Luciano Marchezan, Dr.

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Summary

Has experience in Computer Science, focusing on Software Engineering.
Graduated as Software Engineer at Universidade Federal do Pampa (UNIPAMPA) - Campus Alegrete. Obtained the Ph.D. diploma at the Institute of Software Systems Engineering (ISSE) at the Johannes Kepler University (JKU), supervised by Prof. Dr. Alexander Egyed. Finished Master Degree in Software Engineering at Universidade Federal do Pampa - Campus Alegrete in 2020. Worked for 5 years at the Laboratory of Empirical Studies in Software Engineering (LESSE) as a researcher on the topics of Software Product Lines with a focus on Re-engineering.
Currently, a Post Doctoral Researcher at the Institute of Software Systems Engineering (ISSE) at Johannes Kepler University Austria. The current research includes Model-Driven Software Engineering, Automated Software Engineering, Software Reuse, and Empirical Software Engineering

Employment History

2023 – · · ·	**University Assistant/Postdoc Researcher** - Institute of Software Systems Engineering - Johannes Kepler University, Linz, Austria
2020 – 2023	**University Assistant/Predoc Researcher** - Institute of Software Systems Engineering - Johannes Kepler University, Linz, Austria
2019 – 2020	**Full Stack Developer** - Capataz, Sustainable Livestock, Alegrete RS - Brazil.
	Full Stack Developer - EletroVirtual, Alegrete RS - Brazil.
2017 – 2017	**Full Stack Developer** - Porthal Sistemas, Alegrete RS - Brazil.
2014 – 2014	**Front End Developer** - GreenWays2Go, Chigao IL - USA.

Education

2021 – 2023	**Ph.D. Computer Science** at Johannes Kepler University, Linz, Austria. Thesis title: *Improving Consistency Maintenance for Collaborative Software Systems Engineering.*
2019 – 2020	**M.Sc. Software Engineering,** at Universidade Federal do Pampa, Alegrete, Brazil. Thesis title: *PAxSPL: A generic framework to support the planning of SPL reengineering.*
2012 – 2018	**B.Sc. Software Engineering,** at Universidade Federal do Pampa, Alegrete, Brazil. Thesis title: *PAxSPL: a Feature Retrieval Process for Software Product Line Re-engineering.*

Research Publications

Journal Articles

1. E. Herac, L. Marchezan, W. K. G. Assunção, and A. Egyed, "Conflict-based change awareness for collaborative model-driven software engineering," *Journal of Object Technology*, vol. 23, no. 3, pp. 1–14, Jul. 2024, The 20th European Conference on Modelling Foundations and Applications (ECMFA 2024), ISSN: 1660-1769. DOI: 10.5381/jot.2024.23.3.a7.
2. C. Mayr-Dorn, C.-C. Ratiu, L. Marchezan, F. Keplinger, A. Egyed, and G. Walden, "Actionable light-weight process guidance," *Journal of Systems and Software*, vol. 214, p. 112 064, 2024, ISSN: 0164-1212. DOI: https://doi.org/10.1016/j.jss.2024.112064.

3 L. Marchezan, R. Kretschmer, W. Assunção, A. Reder, and A. Egyed, "Generating repairs for inconsistent models," *Software and Systems Modeling*, 2022, ISSN: 16191374. DOI: 10.1007/s10270-022-00996-0.

4 L. Marchezan, E. Rodrigues, W. Assunção, M. Bernardino, F. Basso, and J. Carbonell, "Software product line scoping: A systematic literature review," *Journal of Systems and Software*, vol. 186, 2022, ISSN: 01641212. DOI: 10.1016/j.jss.2021.111189.

5 M. Tröls, L. Marchezan, A. Mashkoor, and A. Egyed, "Instant and global consistency checking during collaborative engineering," *Software and Systems Modeling*, vol. 21, 6 2022, ISSN: 16191374. DOI: 10.1007/s10270-022-00984-4.

6 A. Iung, J. Carbonell, L. Marchezan, *et al.*, "Systematic mapping study on domain-specific language development tools," *Empirical Software Engineering*, vol. 25, 5 2020, ISSN: 15737616. DOI: 10.1007/s10664-020-09872-1.

7 L. Marchezan, E. M. Rodrigues, M. Bernardino, and F. P. Basso, "PAxSPL: A feature retrieval process for software product line reengineering," *Software - Practice and Experience*, vol. 49, 8 2019, ISSN: 1097024X. DOI: 10.1002/spe.2707.

8 M. Bernardino, E. Rodrigues, A. Zorzo, and L. Marchezan, "Systematic mapping study on mbt: Tools and models," *IET Software*, vol. 11, 4 2017, ISSN: 17518806. DOI: 10.1049/iet-sen.2015.0154.

