

Matthias Grabmair - Curriculum Vitae [2/2022]

CONTACT

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POSITIONS

Assistant Professor of Legal Tech	Technical University of Munich Department of Informatics Munich, Germany	since 1/2021
Legal Data Scientist	SINC GmbH Wiesbaden, Germany	2019-2020
Systems Scientist	Carnegie Mellon University Language Technologies Institute Pittsburgh, PA, USA	2017-2019
Postdoctoral Associate	Carnegie Mellon University Language Technologies Institute Pittsburgh, PA, USA	2016-2017

EDUCATION

PhD, Intelligent Systems	University of Pittsburgh Dietrich School of Arts & Sciences Intelligent Systems Program Pittsburgh, PA, USA	2007-2016
LLM, Master of Laws <i>Magna cum laude honors</i>	University of Pittsburgh School of Law Pittsburgh, PA, USA	2004-2005
Dipl-Jur (Univ) <i>First State Exam in Law</i>	University of Augsburg School of Law Augsburg, Germany	2001-2007

VISITING & ADJUNCT POSITIONS

Adjunct Professor	Carnegie Mellon University, LTI University of Pittsburgh, School of Law University of Heidelberg, School of Law	since 10/2019 Spring 2019 12/2017
Visiting Researcher	Carnegie Mellon University, LTI	2015-2016
Visiting Professor	University of Pittsburgh, School of Law	Fall 2010

SELECTED FELLOWSHIPS & AWARDS

- Andrew Mellon Predoctoral Fellowship, 2012-2013, University of Pittsburgh
- Donald H. Berman Best Student Paper Award, ICAIL Conference 2011
- Summer Fellowship, Google Summer of Code Program 2008
- Undergraduate Fellowship, 2004-2007, Friedrich-Ebert-Foundation, Germany
- Study Abroad Scholarship, 2004, German Academic Exchange Service (DAAD)
- Tuition Scholarship, 2004-2005, Center for International Studies, University of Pittsburgh

INDUSTRY & GOVERNMENT COLLABORATION

- Application of Natural Language Processing and Question Answering Technologies for Airplane Maintenance Documents, 2016-2019
- Research on the development of a context-aware personal assistant, sponsored by Bosch Research Pittsburgh, 2016-2017
- Co-authored report on “Consumer Scoring: A Feasibility Study for an Algorithm Law” for the German Expert Council for Consumer Affairs, an advisory body of the Federal Ministry of Justice and Consumer Protection, Summer 2018

TEACHING & EDUCATION ACTIVITY

- *IN2395 Legal Data Science & Informatics* (6 ECTS), Department of Informatics, Technical University of Munich, Summer & Winter Semesters 2021
- Member of program leadership and admissions committee, Master of Computational Data Science (MCDS), School of Computer Science, Carnegie Mellon University, 2016-2019
- 11-631 *Data Science Seminar*, 11-634 *Capstone Planning Seminar*, 11-632 *Capstone Project Course*, Master’s Program in Computational Data Science, Language Technologies Institute, Carnegie Mellon University, 2015-2019
- *Applied Legal Analytics and AI*, Language Technologies Institute, Carnegie Mellon University and University of Pittsburgh School of Law, Spring 2019
- AI&Law introduction course, University of Heidelberg School of Law, December 2017
- Half-Day conference tutorials on AI&Law co-presented with Kevin Ashley at JURIX 2011 and ICAIL 2013, 2015, 2017
- *Public International Law Advocacy*, University of Pittsburgh School of Law, Fall 2010
- Coach of the Jessup Moot Court Team, University of Pittsburgh School of Law, 2010-2011

RESEARCH COMMUNITY SERVICE

Program Chair: ICAIL 2023 (upcoming)

Organizing Committee Member: ASAIL 2015, 2017, 2019, 2020 Workshops on Automated Semantic Analysis of Information in Legal Texts, held in conjunction with ICAIL and JURIX; chair since 10/2019

Program Committee Memberships: IJCAI 2017 Special Track on AI&Autonomy; Int. Conf. on AI&Law (ICAIL), 2015-2019; JURIX Conf. on Legal Knowledge and Information Systems 2016, 2017; RuleML 2016; RuleML 2014 Special Track on Rules and Human Language Technology; RuleML 2013 Special Track on Translating between Human Language and Formal Rules: Business, Law, and Government; AI for Justice Workshop at ECAI 2016; ARG-MINING, Workshop on Argumentation Mining, 2015, 2017; LIT 2014 (6th Legal Informatics and Legal Information Technology Workshop); Workshop on “Semantic Processing of Legal Texts (SPLeT-2014)”, Special Track on Legal Resources and Access to Law

