UNIVERSITY OF VICTORIA

Date: January 31, 2025

FACULTY CURRICULUM VITAE

Name ERNST, Neil

Faculty or School Engineering **Department** Computer Science

1. Degree and Diplomas

Degree or Diploma	Field	Institution	Year Granted
Ph.D	Computer Science	University of Toronto	2012
M.Sc.	Computer Science	University of Victoria	2004
B.Sc. *cum laude*	Geography	University of Victoria	2001

2. Positions Held

Years	Title	Institution
2022/07–	Associate Professor	University of Victoria
2017/08–2022/06	Assistant Professor	University of Victoria
2016/01–2017/07	Senior Researcher	Software Engineering Institute – Carnegie Mellon University
2013/02–2015/12	Researcher	Software Engineering Institute – Carnegie Mellon University
2011/09–2013/01	Postdoctoral Researcher	University of British Columbia
2009/09–2009/12	Visiting Researcher	University of Trento

3. Major Field(s) of Scholarly or Professional Interest

My primary research interests are in software architecture, software analytics, modeling and requirements engineering. I am particularly interested in how we ensure that software architectures fulfill user requirements.

4. Memberships and Offices Held in Learned and Professional Societies

- 2009–present Member, Association for Computing Machinery
- 2011–present Member, IEEE

5. Scholarships, Fellowships, Honours and Awards

- 2018 Best Reviewer for SoSyM 2018 Journal of Software and Systems Modeling
- 2015 ACM/SIGSOFT Distinguished Paper Award International Conference on Foundations of Software Engineering Awarded to top 5% of papers at SIGSOFT Foundations of Software Engineering Conference

Prior to final degree:

- 2005–09 Junior Fellow Massey College
- 2005–07 NSERC Canadian Graduate Scholarship (CGS-D) $70,000 total
- 2003 NSERC Master's Scholarship (PGS-M) $38,000 total
- 2004 Faculty nominee, Governor-General's Silver Medal University of Victoria
- 2002 Provost's Award for Academic Excellence in Athletics University of Victoria
- T.S. MacPherson Entrance Award, University of Victoria, $22,500 – *1995-2001*
- Governor-General's Bronze Medal — *1996*

6. Appointments at University of Victoria

a. Academic

2022-present	Associate Professor with tenure	Computer Science
2017-2022	Assistant Professor	Computer Science

b. Administrative

2023–	Director	Matrix Institute

7. Research Funding

Year	Program	Amount	Title	Role/Share
2024	UVic Aspiration 2030 PostDoc Fellowship (Nathan Cassee)	$50k	AI and Developer Collaboration	Supervisor
2024	Canadian Space Agency Research Opportunities for Satellite Earth Observation	305000	Satellite-based kelp mapping (SKEMA): a software framework for First Nations	Co-PI
2023	NSERC Discovery Grant	$180k	Towards AI-Supported Software Design	PI
2022	Sloan Foundation - Better Software for Science	103,470 USD	The Nature of Technical Debt in Scientific Software	sole PI
2022/3	University of Victoria Aspiration 2030 PostDoc Fellowship (Biniyam Mezgebo)	$50k (declined)	British Columbia Kelp physiological condition in the face of environmental changes	co-supervisor
2021	Venture For Canada Internship Funding	$10k total	Mining Computational Notebooks	sole PI
2020-2021	MITACS Accelerate Internship	$75k total	Personal Productivity Analytics	sole PI
2018-2019	NSERC Engage	$25k total	Detecting Violations of Data Sharing Agreements	sole PI
2018,2021	Google Cloud Platform Education Grant awarded	$10k total	Credits for learning and teaching on Google Cloud	sole PI
2018-2020	MITACS Accelerate Internship	$30k total	Automating Analysis of Privacy Requirements	sole PI
2018-2023	NSERC Discovery Grant	$115k total +12.5k supplement	Explaining and Architecting Intelligent, Connected Software Systems	sole PI
2016	Line-funded exploratory grant a competitive DOD research grant to SEI researchers pursuing DOD strategic research goals	$450k total	SEI internal, Ongoing, Dynamic Design Analysis of Configurable Systems	co-PI
2012	Amazon In Education Research Grant	$10k total	Mining software repositories for user requirements mining	sole PI

8. Scholarly and Professional Achievements

- H-Index 31
- Citations 3720 (source Google Scholar, as of 2025.01)
- ORCiD: 0000-0001-5992-2366

I publish in ICSE (A*), FSE (CORE A*), RE (A), MSR (A), ICSA (A), ICSME (A), SANER (A), TSE (A*, IF: 6.11), J. ESE (A, IF: 3.16), among others. Co-authors who were trainees under my direct supervision for the work cited are indicated by an asterisk (*).

Books

MITP_2021 Neil Ernst, Julien Delange, and Rick Kazman. *Technical Debt in Practice: How to Find It and Fix It*. MIT Press, 2021.

Journal Articles

EMSE_2025 Nathan Cassee, Neil Ernst, Nicole Novielli, and Alexander Serebrenik. "Negativity in Self-Admitted Technical Debt: How Sentiment Influences Prioritization". In: *Empirical Software Engineering Journal* (2025).

TOSEM_2024 Martin P Robillard, Deeksha M Arya, Neil A Ernst, Jin LC Guo, Maxime Lamothe, Mathieu Nassif, Nicole Novielli, Alexander Serebrenik, Igor Steinmacher, and Klaas-Jan Stol. "Communicating Study Design Trade-offs in Software Engineering". In: *ACM Transactions on Software Engineering and Methodology* (2024).

JSS_2024 Daniel Russo, Sebastian Baltes, Niels van Berkel, Paris Avgeriou, Fabio Calefato, Beatriz Cabrero-Daniel, Gemma Catolino, Jürgen Cito, Neil Ernst, Thomas Fritz, et al. "Generative AI in software engineering must be human-centered: The copenhagen manifesto". In: *Journal of Systems and Software* 216 (2024), p. 112115.

CACM_2023 Maria Teresa Baldassarre, Neil Ernst, Ben Hermann, Tim Menzies, and Rahul Yedida. "(Re)Use of Research Results (Is Rampant)". In: *Communications of the ACM* 66.2 (2023). DOI: 10.1145/3554976.

EMSE_2023b Neil A. Ernst and Maria Teresa Baldassarre. "Registered reports in software engineering". In: *Empirical Software Engineering* 28.2 (Mar. 2023). DOI: 10.1007/s10664-022-10277-5.

JSS_2023 Neil A. Ernst, John Klein, Marco Bartolini, Jeremy Coles, and Nick Rees. "Architecting complex, long-lived scientific software". In: *Journal of Systems and Software* 204 (Oct. 2023), p. 111732. DOI: 10.1016/j.jss.2023.111732.

EMSE_2023 Neil A. Ernst and Martin Robillard. "A Study of Documentation for Software Architecture". In: *Empirical Software Engineering* 28 (2023).

