

THI NGOC TRANG TRAN

Senior Postdoctoral Researcher

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RESEARCH INTERESTS

Recommender Systems; Group Recommender Systems; Human-Centered Explanations; Human Decision-Making and Cognitive Biases; Intelligent User Interfaces; Constraint-Based Recommendation and Configuration Systems; Large Language Models for Software Engineering.

EDUCATION

Graz University of Technology <i>Ph.D. in Computer Science</i>	Graz, Austria 2015 – 2019
College of Sciences, Hue University <i>Master of Computer Science</i>	Hue, Vietnam 2006 – 2008
College of Sciences, Hue University <i>Bachelor of Computer Science</i>	Hue, Vietnam 2000 – 2004

EMPLOYMENT

Graz University of Technology <i>Senior Postdoctoral Researcher / University Assistant with Doctorate, Institute of Software Engineering and AI</i>	Graz, Austria since 2019
Hue University <i>Lecturer, Dept. of Information Technology and Communication, School of Hospitality and Tourism</i>	Hue, Vietnam 2009 – 2015
Hue University <i>Project Assistant, Center of Information Technology</i>	Hue, Vietnam 2004 – 2008

GRANTS & AWARDS

Nominated for Best Teaching, course <i>Introduction to Structured Programming</i> , TU Graz	2023 & 2024
ACM UMAP 2019 — SIGCHI Student Travel Grant	2019
Best Paper Award — Configuration Workshop 2018 (ConfWS'2018)	2018
Best Paper Award — SEKE'2017	2017
Runner-up Best Paper Award — Configuration Workshop 2016 (ConfWS'2016)	2016
Vietnamese–Austrian Doctoral Grant (Vietnamese Government & OeAD, Austria)	2015 – 2019
Recognition among the top Bachelor's graduates in Computer Science	2004
Odon-Vallet Grant for excellent Computer Science students	2003

SELECTED PUBLICATIONS

Below is a selection of my peer-reviewed publications. According to [Google Scholar](#) (August 2026): **2,495 citations**, h-index **23**, i10-index **38**. My full and up-to-date list of publications is available on [Google Scholar](#).

2026

Thi Ngoc Trang Tran, Viet-Man Le, Alexander Felfernig, Sebastian Lubos, Thi Minh Ngoc Chau, Li Chen, Gerhard Leitner, Mehrdad Rostami, Amir Mollazadeh. *How Cultural Background and Cognitive Style Shape Responses to Sustainability-Aware Explanations in Healthy Food Recommender Systems*. *ACM International Conference on Information and Knowledge Management (CIKM 2026)* — just accepted. **CORE A**.

Thi Ngoc Trang Tran, Sebastian Lubos, Alexander Felfernig, Mehrdad Rostami, Viet-Man Le, Damian Garber. *When Do Contrastive Explanations Really Matter in Recommender Systems?*. *ACM Conference on Recommender Systems (RecSys 2026)* — just accepted. **CORE A**.

Alexander Felfernig, Damian Garber, Viet-Man Le, Sebastian Lubos, **Thi Ngoc Trang Tran**. *Sustainability Evaluation Metrics for Recommender Systems. Recommender Systems for Sustainability and Social Good*, pp. 14–26. [DOI](#)

2025

Alexander Felfernig, Damian Garber, Sebastian Lubos, **Thi Ngoc Trang Tran**. *Sustainability Evaluation Metrics for Configuration Systems. 27th International Workshop on Configuration (ConfWS 2025)*, co-located with ECAI 2025. CEUR-WS, vol. 4149, pp. 192–198. [PDF](#)

Alexander Felfernig, Damian Garber, Viet-Man Le, Sebastian Lubos, **Thi Ngoc Trang Tran**. *Towards LLM-Enhanced Product Line Scoping. 27th International Workshop on Configuration (ConfWS 2025)*, co-located with ECAI 2025. CEUR-WS, vol. 4149, pp. 128–134. [PDF](#)

Sebastian Lubos, **Thi Ngoc Trang Tran**, Viet-Man Le, Damian Garber, Manuel Henrich, Reinhard Willfort, Jeremias Fuchs. *Towards LLM-Enhanced Group Recommender Systems. 12th Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS 2025)*, co-located with RecSys 2025. CEUR-WS, vol. 4027. [PDF](#)

