ALINA HERDERICH

University of Graz, Idea Lab Group Data Analysis | Research Assistant

[Graz University of Technology, Institute of Human-Centered Computing | PhD Candidate]

[Harvard Business School, Digital Emotions Lab (Goldenberg Lab) | Visiting Fellow]

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EDUCATION

2021 - today	**PhD (Dr. rer. nat.) Computer Science** Graz University of Technology, Institute of Human-Centered Computing, Computational Social Science Lab Austria Advisor: Prof. David Garcia Thesis: Computational Approaches to Human Behavior: From Emotion Regulation to Hate Speech Date of defense: 23rd June 2025
2019 - 2020	**Computer Science Certificate** (25 ECTS), Route 63 Graz University of Technology Grade: 1.0 (12th March 2020)
2018 - 2020	**M.Sc. Psychology** University of Graz Advisor: Prof. Harald Freudenthaler Thesis: How Does Flexibility in Emotion Regulation Relate to Dimensions of Adaptivity? Development and Validation of a New Measure for ER Repertoire and Flexibility. Grade: 1.1 (30th September 2020)
2016 - 2018	**B.Sc. Psychology** University of Graz Grade: 1.3 (19th March 2018)
2013	**Chinese Language & Culture Studies** (20 ECTS), exchange semester Shanghai Normal University Grade: 90/100
2011 - 2015	**B.Sc. Business Psychology & Economics** University of Lüneburg Grade: 1.5 (24th March 2015)
2011	**Abitur** (German university entrance qualification) Albert-Schweitzer-Gymnasium Crailsheim Grade: 1.0 (07th July 2011)

QUALIFICATIONS

Natural Languages	German (mother tongue), English (C1), Chinese (B2), French & Spanish (~A2)
Programming Languages	Python, SQL

Prizes	High-School Diploma Prize of the German Mathematical Association

RESEARCH EXPERIENCE

2025 - today	**Doctoral Researcher @IDea_Lab**, University of Graz
09/2023 - 08/2024	**Visiting Fellow @Goldenberg Lab, Harvard**, Cambridge, Massachusetts, USA Research projects: Developing a taxonomy of reappraisal types, and investigating the reappraisal ability of large language models (GPT) against humans, supported by various scholarships (see *Funding*)
2021 - 2024	**Doctoral Researcher @Institute of Human-Centered Computing**, Graz University of Technology
2021 - today	**Cooperation** with **Prof. Mirta Galesic @Santa Fe Institute**, New Mexico, USA Research project on the effectiveness of counter speech strategies in online political discourse under the NSF grant *Exploration-exploitation tradeoff and opinion diversity in real-world groups* (Award ID: 1757211)
2018	**Research Internship** (3 months) Charité Universitätsmedizin Berlin, Department of Anesthesiology and Operative Intensive Care Medicine (CCM/CVK) Biomarker Development for Postoperative Cognitive Impairment in the Elderly (www.biocog.eu)

TALKS & WORKSHOPS

03/2025	**German Physical Society (DPG), Spring Meeting Regensburg 2025** Condensed Matter Section, invited talk *When networks can think: The meaning of self-regulation in the presence of humans*
02/2025	**AI and Counter-Speech: An Interdisciplinary Workshop** on User-Centered and Ethical Detection and Interventions at Scale, invited talk and participant Bavarian Research Institute for Digital Transformation (bidt) @LMU Munich *Counter speech: Fighting windmills?*
07/2024	**International Conference for Computational Social Science (IC2S2) 2024** *A computational method to reveal psychological constructs from text data*
03/2024	**Annual Conference of the Society for Affective Science (SAS) 2024**, symposium presentation, symposium chair *Inferring a data-driven taxonomy of emotion regulation strategies with computational methods*, in: Understanding affective experiences with natural language processing
02/2024	**Annual Convention of the Society of Personality and Social Psychology (SPSP) 2024**, poster presentation *Inferring a data-driven taxonomy of emotion regulation strategies with computational methods*
07/2023	**International Conference for Computational Social Science (IC2S2) 2023** *Improving discourse quality in online discussions: A large-scale, longitudinal study of influencing speech characteristics*

| 07/2023 | International Conference on Network Science (NetSci) 2023 |
| | *Improving discourse quality in social media networks: A large-scale, longitudinal study of influencing speech characteristics* |

06/2023	**Chinese Bridge Competition Austria**, 2nd place
	Language competition hosted by the Confucius Institute Vienna
	'One World, One Nation' (天下一家) through the eyes of a psychologist

08/2022	European Forum Alpbach
	Alpbach Technology Talks hosted by the Austrian Institute of Technology
	Breaking the Wall of Emotional Well-Being

| 06/2022 | Conference of the Consortium of European Research on Emotion (CERE) 2022 |
| | *Deriving emotion regulation strategy classes using a computational grounded theory approach* |