IEEESW_2022 Neil A. Ernst and Gabriele Bavota. "AI-Driven Development Is Here: Should You Worry?" In: *IEEE Software* 39.2 (2022), pp. 106–110.

IST_2022 Ze Shi Li*, Colin Werner, Neil Ernst, and Daniela Damian. "Towards privacy compliance: A design science study in a small organization". In: *Information and Software Technology* (2022).

EMSE_2021b Alvi Mahadi*, Karan Tongay*, and Neil Ernst. "Conclusion Stability for Natural Language Based Mining of Design Discussions". In: *Empirical Software Engineering Journal* 27.1 (2022). invited for special issue from SANER 2020, pp. 1–42.

TSE_2021b Omar Elazhary, Colin Werner, Ze Shi Li*, Derek Lowlind, Neil A. Ernst, and Margaret-Anne Storey. "Uncovering the Benefits and Challenges of Continuous Integration Practices". In: *IEEE Transactions on Software Engineering* (2021), pp. 1–1. DOI: 10.1109/tse.2021.3064953.

EMSE_2021a Neil A. Ernst, Jeffrey Carver, Daniel Mendez, and Marco Torchiano. "Understanding Peer Review of Software Engineering Papers". In: *Empirical Software Engineering* 26.5 (2021), pp. 1–29. DOI: 10.1007/s10664-021-10005-5.

TSE_2021c Richard Torkar, Carlo A. Furia, Robert Feldt, Francisco Gomes de Oliveira Neto, Lucas Gren, Per Lenberg, and Neil A. Ernst. "A Method to Assess and Argue for Practical Significance in Software Engineering". In: *IEEE Transactions on Software Engineering* (2021). DOI: 10.1109/TSE.2020.3048991.

TSE_2021 Colin Werner, Ze Shi Li*, Derek Lowlind, Omar Elazhary, Neil Ernst, and Daniela Damian. "Continuously Managing NFRs: Opportunities and Challenges in Practice". In: *IEEE Transactions on Software Engineering* (2021).

EMSE_2020 Margaret-Anne Storey, Neil A Ernst, Courtney Williams, and Eirini Kalliamvakou. "The who, what, how of software engineering research: a socio-technical framework". In: *Empirical Software Engineering* 25.5 (2020), pp. 4097–4129.

EMSE_2017 Richard F Paige, Jordi Cabot, and Neil A Ernst. "Foreword to the special section on negative results in software engineering". In: *Empirical Software Engineering* 22.5 (2017), pp. 2453–2456.

SEN_Mag_2021 Paris Avgeriou, Neil A Ernst, Robert L Nord, and Philippe Kruchten. "Technical Debt: Broadening Perspectives. Report on the Seventh Workshop on Managing Technical Debt". In: *SIGSOFT Software Engineering Notes* 41.2 (2016), pp. 38–41.

TMIS_2014 Ivan J Jureta, Alexander Borgida, Neil A. Ernst, and John Mylopoulos. "The Requirements Problem for Adaptive Systems". In: *ACM Transactions on Management Information Systems* (2014).

ISJ_2013 Neil Ernst, Alexander Borgida, Ivan J Jureta, and John Mylopoulos. "Agile requirements engineering via paraconsistent reasoning". In: *Information Systems* (June 2013). DOI: 10.1016/j.is.2013.05.008.

EMSE_2013 A. Hindle, Neil A. Ernst, M. Godfrey, and J. Mylopoulos. "Automated topic naming to support cross-project analysis of software maintenance activities". In: *Empirical Software Engineering Journal* 18.6 (Dec. 2013), pp. 1125–1155. DOI: 10.1007/s10664-012-9209-9.

GenPsyc_2009 Carl Ernst. "Alternative Splicing, Methylation State, and Expression Profile of Tropomyosin-Related Kinase B in the Frontal Cortex of Suicide Completers". English. In: *Archives of General Psychiatry* 66.1 (Jan. 2009), p. 22. DOI: 10.1001/archpsyc.66.1.22.

AOSDT_2009 Nan Niu, Yijun Yu, Neil Ernst, Bruno González-Baixauli, Julio Sampaio do Prado Leite, and John Mylopoulos. "Aspects across Software Life Cycle: A Goal-Driven Approach". In: *Transactions on Aspect-Oriented Software Development VI* (2009), pp. 83–110. DOI: 10.1007/978-3-642-03764-1.

Neurogenetics_2007 Carl Ernst, Adolfo Sequeira, Tim Klempan, Neil Ernst, Jarlath Ffrench Mullen, and Gustavo Turecki. "Confirmation of region-specific patterns of gene expression in the human brain". In: *Neurogenetics* 8 (2007), pp. 219–224. DOI: 10.1007/s10048-007-0084-2.

IJHCS_2005 Neil Ernst, Margaret-Anne Storey, and Polly Allen. "Cognitive support for ontology modeling". In: *International Journal of Human-Computer Studies* 62.5 (2005), pp. 553–577. DOI: 10.1016/j.ijhcs.2005.02.006.

Conference Papers

CHASE_2025 Adam Alami and Neil A Ernst. "Human and Machine: How Software Engineers Perceive and Engage with AI-Assisted Code Reviews Compared to Their Peers". In: *Proceedings of the 2025 IEEE/ACM 18th International Conference on Cooperative and Human Aspects of Software Engineering*. 2025.

CHASE_2024 Adam Alami and Neil Ernst. "Understanding the building blocks of accountability in software engineering". In: *Proceedings of the 2024 IEEE/ACM 17th International Conference on Cooperative and Human Aspects of Software Engineering*. 2024, pp. 153–163.

SSBSE_2024 Adam Alami, Mansooreh Zahedi, and Neil Ernst. "Are you a real software engineer? best practices in online recruitment for software engineering studies". In: *Proceedings of the 1st IEEE/ACM International Workshop on Methodological Issues with Empirical Studies in Software Engineering*. 2024, pp. 52–57.

ICSE_2024 Z. Li*, N. Arony, K. Devathasan, M. Sihag, N. Ernst, and D. Damian. "Unveiling the Life Cycle of User Feedback: Best Practices from Software Practitioners". In: *Proceedings of the ACM/IEEE International Conference on Software Engineering*. 2024.

ICSE_2023 Amir Ghorbani*, Nathan W Cassee, Derek Robinson*, Adam Alami, Neil Ernst, Alexander Serebrenik, and Andrzej Wasowski. "Autonomy Is An Acquired Taste: Exploring Developer Preferences for GitHub Bots". In: *Proceedings of the ACM/IEEE International Conference on Software Engineering*. 2023.

RE_2023 Manish Sihag, Ze Shi* Li, Amanda Dash, Nowshin Nawar Arony, Kezia Devathasan, Neil Ernst, Alexandra Albu, and Daniela Damian. "A Data-Driven Approach for Finding Requirements Relevant Feedback from TikTok and YouTube". In: *Proceedings of the IEEE Joint International Conference on Requirements Engineering*. IEEE, 2023. DOI: 10.48550/ARXIV.2305.01796.

