We are looking for academic staff in the nascent "Legal Tech" working group, starting as soon as possible.

Ph.D. (funded) & Postdoc Positions in Legal NLP / Legal Tech

About us

The nascent TUM Legal Tech working group at the TUM Department of Informatics conducts research and development around the application of methods from artificial intelligence, machine learning, data science, natural language processing (NLP), and knowledge engineering towards solving tasks and problems arising in the practice of law and public administration. High level goals are to:

- Support judicial decision making
- Facilitate access to justice
- Enable effective research in collections of legal documents
- Enhance processes in public administration and legal practice

Contrary to mainstream AI research, AI&Law is challenged by a lack of large labeled datasets and by problems/tasks that require significant human expertise. Legal documents are different from the kinds of text commonly examined in NLP research, and present unsolved problems that require new solutions and adaptation of existing techniques. Legal inference is argumentative and support systems for legal practitioners often cannot be straightforwardly trained end-to-end with a clear supervision signal using standard error metrics.

Recent advances in NLP (e.g., large pretrained language models) span open a spectrum of possible directions towards discovering and leveraging patterns in large amounts of legal data to derive insight and support legal practitioners.

What to expect

You will be working on research projects in NLP on legal text with a focus on exploring the use of neural network models towards analytical objectives of interest to legal experts by implementing models and rigorously evaluating them (e.g., training sequence classifiers on specialized corpora and analyzing model predictions quantitatively and qualitatively over experimental iterations). Other activities may include:

- implementing and administering experimental systems that use the developed techniques (e.g., in information retrieval) to be used by legal experts
- participating in efforts related to dataset specification, collection, and curation
- participation in broader AI&Law research

Project work will be interdisciplinary and frequently involve intensive national and international collaboration with research groups at other universities and/or practitioners.

You will work as part of a team and will have the opportunity to engage with the global AI&Law and Legal Tech communities at conferences (e.g., ICAIL, Jurix) and workshops (e.g., ASAIL). International applicants are highly encouraged to apply.

Your activities will also include student mentoring and teaching duties according to TUM regulations.

Postdoc position: You will be supported in joint funding applications and further career development.
Your qualifications

You have a strong academic background in Computer Science, Computational Linguistics, or related discipline.

- Ph.D. Applicants: Excellent master's degree in relevant discipline
- Postdoc applicants: Doctorate degree in relevant discipline and strong research record

You are interested in tackling language analysis problems in the legal domain. Please include your prior experience in interdisciplinary work as part of your statement of purpose.

You are fluent in written and spoken English (e.g., at least B2 certificate level or excellent TOEFL scores), communicate effectively, and can productively work with complex texts. You are curious and can quickly familiarize yourself with a problem domain (e.g., a specialized area of law), and enjoy collaborating with technical and legal experts in highly interdisciplinary projects.

You have experience with NLP, machine learning, and AI, and are a versatile and effective programmer (i.e. very good proficiency in Python, Pytorch/Tensorflow, Scikit-Learn/Numpy, Jupyter, git, ability to do rapid app prototyping in the Javascript ecosystem, etc.).

You are curious and creative in coming up with solutions to data analysis and modeling challenges. You are self-motivated and focused in implementing them, and you have the endurance to complete complex projects.

The positions

We offer:

- one full-time position as academic staff in pursuit of a doctoral degree in computer science (Ph.D. student). The initial employment contract will be for one year and, upon satisfactory evaluation, can be extended through to the completion of the PhD (up to a maximum of four years).
- one full-time Postdoctorate position as academic staff. The position's duration will be 18 months from the employment start date.

Payment will be based on the Collective Agreement for the Civil Service of the Länder (TV-L, E13 level). TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. Applications from disabled persons with essentially the same qualifications will be given preference.

How to apply

Your application materials should be in English and consist of a single PDF file comprising:

- statement of purpose explaining your motivation for working at the Legal Tech group and your relevant experience (one page)
- current CV (two pages maximum)
- grade transcripts of prior university studies (unofficial documents are sufficient)
- contact information of two references that can be contacted for recommendations

If you are interested in joining our group, please submit your application by April 30, 2021, with the Subject Line "Application Legal Tech" by email to: matthias.grabmair@tum.de

We look forward to hearing from you! Do not hesitate to contact Prof. Grabmair with any questions you may have (matthias.grabmair@tum.de). You can find out more at www.in.tum.de/legaltech

As part of your application, you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at https://portal.mytum.de/kompass/datenschutz/Bewerbung/. By submitting your application, you confirm to have read and understood the data protection information provided by TUM.