Scientific Journal Activity:

- Section Editor for Machine Learning, Artificial Intelligence & Law Journal, Springer
- Guest Editor, Artificial Intelligence & Law Journal, Special Issue on “Natural Language Processing for Legal Texts”, Summer 2018
- Reviewer: International Journal on Artificial Intelligence and Education, Journal on Argument & Computation

PUBLICATIONS

1. Z. Huang, C. Low, M. Teng, H. Zhang, D. E. Ho, M. S. Krass, **M. Grabmair**, Context-Aware Legal Citation Recommendation using Deep Learning, Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law (ICAIL 2021), 79-88, ACM, 2021.
2. J. Savelka, H. Westermann, K. Benyekhlef, C. S. Alexander, J. C. Grant, D. Restrepo Amariles, R. El-Hamdani, S. Meeus, A. Troussel, M. Araszkievicz, K. D. Ashley, A. Ashley, K. L. Branting, M. Falduti, **M. Grabmair**, J. Harasta, T. Novotna, E. Tippett and S. Johnson, Lex Rosetta: Transfer of Predictive Models Across Languages, Jurisdictions, and Legal Domains, Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law (ICAIL 2021), 129-138, ACM, 2021.
3. J. Savelka, **M. Grabmair**, K. Ashley, A Law School Course in Applied Legal Analytics and AI, Law in Context. A Socio-legal Journal 37, no. 1 (2020): 1-41.
4. A. Belova, **M. Grabmair**, E. Nyberg, Segmentation of Rulemaking Documents for Public Notice-and-Comment Process Analysis, Proceedings of the Workshop on Artificial Intelligence and the Administrative State (AIAS 2019), CEUR-WS.org, <http://ceur-ws.org/Vol-2471/paper1.pdf>, 2019.
5. L. Zhong, Z. Zhong, Z. Zhao, S. Wang, K. D. Ashley, and **M. Grabmair**, Automatic Summarization of Legal Decisions using Iterative Masking of Predictive Sentences, Proceedings of the Seventeenth International Conference on Artificial Intelligence and Law (ICAIL 2019), 163-172, ACM, 2019.
6. B. Karki, F. Hu, N. Haridas, S. Barot, Z. Liu, L. Callebert, **M. Grabmair**, and A. Tomasic, Question answering via web extracted tables, Proceedings of the Second International Workshop on Exploiting Artificial Intelligence Techniques for Data Management (aiDM 2019), Article 4, 8 pages, ACM, 2019.
7. M. Kale, A. Siddhant, S. Nag, R. Parik, **M. Grabmair**, A. Tomasic, Supervised Contextual Embeddings for Transfer Learning in Natural Language Processing Tasks, 2nd Learning from Limited Labeled Data (LLD) Workshop at ICLR 2019, 2019.
8. S. Wadhwa, V. Embar, **M. Grabmair**, E. Nyberg, Towards Inference-Oriented Reading Comprehension: ParallelQA, Workshop on New Forms of Generalization in Deep Learning and Natural Language Processing, NAACL 2018, arXiv:1805.03830, 2018.
9. J. Savelka, Vern R. Walker, **M. Grabmair** and K. D. Ashley, Sentence Boundary Detection in Adjudicatory Decisions in the United States, TAL 58.2, 2017.
10. A. Ravichander, T. Manzini, **M. Grabmair**, G. Neubig, J. Francis and E. Nyberg, How Would You Say It? Eliciting Lexically Diverse Dialogue for Supervised Semantic Parsing, Proceedings SIGDIAL 2017, pp 374-383, ACL, 2017.
11. **M. Grabmair**, Predicting Trade Secret Case Outcomes using Argument Schemes and Learned Quantitative Value Effect Tradeoffs, ICAIL 2017 Proceedings, ACM, 2017.
12. A. Bansal, Z. Bu, B. Mishra, S. Wang, K. D. Ashley and **M. Grabmair**, Document Ranking with Citation Information and Oversampling Sentence Classification in the LUIMA Framework, Proceedings of the 2016 International Conference on Legal Knowledge and Information Systems (JURIX 2016), pp 33-42, IOS Press, 2016.
13. **M. Grabmair**, Modeling Purposive Legal Argumentation and Case Outcome Prediction using Argument Schemes in the Value Judgment Formalism. Doctoral Dissertation, University of Pittsburgh, 2016.
14. **M. Grabmair**, K. D. Ashley, R. Chen, P. Sureshkumar, C. Wang, E. Nyberg and V. R. Walker, Introducing LUIMA: An Experiment in Legal Conceptual Retrieval of Vaccine Injury Decisions using a UIMA Type System and Tools, ICAIL 2015 Proceedings, 69-78, ACM, 2015.
15. J. Savelka, **M. Grabmair**, K.D. Ashley, Mining Information from Statutory Texts in Multi-jurisdictional Settings. In Rinke Hoekstra. Legal Knowledge and Information Systems (JURIX 2014). Amsterdam: IOS Press, pp. 133-142, 2014.
16. P. M. Sweeney, E. F. Bjerke, M. A. Potter, H. Güçlü, C. R. Keane, K. D. Ashley, **M. Grabmair**, R. Hwa, Network Analysis of Manually-Encoded State Laws and Prospects for Automation. In Winkels,