RE_2022 Ze Shi Li*, Manish Sihag, Nowshin Nawar Arony, Joao Bezerra Junior, Thanh Phan, Neil Ernst, and Daniela Damian. "Narratives: the Unforeseen Influencer of Privacy Concerns". In: *2022 IEEE 30th International Requirements Engineering Conference (RE)*. 2022, pp. 127–139.

ICSE_NIER_2021 Omar Elazhary, Margaret-Anne Storey, Neil Ernst, and Elise Paradis. "ADEPT: A Socio-Technical Theory of Continuous Integration". In: *Companion of the International Conference on Software Engineering*. 2021.

CCML_2020 Matthew Ehrler* and Neil Ernst. "VConstruct: Filling Gaps in Chl-a Data Using a Variational Autoencoder". In: *Tackling Climate Change with Machine Learning (NeurIPS workshop)*. 2020.

VLHCC_2020 Andreas Koenzen*, Neil A Ernst, and Margaret-Anne Storey. "Code duplication and reuse in Jupyter notebooks". In: *Proceedings of the IEEE Symposium on Visual Languages and Human-Centric Computing*. IEEE. 2020, pp. 1–9.

SANER_2020 Alvi Mahadi*, Karan Tongay*, and Neil A. Ernst. "Cross-Dataset Design Discussion Mining". In: *Proceedings of the IEEE International Conference on Software Analysis, Evolution, and Reengineering*. Selected for special issue. 2020.

RE_2020 Colin Werner, Ze Shi Li, Neil Ernst, and Daniela Damian. "The Lack of Shared Understanding of Non-Functional Requirements in Continuous Software Engineering: Accidental or Essential?" In: *Proceedings of the IEEE Joint International Conference on Requirements Engineering*. IEEE. 2020, pp. 90–101.

ICSME_2019 Omar Elazhary, Margaret-Anne Storey, Neil Ernst, and Andy Zaidman. "Do as I Do, Not as I Say: Do Contribution Guidelines Match the GitHub Contribution Process?" In: *Proceedings of the IEEE International Conference on Software Maintenance and Evolution*. 2019.

ROSE_2019 Neil Ernst, Rick Kazman, and Philip Bianco. "Component Comparison, Evaluation, and Selection: A Continuous Approach". In: *2019 IEEE International Conference on Software Architecture Companion (ICSA-C)*. IEEE. 2019, pp. 87–90.

REW_2019 Ze Shi Li*, Colin Werner, and Neil Ernst. "Continuous requirements: An example using GDPR". In: *International Requirements Engineering Conference Workshops (REW)*. IEEE. 2019, pp. 144–149.

REW_2019b Colin Werner, Ze Shi Li*, and Neil Ernst. "What Can the Sentiment of a Software Requirements Specification Document Tell Us?" In: *2019 IEEE 27th International Requirements Engineering Conference Workshops (REW)*. IEEE. 2019, pp. 106–107.

MSR_Short_2018 Neil A. Ernst. "Bayesian Hierarchical Modelling for Tailoring Metric Thresholds". In: *Proceedings of the International Working Conference on Mining Software Repositories*. 2018.

ROSE_2018 Neil A. Ernst, Rick Kazman, and Philip Bianco. "Towards Rapid Composition with Confidence in Robotics Software". In: *International Workshop on Robotics Software Engineering*. May 2018.

ICSA_2017 N. A. Ernst, S. Bellomo, I. Ozkaya, and R. L. Nord. "What to Fix? Distinguishing between Design and Non-design Rules in Automated Tools". In: *Proceedings of the IEEE/IFIP Working Conference on Software Architecture*. Apr. 2017, pp. 165–168. DOI: 10.1109/ICSA.2017.25.

MARCH_2017 Neil Ernst, John Klein, George Mathew, and Tim Menzies. "Using Stakeholder Preferences to Make Better Architecture Decisions". In: *International Workshop on decision Making in Software ARCHitecture (MARCH)*. IEEE. 2017, pp. 133–136.

RE_2017 George Mathew, Tim Menzies, Neil A Ernst, and John Klein. ""SHORT" er Reasoning About Larger Requirements Models". In: *Proceedings of the IEEE Joint International Conference on Requirements Engineering*. 2017, pp. 154–163.

ICSME_Short_2017 Martin P Robillard, Andrian Marcus, Christoph Treude, Gabriele Bavota, Oscar Chaparro, Neil Ernst, Marco Aurélio Gerosa, Michael Godfrey, Michele Lanza, Mario Linares-Vásquez, et al. "On-demand developer documentation". In: *Proceedings of the IEEE International Conference on Software Maintenance and Evolution*. 2017, pp. 479–483.

ERTS_2016 Julian Delange, Peter Feiler, and Neil A. Ernst. "Incremental Life Cycle Assurance of Safety-Critical Systems". In: *8th European Congress on Embedded Real Time Software and Systems*. 2016.

ICSA_2016 Neil A. Ernst, Mary Popeck, Felix Bachmann, and Patrick Donohoe. "Creating Software Modernization Roadmaps: The Architecture Options Workshop". In: *Proceedings of the IEEE/IFIP Working Conference on Software Architecture*. Venezia, 2016. DOI: 10.1109/WICSA.2016.39.

FSE_2015 Neil A Ernst, Stephany Bellomo, Ipek Ozkaya, Robert L Nord, and Ian Gorton. "Measure it? Manage it? Ignore it? software practitioners and technical debt". In: *Proceedings of the European Software Engineering Conference/ACM SIGSOFT International Symposium on Foundations of Software Engineering*. SIGSOFT distinguished paper. 2015, pp. 50–60. DOI: 10.1145/2786805.2786848.

BigData_2015 John Klein, Ian Gorton, Neil Ernst, Patrick Donohoe, Kim Pham, and Chrisjan Matser. "Application-Specific Evaluation of NoSQL Databases". In: *IEEE International Congress on Big Data (BigData Congress)*. IEEE. 2015, pp. 526–534.

PADS_2015 John Klein, Ian Gorton, Neil Ernst, Patrick Donohoe, Kim Pham, and Chrisjan Matser. "Performance evaluation of NoSQL databases: A case study". In: *1st Workshop on Performance Analysis of Big Data Systems*. 2015, pp. 5–10.

DSN_2014 Stephany Bellomo, Neil Ernst, Robert Nord, and Rick Kazman. "Toward design decisions to enable deployability: Empirical study of three projects reaching for the continuous delivery holy grail". In: *2014 44th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN)*. 2014, pp. 702–707.

ICSME_Short_2014 Stephany Bellomo, Neil Ernst, Robert L Nord, and Ipek Ozkaya. "Evolutionary improvements of cross-cutting concerns: Performance in practice". In: *Proceedings of the IEEE International Conference on Software Maintenance and Evolution*. SEIP track. 2014, pp. 545–548.