Sebastian Lubos, Alexander Felfernig, Damian Garber, Viet-Man Le, **Thi Ngoc Trang Tran**. *Towards LLM-Based Usability Analysis for Recommender User Interfaces. 12th Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS 2025)*, co-located with RecSys 2025. CEUR-WS, vol. 4027. [PDF](#)

2024

Thi Ngoc Trang Tran, Seda Polat Erdeniz, Alexander Felfernig, Sebastian Lubos, Merfat El Mansi, Viet-Man Le. *Less Is More: Towards Sustainability-Aware Persuasive Explanations in Recommender Systems. 18th ACM Conference on Recommender Systems. RecSys '24*. ACM, pp. 1108–1112. **CORE A**. [DOI](#)

Sebastian Lubos, **Thi Ngoc Trang Tran**, Alexander Felfernig, Seda Polat Erdeniz, Viet-Man Le. *LLM-generated Explanations for Recommender Systems. Adjunct Proceedings of the 32nd ACM Conference on User Modeling, Adaptation and Personalization. UMAP '24 Adjunct*. ACM, pp. 276–285. [DOI](#)

Sebastian Lubos, Alexander Felfernig, **Thi Ngoc Trang Tran**, Damian Garber, Merfat El Mansi, Seda Polat Erdeniz, Viet-Man Le. *Leveraging LLMs for the Quality Assurance of Software Requirements. 2024 IEEE 32nd International Requirements Engineering Conference (RE)*, pp. 389–397. [DOI](#)

Alexander Felfernig, Manfred Wundara, **Thi Ngoc Trang Tran**, Viet-Man Le, Sebastian Lubos, Seda Polat-Erdeniz. *Sports Recommender Systems: Overview and Research Directions. Journal of Intelligent Information Systems*, vol. 62, no. 4, pp. 1125–1164. [DOI](#)

Viet-Man Le, Alexander Felfernig, **Thi Ngoc Trang Tran**, Mathias Uta. *InformedQX: Informed Conflict Detection for Over-Constrained Problems. Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 38, no. 9, pp. 10616–10623. **CORE A***. [DOI](#)

Mathias Uta, Alexander Felfernig, Viet-Man Le, **Thi Ngoc Trang Tran**, Damian Garber, Sebastian Lubos, Tamim Burgstaller. *Knowledge-based recommender systems: overview and research directions. Frontiers in Big Data*, vol. 7. [DOI](#)

2023

Seda Polat Erdeniz, **Thi Ngoc Trang Tran**, Alexander Felfernig, Sebastian Lubos, Michael Schrempf, Diether Kramer, Peter P. Rainer. *Employing Nudge Theory and Persuasive Principles with Explainable AI in Clinical Decision Support. 2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*, pp. 2983–2989. [DOI](#)

Alexander Felfernig, Manfred Wundara, **Thi Ngoc Trang Tran**, Seda Polat-Erdeniz, Sebastian Lubos, Merfat El Mansi, Damian Garber, Viet-Man Le. *Recommender systems for sustainability: overview and research issues. Frontiers in Big Data*, vol. 6. [DOI](#)

Thi Ngoc Trang Tran, Alexander Felfernig, Viet Man Le. *An Overview of Consensus Models for Group Decision-Making and Group Recommender Systems. User Modeling and User-Adapted Interaction*, vol. 34, no. 3, pp. 489–547. [DOI](#)

Tamim Burgstaller, Viet-Man Le, **Thi Ngoc Trang Tran**, Alexander Felfernig. *FMTESTING: A FEATUREIDE Plug-in for Automated Feature Model Analysis and Diagnosis. ECAI 2023*. [DOI](#)

Sebastian Lubos, **Thi Ngoc Trang Tran**, Seda Polat Erdeniz, Merfat El Mansi, Alexander Felfernig, Manfred Wundara, Gerhard Leitner. *Concentrating on the Impact: Consequence-based Explanations in Recommender Systems. 10th Joint Workshop on Interfaces and Human Decision Making for Recommender Systems (IntRS 2023)*, co-located with RecSys 2023. CEUR-WS, vol. 3534. [PDF](#)