- R.; Lettieri, N.; Faro, S. (Eds.). *Network Analysis in Law*. Collana: Diritto Scienza Tecnologia/Law Science Technology Temi, 3, Napoli: Edizioni Scientifiche Italiane, 2014.
17. **M. Grabmair** & K.D. Ashley, Using Event Progression to Enhance Purposive Argumentation in the Value Judgment Formalism, *ICAIL 2013 Proceedings*, 73-82, ACM, 2013.
 18. **M. Grabmair** & K.D. Ashley, A Survey of Uncertainties and their Consequences in Probabilistic Legal Argumentation, in: *Bayesian Argumentation - The Practical Side of Probability* (Frank Zenker ed.), S. 61-85, Springer, 2012.
 19. **M. Grabmair**, K.D. Ashley, R. Hwa and P.M. Sweeney, Toward Extracting Information from Public Health Statutes using Text Classification and Machine Learning, *Jurix 2011: The 24th Annual Conference*, pp. 73-82 (Katie M. Atkinson ed.) IOS Press, 2011.
 20. **M. Grabmair** & K.D. Ashley, Facilitating Case Comparison Using Value Judgments and Intermediate Legal Concepts, *ICAIL 2011 Proceedings*, 161-170, ACM, 2011. [**Donald H. Berman Best Student Paper Award**]
 21. **M. Grabmair** & K.D. Ashley, Argumentation with Value Judgments - An Example of Hypothetical Reasoning, *Jurix 2010: The 23rd Annual Conference*, 67-76 (R.G.F. Winkels ed.), IOS Press, 2010.
 22. **M. Grabmair**, T.F. Gordon, and D. Walton, Probabilistic Semantics for the Carneades Argument Model Using Bayesian Networks, *Proceedings of the Third International Conference on Computational Models of Argument (COMMA)*, 255-266, IOS Press, 2010.
 23. **M. Grabmair** & K.D. Ashley, Using Critical Questions to Disambiguate and Formalize Statutory Provisions, *ICAIL 2009 Proceedings*, 240-241, ACM SIGART, 2009.
 24. **M. Grabmair** & K.D. Ashley, Towards Modeling Systematic Interpretation of Codified Law, *Jurix 2005: The Eighteenth Annual Conference*, 107-108 (M.-F. Moens, P. Spyns ed.), IOS Press, 2005.

SELECTED TALKS

- Panelist on "AI and Legal Practice", Invited workshop on AI at the Frontiers of International Law concerning Armed Conflict, Harvard Law School, Boston, MA, USA, December 2018.
- Fairness in Machine-Learning-Based Decision Making under Non-Discrimination Imperatives, Dagstuhl Seminar 18171 on Normative Multi-Agent Systems (NORMAS 2018), Schloss Dagstuhl, Germany
- Panelist, *ICAIL 2013 Workshop on Argumentation in Artificial Intelligence and Law* (chaired by Trevor Bench-Capon), Rome, Italy.
- How argument schemes and structures can be used for effective international law moot court preparation, University of Pittsburgh School of Law, Pittsburgh, PA, USA, October 2012.
- A Formalization of the Right to Life (R2L) and the Responsibility to Protect (R2P), Introductory remarks for roundtable discussion, *JURIX 2011*, Vienna, Austria.
- Assessing Argument Moves in the Carneades Argument Model Using Bayesian Networks, Workshop on Bayesian Argumentation 2010, Lund University, Sweden.