AIRE_2014 Neil A Ernst and Ian Gorton. "Using AI to model quality attribute tradeoffs". In: *International Workshop on Artificial Intelligence for Requirements Engineering (AIRE)*. IEEE. 2014, pp. 51–52.

TwinPeaks_2013 Neil A. Ernst, Ipek Ozkaya, Robert L. Nord, J. Delange, S. Bellomo, and I. Gorton. "Understanding the Role of Constraints on Architecturally Significant Requirements". In: *International Workshop on the Twin Peaks of Requirements and Architecture (TwinPeaks) at RE*. Rio de Janeiro, July 2013.

TechDebt_2012 Neil Ernst. "On the Role of Requirements in Understanding and Managing Technical Debt". In: *International Workshop on Managing Technical Debt*. 2012.

CAISE_2012 Neil Ernst, Alexander Borgida, John Mylopoulos, and Ivan J Jureta. "Agile Requirements Evolution via Paraconsistent Reasoning". In: *International Conference on Advanced Informations Systems Engineering*. Gdansk, June 2012, pp. 1–16. DOI: 10.1007/978-3-642-31095-9_25.

EMPIRE_2012 Neil Ernst and Gail C Murphy. "Case Studies in Just-In-Time Requirements Analysis". In: *Empirical Requirements Engineering Workshop at RE*. Chicago, Sept. 2012, pp. 1–8.

IWPSE_2011 Neil Ernst, Alexander Borgida, and John Mylopoulos. "Requirements evolution drives software evolution". In: *International Workshop on Software Evolution (IWPSE)*. Szeged, Hungary, July 2011, pp. 1–5.

RE_2011 Neil A. Ernst, Alexander Borgida, and Ivan J Jureta. "Finding incremental solutions for evolving requirements". In: *Proceedings of the IEEE Joint International Conference on Requirements Engineering*. Trento, Italy: IEEE, 2011, pp. 15–24. ISBN: 145770921X. DOI: 10.1109/RE.2011.6051656.

MSR_2011 Abram Hindle, Neil Ernst, Michael W Godfrey, and John Mylopoulos. "Automated topic naming to support cross-project analysis of software maintenance activities". In: *Proceedings of the International Working Conference on Mining Software Repositories*. Honolulu, 2011, pp. 1–10. DOI: 10.1145/1985441.1985466.

REFSQ_2010 Neil Ernst and John Mylopoulos. "On the perception of software quality requirements during the project lifecycle". In: *Proceedings of the International Working Conference on Requirements Engineering: Foundation for Software Quality*. 2010, pp. 143–157.

ER_2010 Neil Ernst, John Mylopoulos, Alexander Borgida, and Ivan J Jureta. "Reasoning with Optional and Preferred Requirements". In: *International Conference on Conceptual Modeling (ER)*. Vancouver, 2010, pp. 118–131.

RE_2010 Ivan J Jureta, Alexander Borgida, Neil Ernst, and John Mylopoulos. "Techne: Towards a New Generation of Requirements Modeling Languages with Goals, Preferences, and Inconsistency Handling". In: *Proceedings of the IEEE Joint International Conference on Requirements Engineering*. Sydney, Australia, 2010, pp. 115–124. DOI: 10.1109/RE.2010.24.

RunTime_2010 Nauman A Qureshi, Anna Perini, Neil Ernst, and John Mylopoulos. "Towards a Continuous Requirements Engineering Framework for Self-Adaptive Systems". In: *Requirements at Run-time at RE*. Sydney, 2010, pp. 1–8. DOI: 10.1109/RERUNTIME.2010.5628552.

DesignRE Neil Ernst, John Mylopoulos, and Yiqiao Wang. "Requirements Evolution and What (Research) to Do about It". In: *Design Requirements Engineering: A Ten-Year Perspective*. Ed. by Neil Ernst, John Mylopoulos, and Yiqiao Wang. Nov. 2008, pp. 186–214. DOI: 10.1007/978-3-540-92966-6.

RE_2008 Neil Ernst, John Mylopoulos, Yijun Yu, and Tien Nguyen. "Supporting Requirements Model Evolution throughout the System Life-Cycle". In: *Proceedings of the IEEE Joint International Conference on Requirements Engineering*. Barcelona, 2008, pp. 321–322. DOI: 10.1109/RE.2008.11.

ModelingSE_2007 Jorge Aranda, Neil Ernst, Jennifer Horkoff, and Steve M Easterbrook. "A Framework for Empirical Evaluation of Model Comprehensibility". In: *International Workshop on Modeling in Software Engineering at ICSE*. Minneapolis, USA, 2007.

Evolvability_2007 Neil Ernst and John Mylopoulos. "Tracing software evolution history with design goals". In: *International Workshop on Software Evolvability at ICSM*. Paris, France, June 2007, pp. 36–41. DOI: 10.1109/SE.2007.10.

mylopoulos07drw John Mylopoulos and Neil Ernst. "Dynamically evolving requirements". In: *Design Requirements Workshop*. Case Western University, Cleveland, OH, 2007.

CSER_2006 Neil Ernst, Greg A Jamieson, and John Mylopoulos. "Integrating requirements engineering and cognitive work analysis: A case study". In: *Conference on Systems Engineering Research*. Los Angeles, 2006.

REVis_2006 Neil Ernst, Yijun Yu, and John Mylopoulos. "Visualizing non-functional requirements". In: *International Workshop on Requirements Engineering Visualization at RE*. Minneapolis, Minnesota, 2006, pp. 2–2. ISBN: 0-7695-2711-6. DOI: 10.1109/REV.2006.10.

ernst03a Neil Ernst. "Adoption-Centric Knowledge Engineering". In: *Workshop on Adoption-Centric Software Engineering at ICSE 2003*. Portland, OR, 2003.

ernst03b Neil Ernst, Margaret-Anne Storey, Polly Allen, and Mark Musen. "Addressing cognitive issues in knowledge engineering with Jambalaya". In: *Workshop on Visualization in Knowledge Engineering at KCAP*. Sanibel Island, FL, 2003, pp. 26–30.

Book Chapters

Evolve_2014 Neil Ernst, Alexander Borgida, Ivan J Jureta, and John Mylopoulos. "An overview of requirements evolution". In: *Evolving Software Systems*. Springer Berlin Heidelberg, 2014, pp. 3–32.

Technical Reports and Preprints

ArXiv_2021 Maria Teresa Baldassarre, Neil Ernst, Ben Hermann, Tim Menzies, and Rahul Yedida. *Crowdsourcing the State of the Art(ifacts)*. Tech. rep. arXiv:2108.06821. 2021.

SIGSOFT_2021 Paul Ralph et al. *Empirical Standards for Software Engineering Research*. Tech. rep. arxiv:2010.03525. 2021.

SEI_2015c Neil A. Ernst, Stephany Bellomo, Robert L. Nord, and Ipek Ozkaya. *Enabling Incremental Iterative Development at Scale: Quality Attribute Refinement and Allocation in Practice*. Tech. rep. CMU/SEI-2015-TR-008. Software Engineering Institute, 2015.