Conference Proceedings

1 W. K. G. Assunção, L. Marchezan, A. Egyed, and R. Ramler, "Contemporary software modernization: Perspectives and challenges to deal with legacy systems," in *2030 Software Engineering*, 2024. eprint: 2407.04017. URL: https://arxiv.org/abs/2407.04017.

2 M. Homolka, L. Marchezan, W. K. Assunçao, and A. Egyed, ""What Happened to my Models?" History-Aware Co-Existence and Co-Evolution of Metamodels and Models," in *International Conference on Software Maintenance and Evolution (ICSME)*, 2024.

3 M. Homolka, L. Marchezan, W. K. Assunção, and A. Egyed, ""don't touch my model!" towards managing model history and versions during metamodel evolution," in *2024 IEEE/ACM 45th International Conference on Software Engineering: New Ideas and Emerging Results (ICSE-NIER)*, 2024.

4 L. Marchezan, W. K. Assunçao, E. Herac, S. Shafiq, and A. Egyed, "Exploring dependencies among inconsistencies to enhance the consistency maintenance of models," in *IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)*, 2024.

5 E. Herac, W. Assunção, L. Marchezan, R. Haas, and A. Egyed, "A flexible operation-based infrastructure for collaborative model-driven engineering," 2, The 19th European Conference on Modelling Foundations and Applications (ECMFA 2023), vol. 22, Jul. 2023, 2:1–14. DOI: 10.5381/jot.2023.22.2.a5.

6 L. Marchezan, W. K. G. Assunção, E. Herac, F. Keplinger, A. Egyed, and C. Lauwerys, "Fulfilling industrial needs for consistency among engineering artifacts," in *2023 IEEE/ACM 45th International Conference on Software Engineering: Software Engineering in Practice (ICSE-SEIP)*, 2023, pp. 246–257. DOI: 10.1109/ICSE-SEIP58684.2023.00028.

7 L. Marchezan, W. K. G. Assunção, G. K. Michelon, and A. Egyed, "Do developers benefit from recommendations when repairing inconsistent design models? a controlled experiment," in *Proceedings of the 27th International Conference on Evaluation and Assessment in Software Engineering*, ser. EASE '23, Oulu, Finland: Association for Computing Machinery, 2023, pp. 131–140, ISBN: 9798400700446. DOI: 10.1145/3593434.3593482.

8 L. Marchezan, W. K. G. Assuncao, R. Kretschmer, and A. Egyed, "Change-oriented repair propagation," in *Proceedings of the International Conference on Software and System Processes and International*

Conference on Global Software Engineering, ser. ICSSP'22, Pittsburgh, PA, USA: Association for Computing Machinery, 2022, pp. 82–92, ISBN: 9781450396745. DOI: 10.1145/3529320.3529330.

9 L. Marchezan, W. K. G. Assunção, G. Michelon, E. Herac, and A. Egyed, "Code smell analysis in cloned java variants: The apo-games case study," in *Proceedings of the 26th ACM International Systems and Software Product Line Conference - Volume A*, ser. SPLC '22, Graz, Austria: Association for Computing Machinery, 2022, pp. 250–254, ISBN: 9781450394437. DOI: 10.1145/3546932.3547015.

10 L. Marchezan, W. Assunção, J. Carbonell, E. Rodrigues, M. Bernardino, and F. Basso, "SPLReePlan - Automated Support for Software Product Line Reengineering Planning," in *15th Brazilian Symposium on Software Components, Architectures, and Reuse*, ser. SBCARS '21, Joinville, Brazil, 2021, pp. 1–10, ISBN: 9781450384193. DOI: 10.1145/3483899.3483902.

11 L. Marchezan, J. Carbonell, E. Rodrigues, M. Bernardino, F. P. Basso, and W. K. G. Assunção, "Enhancing the Feature Retrieval Process with Scoping and Tool Support: PAxSPL_v2," in *Proceedings of the 24th ACM International Systems and Software Product Line Conference - Volume B*, ser. SPLC '20, Montreal, QC, Canada: Association for Computing Machinery, 2020, pp. 29–36, ISBN: 9781450375702. DOI: 10.1145/3382026.3425767.

12 L. Marchezan, G. Bolfe, E. Rodrigues, M. Bernardino, and F. P. Basso, "Thoth: A web-based tool to support systematic reviews," in *2019 ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)*, 2019, pp. 1–6. DOI: 10.1109/ESEM.2019.8870160.