05/2022	**Falling Walls Lab Austria**, 2nd place
	Competition, pitching an innovative research idea in just three minutes
	Breaking the Wall of Emotional Well-Being

TEACHING

| 06/2024 | Workshop: Before model training - Crafting high-quality text annotations for machine learning |
| | International Conference on Web and Social Media (ICWSM) 2024 |

| 2021 | Workshop: A psychologist's guide to machine learning |
| | University of Zurich, for researchers at the department of psychology |

| 2020 | **Teaching Assistant** Databases & Data Management |
| | Graz University of Technology |

FUNDING

| 2023 - 2024 | Agency for Education and Internationalization Austria, OeAD (19,920 €) |
| | *Marietta Blau Scholarship* to support visiting fellow activity at Harvard University in the academic year of 23/24 (partially claimed) |

| 2023 - 2024 | Marshall Plan Foundation Austria (10,000 €) |
| | Scholarship to support visiting fellow activity at Harvard University in the academic year of 23/24 |

| 2023 - 2024 | German Academic Scholarship Foundation (24,300 USD) |
| | *ERP scholarship* to support visiting fellow activity at Harvard University in the academic year of 23/24 (partially claimed) |

ADDITIONAL QUALIFICATIONS

2025 (ongoing)	Career program for female scientists
	Coordination Centre for Gender Studies and Equal Opportunities, University of Graz
	Competencies, strategies, and networking for a career in academia

07/2022	**Complexity-GAINs summer school** (2 weeks)
	Santa Fe Institute, New Mexico & Complexity Science Hub, Vienna
	Disintegration of societies: Quantitative modeling of complex socio-behavioral systems
2019 - 2021	**Data Team**
	Graz University of Technology
	Participating in data science challenges in teams
	/ ASHRAE - Great Energy Predictor III (How much energy will a building consume?)
	/ Jigsaw Multilingual Toxic Comment Classification (Identify toxic online comments.)
	/ HuBMAP - Hacking the Kidney (Identify glomeruli in images of the human kidney.)

SERVICE

2022 - today	**Doc School Speaker** and elected member of the **PhD Union**
	Student representative for the student body of the Doctoral School of Computer Science, and all PhD students at TU Graz

REVIEWING ACTIVITIES

Journals	Psychological Science, Behavior Research Methods, EPJ Data Science, Cyberpsychology
Conferences	IC2S2

OUTSIDE ACADEMIA

2015 - 2016	**GGH Mullen Lowe Hamburg** (advertising agency)
	Junior strategic planner
	E.ON, Seat, Fielmann, international new business
2015	**FCB Hamburg** (advertising agency, 6 months)
	Strategic planning internship
	NIVEA, international level
2014	**Publicis Pixelpark** (advertising agency, 6 months)
	Strategic planning internship
	Barmer GEK, Telekom, VISA, BNP Paribas, Swarovski

PUBLICATIONS

Herderich, A., Freudenthaler, H. H., & Garcia, D. (2024). A Computational Method to Reveal Psychological Constructs from Text Data. *Psychological Methods*, Advance online publication. https://doi.org/10.1037/met0000700

Lasser, J.*****, Herderich, A.*****, Garland, J., Aroyehun, S. T., Garcia, D., & Galesic, M. (2023). *Collective moderation of hate, toxicity, and extremity in online discussions*. ArXiv. https://arxiv.org/abs/2303.00357

Herderich, A.*****, Lasser, J.*****, Galesic, M., Aroyehun, S. T., Garcia, D., & Garland, J. (2024). *Measuring complex psychological and sociological constructs in large-scale text*. PsyArxiv. https://doi.org/10.31234/osf.io/tzc9p

Li, J. Z., Herderich, A., Nair, P., & Goldenberg, A. (2025). *Skill but not Effort Drive GPT Overperformance over Humans in Cognitive Reframing of Negative Scenarios*. PsyArxiv. https://doi.org/10.31234/osf.io/fzvd8

Herderich, A., Li, J. Z., & Goldenberg, A. (2024). *Data-driven classification of interpersonal reappraisals reveals eight distinct reappraisal strategies [Scholarship Paper]*. Austrian Marshall Plan Foundation. https://www.marshallplan.at/papers-2024

Röseler, L., Kaiser, L., Doetsch, C. A., Klett, N., Seida, C., Schütz, A., …, Herderich, A., …, & Zhang, Y. (2024). The Replication Database: Documenting the Replicability of Psychological Science. *Journal of Open Psychology Data*, *12*(8), 1–23. https://doi.org/10.5334/jopd.101

Frank, M., Grüning, D. J., Pronizius, E., Korbmacher, M., Elsherif, M. M., Bergmann, L., … Herderich, A. (2024). *Mapping students' Open Science attitudes and preferences: Country and education level differences - PCI RR Stage 1 Report*. PsyArxiv. https://doi.org/10.31219/osf.io/7gbvp

* shared first authorship