SEI_2015 Peter H Feiler, Charles B Weinstock, John B Goodenough, Julien Delange, Ari Z Klein, and Neil Ernst. *Improving Quality Using Architecture Fault Analysis with Confidence Arguments*. Tech. rep. Carnegie-Mellon University, 2015.

SEI_2015b John Klein, Ian Gorton, Neil Ernst, Patrick Donohoe, Kim Pham, and Chrisjan Matser. *Quality Attribute-Guided Evaluation of NoSQL Databases: A Case Study*. Tech. rep. Carnegie-Mellon Univ Software Engineering Institute, 2015.

SEI_2014 John Klein, Patrick Donohoe, Neil Ernst, Ian Gorton, Kim Pham, and Chrisjan Matser. *NoSQL data store technologies*. Tech. rep. Carnegie-Mellon Univ Software Engineering Institute, 2014.

ArXiv_2011 Ivan Jureta, Alexander Borgida, and Neil Ernst. *Mixed-Variable Requirements Roadmaps and their Role in the Requirements Engineering of Adaptive Systems*. Tech. rep. 1102.4178. Arxiv, 2011.

CSRG_2009 Ivan J Jureta, Alexander Borgida, John Mylopoulos, Neil Ernst, Alexei Lapouchnian, and Sotirios Liaskos. *Techne: A(nother) requirements modeling language*. Tech. rep. 2009.

ArXiv_2006 Neil A. Ernst, Steve Easterbrook, and John Mylopoulos. *Code forking in open-source software: a requirements perspective*. Tech. rep. 1004.2889. arXiv, 2006.

Refereed Workshop Papers

SSBSE_2024 Adam Alami, Mansooreh Zahedi, and Neil Ernst. "Are you a real software engineer? best practices in online recruitment for software engineering studies". In: *Proceedings of the 1st IEEE/ACM International Workshop on Methodological Issues with Empirical Studies in Software Engineering*. 2024, pp. 52–57.

CCML_2020 Matthew Ehrler* and Neil Ernst. "VConstruct: Filling Gaps in Chl-a Data Using a Variational Autoencoder". In: *Tackling Climate Change with Machine Learning (NeurIPS workshop)*. 2020.

ROSE_2019 Neil Ernst, Rick Kazman, and Philip Bianco. "Component Comparison, Evaluation, and Selection: A Continuous Approach". In: *2019 IEEE International Conference on Software Architecture Companion (ICSA-C)*. IEEE. 2019, pp. 87–90.

REW_2019 Ze Shi Li*, Colin Werner, and Neil Ernst. "Continuous requirements: An example using GDPR". In: *International Requirements Engineering Conference Workshops (REW)*. IEEE. 2019, pp. 144–149.

REW_2019b Colin Werner, Ze Shi Li*, and Neil Ernst. "What Can the Sentiment of a Software Requirements Specification Document Tell Us?" In: *2019 IEEE 27th International Requirements Engineering Conference Workshops (REW)*. IEEE. 2019, pp. 106–107.

ROSE_2018 Neil A. Ernst, Rick Kazman, and Philip Bianco. "Towards Rapid Composition with Confidence in Robotics Software". In: *International Workshop on Robotics Software Engineering*. May 2018.

MARCH_2017 Neil Ernst, John Klein, George Mathew, and Tim Menzies. "Using Stakeholder Preferences to Make Better Architecture Decisions". In: *International Workshop on decision Making in Software ARCHitecture (MARCH)*. IEEE. 2017, pp. 133–136.

PADS_2015 John Klein, Ian Gorton, Neil Ernst, Patrick Donohoe, Kim Pham, and Chrisjan Matser. "Performance evaluation of NoSQL databases: A case study". In: *1st Workshop on Performance Analysis of Big Data Systems*. 2015, pp. 5–10.

AIRE_2014 Neil A Ernst and Ian Gorton. "Using AI to model quality attribute tradeoffs". In: *International Workshop on Artificial Intelligence for Requirements Engineering (AIRE)*. IEEE. 2014, pp. 51–52.

TwinPeaks_2013 Neil A. Ernst, Ipek Ozkaya, Robert L. Nord, J. Delange, S. Bellomo, and I. Gorton. "Understanding the Role of Constraints on Architecturally Significant Requirements". In: *International Workshop on the Twin Peaks of Requirements and Architecture (TwinPeaks) at RE*. Rio de Janeiro, July 2013.

TechDebt_2012 Neil Ernst. "On the Role of Requirements in Understanding and Managing Technical Debt". In: *International Workshop on Managing Technical Debt*. 2012.

EMPIRE_2012 Neil Ernst and Gail C Murphy. "Case Studies in Just-In-Time Requirements Analysis". In: *Empirical Requirements Engineering Workshop at RE*. Chicago, Sept. 2012, pp. 1–8.

IWPSE_2011 Neil Ernst, Alexander Borgida, and John Mylopoulos. "Requirements evolution drives software evolution". In: *International Workshop on Software Evolution (IWPSE)*. Szeged, Hungary, July 2011, pp. 1–5.

RunTime_2010 Nauman A Qureshi, Anna Perini, Neil Ernst, and John Mylopoulos. "Towards a Continuous Requirements Engineering Framework for Self-Adaptive Systems". In: *Requirements at Run-time at RE*. Sydney, 2010, pp. 1–8. DOI: 10.1109/RERUNTIME.2010.5628552.

DesignRE Neil Ernst, John Mylopoulos, and Yiqiao Wang. "Requirements Evolution and What (Research) to Do about It". In: *Design Requirements Engineering: A Ten-Year Perspective*. Ed. by Neil Ernst, John Mylopoulos, and Yiqiao Wang. Nov. 2008, pp. 186–214. DOI: 10.1007/978-3-540-92966-6.

ModelingSE_2007 Jorge Aranda, Neil Ernst, Jennifer Horkoff, and Steve M Easterbrook. "A Framework for Empirical Evaluation of Model Comprehensibility". In: *International Workshop on Modeling in Software Engineering at ICSE*. Minneapolis, USA, 2007.

Evolvability_2007 Neil Ernst and John Mylopoulos. "Tracing software evolution history with design goals". In: *International Workshop on Software Evolvability at ICSM*. Paris, France, June 2007, pp. 36–41. DOI: 10.1109/SE.2007.10.

REVis_2006 Neil Ernst, Yijun Yu, and John Mylopoulos. "Visualizing non-functional requirements". In: *International Workshop on Requirements Engineering Visualization at RE*. Minneapolis, Minnesota, 2006, pp. 2–2. ISBN: 0-7695-2711-6. DOI: 10.1109/REV.2006.10.