Sebastian Lubos, Alexander Felfernig, Viet-Man Le, **Thi Ngoc Trang Tran**, David Benavides, José A. Zamudio, Damian Garber. *Analysis Operations On The Run: Feature Model Analysis in Constraint-based Recommender Systems. Proceedings of the 27th ACM International Systems and Software Product Line Conference - Volume A. SPLC '23*. ACM, pp. 111–116. [DOI](#)

Thi Ngoc Trang Tran, Alexander Felfernig, Viet Man Le, Thi Minh Ngoc Chau, Thu Giang Mai. *User Needs for Explanations of Recommendations: In-Depth Analyses of the Role of Item Domain and Personal Characteristics. Proceedings of the 31st ACM Conference on User Modeling, Adaptation and Personalization. UMAP '23*. ACM, pp. 54–65. **CORE A**. [DOI](#)

Viet-Man Le, Cristian Vidal Silva, Alexander Felfernig, David Benavides, José Galindo, **Thi Ngoc Trang Tran**. *FastDiagP: An Algorithm for Parallelized Direct Diagnosis. Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 37, no. 5, pp. 6442–6449. **CORE A***. [DOI](#)

2022

Viet-Man Le, Alexander Felfernig, Mathias Uta, **Thi Ngoc Trang Tran**, Cristian Vidal Silva. *Wipe-OutR: Automated Redundancy Detection for Feature Models. Proceedings of the 26th ACM International Systems and Software Product Line Conference - Volume A. SPLC '22*. ACM, pp. 164–169. [DOI](#)

Viet-Man Le, **Thi Ngoc Trang Tran**, Alexander Felfernig. *Consistency-based integration of multi-stakeholder recommender systems with feature model configuration. Proceedings of the 26th ACM International Systems and Software Product Line Conference - Volume B. SPLC '22*. ACM, pp. 178–182. [DOI](#)

Viet-Man Le, Alexander Felfernig, **Thi Ngoc Trang Tran**. *Test case aggregation for efficient feature model testing. Proceedings of the 26th ACM International Systems and Software Product Line Conference - Volume B. SPLC '22*. ACM, pp. 174–177. [DOI](#)

Seda Polat Erdeniz, Sai Veeranki, Michael Schrempf, Stefanie Jauk, **Thi Ngoc Trang Tran**, Alexander Felfernig, Diether Kramer, Werner Leodolter. *Explaining Machine Learning Predictions of Decision Support Systems in Healthcare. Current Directions in Biomedical Engineering*, vol. 8, no. 2, pp. 117–120. [DOI](#)

2021

Müslüm Atas, Alexander Felfernig, Seda Polat-Erdeniz, Andrei Popescu, **Thi Ngoc Trang Tran**, Mathias Uta. *Towards psychology-aware preference construction in recommender systems: Overview and research issues. Journal of Intelligent Information Systems*, vol. 57, no. 3, pp. 467–489. [DOI](#)

Thi Ngoc Trang Tran, Viet Man Le, Muesluem Atas, Alexander Felfernig, Martin Stettinger, Andrei Popescu. *Do Users Appreciate Explanations of Recommendations? An Analysis in the Movie Domain. Fifteenth ACM Conference on Recommender Systems. RecSys '21*. ACM, pp. 645–650. **CORE A**. [DOI](#)

Mathias Uta, Alexander Felfernig, Viet-Man Le, Andrei Popescu, **Thi Ngoc Trang Tran**, Denis Helic. *Evaluating recommender systems in feature model configuration. Proceedings of the 25th ACM International Systems and Software Product Line Conference - Volume A. SPLC '21*. ACM, pp. 58–63. [DOI](#)

Viet-Man Le, Alexander Felfernig, **Thi Ngoc Trang Tran**, Müslüm Atas, Mathias Uta, David Benavides, José Galindo. *DirectDebug: A software package for the automated testing and debugging of*

feature models. Software Impacts, vol. 9, p. 100085. [DOI](#)

Elisabeth Lex, Dominik Kowald, Paul Seitlinger, **Thi Ngoc Trang Tran**, Alexander Felfernig, Markus Schedl. *Psychology-Informed Recommender Systems. Foundations and Trends® in Information Retrieval*, vol. 15, no. 2, pp. 134–242. [DOI](#)