13 L. Marchezan, E. Rodrigues, M. Bernardino, and F. P. Basso, "A customizable spl scoping process for spl reengineering," in *Anais da III Escola Regional de Engenharia de Software*, SBC, 2019, pp. 137–146.

14 J. Carbonelli, L. Marchezan, A. Neto, E. Rodrigues, M. Bernardino, and Y. Lima, "Analyzing the impact of the search phase in a systematic mapping study," in *Anais da II Escola Regional de Engenharia de Software*, SBC, 2018, pp. 33–40.

15 J. P. S. da Silva, M. Ecar, M. S. Pimenta, G. T. A. Guedes, L. P. Franz, and L. Marchezan, "A systematic literature review of uml-based domain-specific modeling languages for self-adaptive systems," in *Proceedings of the 13th International Conference on Software Engineering for Adaptive and Self-Managing Systems*, ser. SEAMS '18, Gothenburg, Sweden: Association for Computing Machinery, 2018, pp. 87–93, ISBN: 9781450357159. DOI: 10.1145/3194133.3194136.

16 L. Marchezan, E. Rodrigues, M. Bernardino, M. Laser, and F. Lima, "Towards a generic process for spl re-engineering," in *Anais da I Escola Regional de Engenharia de Software*, SBC, 2017, pp. 1–8.

Books and Chapters

1 L. Marchezan, E. Rodrigues, J. Carbonell, M. Bernardino, F. P. Basso, and W. K. Assunção, "PAxSPL: A Framework for Aiding SPL Reengineering Planning," in *Handbook of Re-Engineering Software Intensive Systems into Software Product Lines*, Springer, 2022, pp. 319–353.

2 E. M. Rodrigues, A. F. Zorzo, and L. Marchezan, "PLeTs: A Software Product Line for Testing Tools," in *UML-Based Software Product Line Engineering with SMarty*, Springer, 2022, pp. 315–334.

Teaching

Johannes Kepler University

2024 343.301 Techniques of Presentation and Team Work (AI for Software Engineering) (3 credits)

343.350 Engineering of AI-intensive Systems (3 credits)

343.008 Model-driven Engineering (3 credits)

343.006 Seminar in Software Engineering (History and Evolution of Software Artifacts) (3 credits)

2023 343.006 Seminar in Software Engineering (AI-driven Software Systems) (3 credits)

Teaching (continued)

	343.001 Software Engineering (Exercises) (3 credits)
	343.302 Software Engineering (Exercises) (3 credits)
	343.006 Seminar in Software Engineering (Software Modernization) (3 credits)
2022	343.309 Software Engineering (Exercises) (3 credits)
	343.006 Seminar in Software Engineering (Software Modernization) (3 credits)
2021	343.309 Software Engineering (Exercises) (3 credits)
	343.006 Seminar in Software Engineering (Recommendation Systems for SE) (3 credits)

Skills

Languages	Strong reading, writing and speaking competencies for English and Portuguese.
Coding	Java, Dart, PHP, C#, Python, LaTeX.
Databases	Cloud Firestore, MySQL, PostgreSQL.
Web Dev	JavaScript, HTML, CSS, Apache Web Server, Tomcat Web Server.
Modeling.	UML, Feature models, ER.
Technologies	GitHub, Bitbucket, Jira, Laravel, Flutter, Firebase, Eclipse Modeling Fraemework.
Misc.	Academic research, teaching, LaTeX typesetting and publishing.

Miscellaneous Experience

Organization

2024 – · · · International workshop on collaborative and participatory modeling (MODELS co-located workshop)

Reviews for Journals

2022 – · · · Journal of Software: Evolution and Process

2023 – · · · Journal of Systems and Software

2024 – · · · Automated Software Engineering

Software and Systems Modeling

Reviews for Conferences and Workshops

2023 – · · · Re:Volution (SPLC co-located workshop)

2024 – · · · First International Workshop on Model Management (MODELS co-located workshop)

Awards and Achievements

2024	**Distinguished Paper Award**, SANER 2024.
2022	**SoSym-First Paper Award**, MODELS 2022.
	Best Paper Award, ICSSP/ICGSE 2022.
2021	**Best Master Thesis**, Software Engineering Doctoral and Master Theses Competition - Brazil.
2019	**Student with the most outstanding performance in the Software Engineering Masters Course**, Universidade Federal do Pampa.
2018	**Student with the most outstanding performance in the Software Engineering Undergraduate Course**, Universidade Federal do Pampa.
2016	**Student with the most outstanding performance in the Software Engineering Undergraduate Course**, Universidade Federal do Pampa.

Miscellaneous Experience (continued)

2014 **Dean's List Certificate**, Illinois Institute of Technology School of Applied Technology.

References

Available on Request