8.1. Lectures and Addresses (since appointment)

- 1/2025 Balancing accuracy, performance, and maintainability in research software. Invited talk to UVic Libraries Reproducibility for All series.
- 11/2024 Technical Debt in Research Software. Invited talk to DLR, German Center For Aerospace.
- 10/2024 Technical Debt in Research Software. Invited talk to Canada Centre for Climate Modeling and Analysis.
- 10/2024 Technical Debt: Does It Exist? Rapid Access Microtalk, US Research Software Engineer Conference, invited
- 10/2024 Technical Debt in Research Software. Invited talk to Sandia National Labs.
- 8/2023 Architecting Complex, Long-Lived Scientific Software, Invited Talk at the Astronomy Data Centre, Herzberg Institute.
- 3/2023 Coding with Music, Invited talk at Colwood Elementary School.
- 10/2022 Title: Off the Shelf or Build It Ourselves? The Nature of Components in Scientific Software. Invited Talk at Astronomical Data Analysis Software and Systems, Online.
- 02/2022 Technical Debt in Practice: Tools and Techniques for Identifying, Fixing, and Managing It. Invited talk to Technical Debt Remediation Office, Business Operations Sustainability (BOS), Innovation, Information and Technology (IITB), Employment and Social Development Canada (ESDC) | Government of Canada. Online.
- 07/08/2021 The Who-What-How of Architecture Technical Debt. Invited keynote. CANARIE Canadian Research Software Conference. Online.
- 05/07/2021. Technical Debt in Practice: Tools and Techniques for Identifying, Fixing, and Managing It. UVIc Dev Services Group. Online.
- 03/23/2021 The Who-What-How of Architecture Technical Debt online/Germany invited talk Working Session on Architecture Technical Debt, at the International Conference on Software Architecture
- 03/10/2021 The Who-What-How of SANER Research online/Hawaii invited keynote Intl Conference on Software Analysis, Evolution and Re-engineering joint with Dr. Margaret Storey
- 11/24/2020 Software Bot Research Victoria, Canada UVic Faculty of Engineering Open House
- 11/2020 Why Did The System Do That? Victoria, Canada UVic Speaker's Bureau invited talk Journey Middle School
- 5/2020 Compositional Software Quality ROS Quality Working Group Invited Talk
- 12/2019 Computational Notebooks Victoria, Canada UVic Speaker's Bureau invited talk Colquitz Middle School
- 06/2019 Why Did The System Do That? Victoria, Canada UVic Speaker's Bureau invited talk
- 03/2019 Industry Tools in Computer Science Education Vancouver, Canada Microsoft Education Summit invited https://www.youtube.com/watch?

- 03/2019 Notebooks and Data Science Victoria, Canada University of Victoria Ideafest
- 01/2019 Architecture Tradeoff Analysis Manchester, UK Square Kilometre Array
- 10/2018 When Writing It Down is Not Enough: the Era of Computational Notebooks UVic Matrix Institute for Data Science invited seminar Victoria, Canada
- 9/2017 Explaining how software works in terms of your intentions and its design Canadian Consortium for Software Engineering Research (CSER) Toronto, Canada new faculty talk

8.2. Thesis Students Graduated

Year	Student	Degree	Title
04/2020	Zane Li (co-supervisor)	MSc	Complying with the GDPR in the context of continuous integration
09/2020	Andreas Koentzen (co-supervisor)	MSc	Code Duplication and Reuse in Jupyter Notebooks
12/2020	Karan Tongay	MSc	Privacy preserving software engineering for data driven development
02/2021	Alvi Mahadi	MSc	Conclusion Stability for Natural Language Based Mining of Design Discussions
09/2021	Matthew Ehrler	MSc	VConstruct: A Computationally Efficient Method for Reconstructing Satellite Derived Chlorophyll A Data
12/2021	Marvi Jokhio	MSc (project)	NLP for software bugs
12/2021	David Cheng (co-supervisor)	MSc (course)	NLP for privacy
07/2022	Roshan Lasrado	MSc	Characterizing Design Discussions with NLP
08/2022	Rohith Pudari	MSc	Automated Design
10/2023	Amirreza Ghorbani	MSc	Automated Design
10/2024	Ahmed Musa Awon	MSc	Scientific Self Admitted Technical Debt

8.3. Post-doctoral Researchers Completed

Year	Researcher	Subject
2023-2024	Swapnil Hingmire	Topic Models in Software Engineering and Science

8.4. Post-doctoral Researchers Under Supervision

Year	Researcher	Subject
2024-2026	Nathan Cassee (co-supervisor)	Human and AI collaboration in Software Creation
2024-2026	Mohsen Ghanbari (co-supervisor)	SKEMA: Kelp Monitoring for Coastal Communities

8.5. Thesis Students Under Supervision

Year	Student	Degree	Subject
2024	Ekaba Bisong	PhD	Developers and AI
2024	Piper Steffen (co-supervisor)	MSC	Low Water Mask Creation
2023	Aidan Wright (co-supervisor)	MSC	Drone Surveillance of Kelp Bryozoans
2023	Luiz Guerra	PhD	LLMs for Software Development
2023	Vivienne Li	MSc	Requirements Topic Modeling
2020	Ze Shi Li (co-supervisor)	PhD	Requirements Ecosystems

8.6. Current Students Non-Thesis

Year	Student	Degree	Subject

8.7. Student Thesis Committee Work

- 08/2024, Md. Shakirul Islam, department member, research masters, Computer Science, University of Victoria (Miguel Nacenta)
- 04/2024, Pratvina Talele, external member, PhD, Computer Engineering, MIT World Peace University
- 01/2024, Yikun Li, external member, PhD, Computer Science, University of Groningen
- 11/2023, Nowshin Arony, department member, research masters, UVic
- 12/2021 Maria Ulan, external member/opponent, PhD, Computer Science, Linnaeus University Sweden
- 09/2021 Jean-Philippe Stoldt, departmental member, PhD, Computer Science
- 10/2021 Colin Werner, departmental member PhD, Computer Science
- 8/2020 David Rulff external member PhD, Civil Engineering
- 01/2020 Merhnaz Movahed external member, research masters, ECE
- 08/2019 Jaimin Modi external member, research masters, ECE
- 11/2018 Harsh Jain committee member, project masters
- 05/2019 Michael Anderson external member, research masters, ECE
- 2019 Miguel Jimenez committee member, research PhD
- 05/2019 Bing Jao committee member, research masters
- 11/2017 Harneet Kaur committee member, industry masters
- 2018 Carlene LeBoeuf committee member, research masters
- 2018 Courtney Williams committee member, research masters
- 2018 Julius Davies committee member, research masters
- 2018 Omar Alzhary committee member, PhD
- 2015 Petra Heck external PhD examiner, University of Delft

8.8. Undergraduate Student Supervision

- 2023 CSC 497 Sean Turney, Open Source Remote Sensing Pipeline
- 2023 CSC 591 Manish Sihag, Requirements from Videos
- 2022 CSC 497 Ayham Gheis, RINEX file conversion for GPS
- 2022 SENG 490 Jamieson Fregeau, design principles for chat agents
- 2021 CSC 591 Amir Ghorbani, bot interaction
- 2021 CSC 591—Jordan Watson, requirements ecosystems
- 2021 SENG499—3 students working on in-browser IDE
- 2021 CSC490—Derek Robinson directed studies: bot interactions