Thi Ngoc Trang Tran, Alexander Felfernig, Nava Tintarev. *Humanized Recommender Systems: State-of-the-Art and Research Issues. ACM Transactions on Interactive Intelligent Systems*, vol. 11, no. 2, pp. 1–41. [DOI](#)

Viet-Man Le, Alexander Felfernig, Mathias Uta, David Benavides, José Galindo, **Thi Ngoc Trang Tran**. *DirectDebug: Automated Testing and Debugging of Feature Models. 2021 IEEE/ACM 43rd International Conference on Software Engineering: New Ideas and Emerging Results (ICSE-NIER)*, pp. 81–85. **CORE A***. [DOI](#)

Viet-Man Le, **Thi Ngoc Trang Tran**, Alexander Felfernig. *A Conversion of Feature Models into an Executable Representation in Microsoft Excel. Intelligent Systems in Industrial Applications*, pp. 153–168. [DOI](#)

2020

Thi Ngoc Trang Tran, Alexander Felfernig, Christoph Trattner, Andreas Holzinger. *Recommender Systems in the Healthcare Domain: State-of-the-Art and Research Issues. Journal of Intelligent Information Systems*, vol. 57, no. 1, pp. 171–201. [DOI](#)

Stettinger Martin, **Thi Ngoc Trang Tran**, Pribik Ingo, Leitner Gerhard, Felfernig Alexander, Samer Ralph, Atas Müslüm, Wundara Manfred. *KNOWLEDGECHECKR: Intelligent Techniques for Counteracting Forgetting. ECAI 2020*. [DOI](#)

2019

Seda Polat Erdeniz, Andreas Menychtas, Ilias Maglogiannis, Alexander Felfernig, **Thi Ngoc Trang Tran**. *Recommender systems for IoT enabled quantified-self applications. Evolving Systems*, vol. 11, no. 2, pp. 291–304. [DOI](#)

Muesluem Atas, Ralph Samer, Alexander Felfernig, **Thi Ngoc Trang Tran**, Seda Polat Erdeniz, Martin Stettinger. *Socially-Aware Diagnosis for Constraint-Based Recommendation. Proceedings of the 27th ACM Conference on User Modeling, Adaptation and Personalization. UMAP '19. ACM*, pp. 121–129. [DOI](#)

Thi Ngoc Trang Tran, Müslüm Atas, Alexander Felfernig, Viet Man Le, Ralph Samer, Martin Stettinger. *Towards Social Choice-Based Explanations in Group Recommender Systems. Proceedings of the 27th ACM Conference on User Modeling, Adaptation and Personalization. UMAP '19. ACM*, pp. 13–21. **CORE A**. [DOI](#)

Thi Ngoc Trang Tran, Alexander Felfernig, Viet Man Le, Müslüm Atas, Martin Stettinger, Ralph Samer. *User Interfaces for Counteracting Decision Manipulation in Group Recommender Systems. Adjunct Publication of the 27th Conference on User Modeling, Adaptation and Personalization. UMAP '19 Adjunct. ACM*, pp. 93–98. [DOI](#)

Muesluem Atas, **Thi Ngoc Trang Tran**, Alexander Felfernig, Seda Polat Erdeniz, Ralph Samer, Martin Stettinger. *Towards Similarity-Aware Constraint-Based Recommendation. Advances and Trends in Artificial Intelligence. From Theory to Practice*, pp. 287–299. [DOI](#)

2018

Müslüm Atas, **Thi Ngoc Trang Tran**, Ralph Samer, Alexander Felfernig, Martin Stettinger, Davide Fucci. *Liquid Democracy in Group-based Configuration. 20th International Configuration Workshop (ConfWS 2018), CEUR-WS*, vol. 2220, pp. 93–98 — **Best Paper Award**. [PDF](#)

Thi Ngoc Trang Tran, Müslüm Atas, Alexander Felfernig, Ralph Samer, Martin Stettinger. *Investigating Serial Position Effects in Sequential Group Decision Making. Proceedings of the 26th Conference on User Modeling, Adaptation and Personalization. UMAP '18. ACM*, pp. 239–243. **CORE A**. [DOI](#)

