MODELS-C.2019.00064
- *Boaye Belle, A., Lethbridge, T.C., Kpodjedo, S., Adesina, O., Garzón, M. (2019). A novel approach to measure confidence and uncertainty in assurance cases. In *9th International Model-Driven Requirements Engineering Workshop (MoDRe)* 2019 IEEE. https://doi.org/10.1109/REW.2019.00011
- 128. Lethbridge, TC. (2019). Capstone Software Engineering Students Can Develop a High-Quality Complex System: A Case Study With Umple. In *Canadian Engineering Education Association Conference*. https://doi.org/10.24908/pceea.vi0.13730
- 127. *Husseini-Orabi, M., *Husseini-Orabi, A., Lethbridge, TC. (2019). Umple as a Template Language (Umple-TL). In 7th International Conference on Model-Driven Engineering and Software Development, MODELSWARD INSTCC. https://doi.org/10.5220/0007382000980106
- 126. Badreddin, O., Khandoker, R., Forward, A., Masmali, O., Lethbridge, T.C. (2018). A decade of software design and modeling: A survey to uncover trends of the practice. In *Proceedings of the 21th ACM/IEEE International Conference on Model Driven Engineering Languages and Systems* (p. 245-255). https://doi.org/10.1145/3239372.3239389
- 125. Lethbridge, T.C, *Algablan, A. (2018). Using umple to synergistically process features, variants, UML models and classic code. In *International Symposium on Leveraging Applications of Formal Methods* (p. 69-88) Springer. https://doi.org/10.1007/978-3-030-03418-4 5
- 124. Lethbridge. T.C. and *Algablan, A. (2018). Applying Umple to the Rover Control Challenge Problem: A Case Study in Model-Driven Engineering. In *MDETools*, *Models 2018* (p. 386-395) CEUR. Retrieved from https://ceur-ws.org/Vol-2245/mdetools_paper_9.pdf

- 123. Sturm, A., Lethbridge, TC. (2018). Poster: Are Our Students Engaged in Their Studies? Professional Engagement vs. Study Engagement. In 2018 IEEE/ACM 40th International Conference on Software Engineering: Companion (ICSE-Companion) (p. 149-150) IEEE. Retrieved from https://ieeexplore.ieee.org/abstract/document/8449474
- *Husseini-Orabi, M., *Husseini-Orabi, A., and Lethbridge, T.C. (2018, January). Component-Based Modeling in Umple. In *Modelsward 2018* (p. 247-255) SCITEPRESS. Retrieved from https://www.researchgate.net/profile/Timothy_Lethbridge/publication/322879081_Component-based_Modeling_in_Umple/links/5a7b01550f7e9b41dbd725f2/Component-based-Modeling-in-Umple.pdf
- *Husseini-Orabi, M., *Husseini-Orabi, A., and Lethbridge, T.C. (2018, January). Concurrent Programming using Umple. In *Modelsward 2018* (p. 575-585) SCITEPRESS. Retrieved from https://www.researchgate.net/profile/Timothy_Lethbridge/publication/322870960_Concurrent_Programming using Umple/links/5a7b01c0aca2722e4df60555/Concurrent-Programming-using-Umple.pdf
- 120. Lethbridge, T.C., Peyton, L., Amyot, D., Somé, S. (2017, October). The University of Ottawa Undergraduate Software Engineering Program: Leading and Innovative. In *CSEE&T 2017* (p. 5-6) IEEE. https://doi.org/10.1109/CSEET.2017.12
- *Agner, Luciane T. W. and Lethbridge, T.C. (2017, September). A Survey of Tool Use in Modeling Education. In *Models* 2017 (p. 303-322) IEEE Computer Society. https://doi.org/10.1109/MODELS.2017.1
- 118. Lima, E., *Resende, A., Lethbridge, TC. (2016, August 21). The Uncomfortable Discrepancies of Software Metric Thresholds and Reference Values in Literature. In *ICSEA 2016, The Eleventh International Conference on Software Engineering Advances* (p. 1-9). doi:http://www.thinkmind.org/index.php?view=article&articleid=icsea 2016 1 10 10013
- 117. Badreddin, O., *Abdelzad, V., Lethbridge, TC, Elaasar, M. (2016, June 15). fSysML: Foundational Executable SysML for Cyber-Physical System Modeling. In *GEMOC workshop*. doi:http://ceur-ws.org/Vol-1731/paper_3.pdf
- *Husseini Orabi, M., *Husseini Orabi, A., Lethbridge, TC. (2016, January). Umple as a component-based language for the development of real-time and embedded applications. In *Modelsward 2016* (p. 282-291) Scitepress. doi:https://ieeexplore.ieee.org/abstract/document/7954371
- George, A., Lethbridge, TC., Peyton, L. (2016, June). Graduate Attribute Assessment In Software Engineering Program At University Of Ottawa Continual Improvement Process. In 2016 Canadian Engineering Education Conference. doi:https://ojs.library.queensu.ca/index.php/PCEEA/article/view/6484/6032
- 114. *Husseini Orabi, A, *Husseini Orabi, M, Lethbridge, TC. (2016, June 15). Psychophysiological observing and analysis tool for user experience. In *Proceedings of the 1st International Workshop on Emotion Awareness in Software Engineering* (p. 22-25). doi:10.1145/2897000.2897004
- 113. Lethbridge, TC, *Abdelzad, V, *Husseini Orabi, M, *Husseini Orabi, A, *Adesina, O. (2016, June 15). Merging modeling and programming using Umple. In *International Symposium on Leveraging Applications of Formal Methods* (p. 187-197). doi:10.1007/978-3-319-47169-3_14
- *Adesina, O, Lethbridge, TC, Somé, S. (2016, June 15). A fully automated approach to discovering non-determinism in state machine diagrams. In 10th International Conference on the Quality of Information and Communications Technology, Portugal. doi:10.1109/QUATIC.2016.021

- *Abdelzad, V, Lethbridge, TC, Hosseini, M. (2016, June 15). The role of semiotic engineering in software engineering. In *Proceedings of the 5th International Workshop on Theory-Oriented Software Engineering* (p. 15-21). doi:10.1145/2897134.2897136
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- *Aljamaan, H, Lethbridge TC. (2015, November 3). MOTL: a Textual Language for Trace Specification of State Machines and Associations. In *Proceedings of 25th Annual International Conference on Computer Science and Software Engineering (Cascon)* (p. 101-110) IBM and ACM. doi:https://dl.acm.org/citation.cfm?id=2886460
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A compiler that combines UML class diagrams, state diagrams, traits, mixins and other techniques into Java, Python, PHP, C++ and other languages. Includes an online website, a command-line tool, plugins for IDEs and extensive manual. Used widely for education in universities around the world

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