- 2019 CSC497—Russell Brown directed studies: urban growth
- 2019 CSC490—Matthew Smith directed studies: financial regulation compliance
- 2019 CSC490—Charlie Friend directed studies: requirements spec for OrcaSat ADCS
- 2019 SENG499—5 students working on Android Alarm app
- 2019 CSC497—Andrea Nesdoly directed studies
- 2019 CSC490—James Beasley directed studies
- 2018 SENG499—5 students working on distributed ML with Elixir
- 2018, CSC490—Zane Li directed studies
- 2012 Department mentor, Undergraduate Capstone Open Source Project (UCOSP) University of British Columbia

8.9. Defences Chaired

- 12/2024, Yunjie Lin, Civil Engineering PhD.
- 04/2023, Chengcheng Zhang, Civil Engineering MASc.
- 2024/03 Destiny Underwood, EPHE MSc.
- 2022/01, Peter Filice, PhEd Msc.
- 2021/08, Jon Davidson, Chemistry MSc.
- 10/2020 Sophia Myers, masters defence, Sociology
- 04/2019 Aigerim Mashkanova, industry masters
- 04/2019 Faelan Lundeberg, masters defence, History
- 04/2018 Jasmeet Singh, industry masters

8.10. Professional Activities

8.10.1 Media

- July 12 2023 - Business Insider Interview on ChatGPT and Programming. https://www.businessinsider.com/chatgpt-ai-code-develop-software-guide-prompts-2023-7
- Mar 28 2023 - Nature Publishing interview on Copilot. https://www.nature.com/articles/d41586-023-01833-0
- Feb 28 2023 - Victoria Buzz interview on ChatGPT. [1]

9. Organizing Roles and Community Service

Editorial Boards

- 2023–Recommender (editor), Peer Community in Registered Reports
- 2020—Editorial Board Member, Registered Reports co-Chair, Empirical Software Engineering J.
- 2017—Senior Associate Editor, Journal of Systems and Software
- 2018—Open Science Review Board Journal of Empirical Software Engineering

[1] https://www.victoriabuzz.com/2023/03/heres-how-the-use-of-ai-and-chatgpt-could-impact-uv

Community Organizing and Initiatives

- 2024 ICSME Journal First track
- 2023 EDI Co-Chair, ESEM conference
- 2023 RR Track co-chair, ICSME conference
- 2022 Early Career Researchers Track co-chair, ICSA conference
- 2022 Faculty Mentor, Verna Kirkness Foundation Education Program for First Nations, Metis, and Inuit High School Students.
- 2022 Workshop Co-Organizer, Mining Software Repositories for Software Architecture at ECSA.
- 2022 Workshop Organizer, Recruitment of Participants in Empirical SE Research
- 2022 General Chair International Conference on Managing Technical Debt Pittsburgh
- 2021 Registered Reports Track co-Chair ESEM
- 2021 Journal First Track Co-Chair ICPC
- 2021 REFSQ Empirical Studies co-Chair REFSQ 2021 Essen
- 2020 Challenge co-Chair Workshop on Dynamic Software Documentation Adelaide
- 2020 Registered Reports Track co-Chair ICSME
- 2020 Registered Reports Track co-Chair MSR, International Conference on Mining Software Repositories
- 2019 Open Science Initiative Chair International Conference on Empirical Software Engineering
- 2019 Negative Results Track Co-Chair International Conference on Program Comprehension Montreal
- 2019 Industry/Tools Track co-Chair International Conference on Managing Technical Debt Montreal
- 2019 Artifact Track co-Chair International Conference on Requirements Engineering Korea
- 2018 Program co-Chair Canadian Consortium for Software Engineering Research (CSER)
- 2018 Negative Results Track Co-Chair International Conference on Software Analysis, Evolution and Re-engineering Campobasso
- 2018 Program Co-Chair ICSA, International Conference on Software Architecture Seattle
- 2016-18 Steering Committee chair SCAM, International Conference on Source Code Analysis and Manipulation
- 2016,2018 Engineering Track co-Chair SCAM, International Working Conference on Source Code Analysis and Manipulation Raleigh
- 2013-16 Social Media Chair International Requirements Engineering Conference
- 2015 Organizer International Workshop on Just-in-time RE
- 2015 Program co-Chair Seventh International Workshop on Managing Technical Debt, at ICSME Bremen
- 2014 Tutorials chair SATURN, SEI Architecture Technology Users Network Conference
- 2014 Member Workshop Selection Committee International Requirements Engineering Conference
- 2011 Twitter manager International Requirements Engineering Conference
- 2011 Workshop organizer Climate Computing and Applied Software Research
- 2011 Volunteer co-chair International Requirements Engineering Conference

9.1. Conference Program Committees

Conference program committees in Computer Science disciplines are the equivalent of short-term journal editorial boards that exist to peer review high-quality research work.

- 2025 RE technical track
- 2024 US-RSE technical track
- 2024 UK-RSE technical track
- 2025 CHASE technical track
- 2025 ICSE Technical Track
- 2024 RE technical track
- 2024 ICSE Tool Demo track
- 2023 ICSME Technical Track
- 2023 SANER PC Technical Papers Track
- 2022 Artifacts and ROSE festival PC, ICSME
- 2022 Program Committee RE Technical Track
- 2023 ICSME Registered Reports Chair
- 2022 New Ideas track, International Conference on Software Architecture
- 2022 SANER PC Early Research Achievements track
- 2021 Program Committee RE Tools Track
- 2021 Program Committee CHASE Working Conference on Cooperative and Human Aspects of Software Engineering (CHASE)
- 2021,2023, 2024 Program Committee MTD
- 2021 Program Committee ICSA Early Career Researcher Forum
- 2021-2022 Program Committee ICSA, International Conference on Software Architecture
- 2021 Industry Track International Conference on Requirements Engineering
- 2021 Program Committee ICPC
- 2021 Program Committee ICSE NIER, International Conference on Software Engineering New Ideas and Emerging Results invited, declined due to overlap
- 2021-23 Program Committee ICSE, International Conference on Software Engineering
- 2020 Program Committee ASE 2020 Tools Track
- 2020 New Ideas Track International Conference on Software Maintenance and Engineering
- 2020 Artifact Track International Conference on Requirements Engineering
- 2020 Program Committee ICPC, International Conference on Program Comprehension
- 2020 Program Committee ECSA, European Conference on Software Architecture