Muesluem Atas, Stefan Reiterer, Alexander Felfernig, **Thi Ngoc Trang Tran**, Martin Stettinger. *Polarization Effects in Group Decisions. Adjunct Publication of the 26th Conference on User Modeling,*

Adaptation and Personalization. UMAP '18. ACM, pp. 305–310. [DOI](#)

Muesluem Atas, **Thi Ngoc Trang Tran**, Alexander Felfernig, Ralph Samer. *Socially-Aware Recommendation for Over-Constrained Problems*. *Recent Trends and Future Technology in Applied Intelligence*, pp. 267–278. [DOI](#)

Alexander Felfernig, Nava Tintarev, **Thi Ngoc Trang Tran**, Martin Stettinger. *Explanations for Groups*. *Group Recommender Systems: An Introduction*, pp. 105–126. [DOI](#)

2017

Thi Ngoc Trang Tran, Müslüm Atas, Alexander Felfernig, Martin Stettinger. *An Overview of Recommender Systems in the Healthy Food Domain*. *Journal of Intelligent Information Systems*, vol. 50, no. 3, pp. 501–526. [DOI](#)

TEACHING

Responsible for organizing and/or lecturing the following courses at TU Graz:

- **Recommender Systems** — fundamentals and algorithms: content-based and collaborative filtering (matrix factorization), hybrid, knowledge-based, and group recommendation; plus LLMs in recommenders, explanations, evaluation, and biases.
- **Configuration Systems** — state-of-the-art configuration knowledge representation, interacting with configurators, and intelligent testing/debugging of configuration knowledge bases.
- **Object-Oriented Analysis and Design** — requirements engineering, class diagrams, state charts, object-relational mapping, design patterns, automated testing, and software design principles.
- **Introduction to Structured Programming** — foundational programming concepts and techniques.
- **Software Development Process** — software process models, high-quality requirements, prioritization, and effort estimation.
- **Explanations in Artificial Intelligence** — theoretical foundations of explainability in logic-based and sub-symbolic AI systems.

BACHELOR AND MASTER THESIS SUPERVISION

- Co-supervisor, Master thesis *Application of Large Language Models in Usability Testing of Recommender Systems* (2025).
- Co-supervisor, Master thesis *Decision Biases in Food Recommendation Systems* (2023).
- Supervisor, Bachelor thesis *The Impacts of Primacy/Recency Effects on Item Review Sentiment Analysis* — published at IntRS'22, Seattle, USA.
- Supervisor, Bachelor thesis *The Immunity of Users' Item Selection from Serial Position Effects in Multi-Attribute Item Recommendation Scenarios* — published at IntRS'21, Amsterdam.

PROJECT EXPERIENCES

- **HUMAX** — *Human Factors-Enhanced Explanations in Recommender Systems* (FWF, WEAVE call). Principal Investigator and leader, in collaboration with Prof. Marko Tkalčič (University of Primorska, Slovenia). Submitted 2024; received very positive reviews (C2); under revision for resubmission.
- **GenRE** — analysing how Large Language Models improve requirements engineering tasks (definition, quality assurance, reuse, prioritization).
- **OpenSpace** — automated analysis of software variability models and test-case generation; ML-based identification of faulty components and suboptimal parameter configurations.
- **ParXCel** — ML techniques to enhance constraint-solving performance and prediction quality, with parallelized analysis operations.
- **WEWANT** (FFG no. 850702) — configuration technologies and decision-making support for user groups.

SCIENTIFIC COMMUNITY ACTIVITIES

Conference and Workshop Organisation Local Chair at [SPLC'2022](#) and ConfWS'2022.

Program Committee & Reviewing UMAP'2026; CHI'2023; FinRec'2022; IntRS'2022; UMAP'2022; UMAP'2021; CHI'2021; Journal of Intelligent Information Systems (JIIS).

TECHNICAL SKILLS

- **Programming Languages:** Java, JavaScript, PHP, Python
- **Databases:** MySQL, SQL Server
- **Languages:** Vietnamese (native), English (fluent), German (A2-B1)