- 2020-21 Artifacts Committee ICSE, International Conference on Software Engineering
- 2019-20 Program Committee RE, International Conference on Requirements Engineering
- 2019 Program Committee ICSME 2019 Short Papers Track International Conference on Software Maintenance and Evolution
- 2019 Program Committee ASE 2019 Student Research Competition Automated Software Engineering
- 2020 Program Committee FASE 2019 Fundamental Approaches to Software Engineering
- 2019 Program Committee FSE 2019 Tools Track
- 2019-20 Program Committee TechDebt, International Conference on Managing Technical Debt
- 2019 Program Committee ANT-2019 (The 10th International Conference on Ambient Systems, Networks and Technologies)
- 2019-20 Program Committee XP, International Conference on Extreme Programming
- 2019 Negative Results Track PC International Conference on Software Analysis, Evolution and Re-engineering
- 2018 Review Committee ESEM, International Conference on Empirical Software Engineering and Measurement
- 2018 Program Committee ICSME, International Conference on Software Maintenance and Engineering New Ideas track
- 2018 Program Committee RE, International Requirements Engineering Conference RE in Practice track
- 2016,2018/19 Program Committee SCAM, International Working Conference on Source Code Analysis and Manipulation
- 2014,2016 Program Committee MSR, International Working Conference on Mining Software Repositories Data Track
- 2017 Program Committee RE, International Requirements Engineering Conference Data Track
- 2017 Program Committee ICSE, International Conference on Software Engineering SEIP Track
- 2015-16 Program Committee MODELS, International Conference on Model Driven Engineering Languages and Systems
- 9/2016 Review Committee RE, International Requirements Engineering Conference Beijing, China
- 2014-16 Program Committee CAISE, International Conference on Advanced Information Systems Engineering
- 2013 Program committee SATURN, SEI Architecture Users Network Conference

9.2. Journal Reviewing

- Reviewer ACM Trans. on Software Engineering and Methodology
- Reviewer IEEE Transactions on Dependable and Secure Systems
- Reviewer Journal of Systems and Software
- Reviewer IEEE Software Special Issue on Release Engineering
- Reviewer Software Quality Journal
- Reviewer Requirements Engineering Journal
- Reviewer Communications of the ACM
- Reviewer Journal of Geoscientific Model Development

- Reviewer IEEE Transactions on Software Engineering
- Reviewer IEEE Software
- Reviewer Transactions on Management Information Systems
- Reviewer Requirements Engineering Journal

9.3. Grant proposals reviewed

- 2020–present – NSERC Discovery. Review proposals (1-3 per year) for the Discovery program
- 2025 – Hong Kong University. Reviewed 1 draft proposal for national call.
- 2021 – Climate Change AI. Reviewed 4 proposals for the CCAI climate innovation grants program.
- 2020 – Swiss Research Agency. Reviewed 1 proposal for Swiss grants
- 2019,2021, 2022, 2024 – Fall Swedish Foundation for Strategic Research. Reviewed four proposals for the Individual Grants for Future Research Leaders program

9.4. Letters and Tenure Reviews

- Letter for nominee for ACM SIGSOFT Distinguished Educator Award, 2024
- Letter for a candidate for CRC chair, 2024
- Letter for nominee for ACM SIGSOFT Distinguished Educator Award, 2023 (won)

9.5. Visiting scientists hosted

- 2024 Fall – Steve Easterbrook, University of Toronto, Invited Lecture
- 2019 Summer – Martin Robillard, McGill University, Invited lecture
- 2018 Summer – Andreas Vogelsang, TU Berlin, Invited lecture

10. Teaching Duties at the University of Victoria

10.1. Courses Taught

Course numbers starting 1-4 at University of Victoria and BC indicate undergraduate courses; numbers starting with 5 indicate grad courses.

Academic Year	Course and Term	Hours	# students	# TAs
2024/2025	**Research Leave**			
2023/24	CSC 595 Research Skills, Fall	3-0	25	1
2023/24	SENG 480/CSC486D Data Science for Software Engineering, Summer	3-0	50?	2
2022/23	CSC 595 Research Skills, Spring	3-0	25	1
2022/23	SENG 321, Requirements Engineering, Spring	3-3	60	2
2022/23	SENG 480C/CSC586B Data Science for Software Engineering, Fall	3-0	60	1
2021/22	SENG 321, Requirements Engineering*, Spring	3-3	75	1
2021/22	SENG 350, Software Architecture*, Fall	3-3	90	2
2021/22	**SENG 480C/CSC586B Data Science for Software Engineering***, Fall	3-0	65	1
2020/21	**CSC 595 Research Skills**, Spring*	3-0	30	1
2020/21	**SENG 321 Requirements Engineering**, Spring*	3-3	70	2
2020/21	SENG 330 Object Oriented Design and Analysis, Fall*	3-0	53	1
2019/20	SENG 330 Object Oriented Design and Analysis, Spring*	3-0	53	1
2019/20	CSC486b / CSC587b / SENG480D – Documenting and Understanding Software Systems, Fall	3-0	46	1
2019/20	**SENG 350 Software Architecture**, Fall	3-3	50	1
2018/19	CSC486b / CSC587b / SENG480D – Documenting and Understanding Software Systems, Spring	3-0	42	1
2018/19	SENG 330 Object Oriented Design and Analysis	3-0	63	1
2017/18	**CSC486b / CSC587b / SENG480D – Documenting and Understanding Software Systems**, Spring	3-3	42	1
2017/18	**SENG 330 Object Oriented Design and Analysis, Fall**	3-0	82	1
2012/13	UBC CPSC 310 Software Engineering Fall	3-3	~90	4
2011/12	UBC CPSC 310 Software Engineering, Spring	3-0	~80	3
2011/12	UBC CPSC 310 Software Engineering Fall	3-3	~100	4

Bold text indicates first time taught. * indicates Covid-affected. Italics indicates future planned course.

11. Administrative Activities

11.1. University and Faculty Committees

- 2023-2024 University Research Advisory Committee (ex officio as Matrix director)
- Matrix Institute executive committee chair
- 2022-01 Faculty Evaluation Plan Renewal Committee
- 2021-10 University Systems Research Computing Hiring Committee
- 2021-06 Faculty Teaching Awards Committee
- 2017/09-2018/09 Faculty B.Seng Curriculum Committee
- 2018/04-2018/09 Faculty B.Seng Accreditation Committee
- 2018/09 Faculty Chair Search Committee

11.2. Department/School Committees and Responsibilities

- 2024 Black Scholar Appointment Committee
- 2023 Recruitment event, Camosun
- 2023– Department Program Review Committee
- 2022-07 Department ARPT Associate Professor Promotion Committee, Reappointment Committee, Promotion to Associate Teaching Professor Committee
- 2022-01 Department Strategic Planning Committee
- 2020/2021 ATP hiring committee
- 2019– Departmental graduate committee
- 2019-2020 Subcommitee chair, ARPT Software Subcommittee
- 2017/09– Department Advancement, Recruitment, Tenure and Promotion Committee
- 02/2018 Department Interaction Design Recruitment Subcommittee
- 02/2019 Department Interdisciplinary Recruitment Subcommittee
- 09/2019 Department Graduate Awards Committee
- 11/2020 SENG representative, Recruitment Open House