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|----------------------------------|---|----------------------------------|---------------------------------------|-------------------------|---------------------------------------|
| Modulverantwortliche/r           | Prof. Dr. Torsten Zesch   |                                  |                                       |                         |                                       |
|                                  | <table border="0"> <tr> <td>Dauer des Moduls<br/>ein Semester</td> <td>ECTS<br/>10</td> <td>Workload<br/>300 Stunden</td> <td>Häufigkeit<br/>in jedem Sommersemester</td> </tr> </table>  | Dauer des Moduls<br>ein Semester | ECTS<br>10                            | Workload<br>300 Stunden | Häufigkeit<br>in jedem Sommersemester |
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| Lehrveranstaltung(en)            | Masterseminar Sprachtechnologie   |                                  |                                       |                         |                                       |
| Detaillierter Zeitaufwand        | <p>Masterseminar Sprachtechnologie:</p> <p>Präsenzphase: 30 Stunden</p> <p>Literaturrecherche und Lektüre der relevanten Literatur: 60 Stunden</p> <p>Peer Feedback: 10 Stunden</p> <p>Schreiben Seminararbeit: 100 Stunden</p> <p>Formulieren von Gegenthesen: 20 Stunden</p> <p>Erstellen der Präsentation, Üben des Vortrags: 80 Stunden</p>   |                                  |                                       |                         |                                       |
| Qualifikationsziele              | Students gain an overview of various ethical issues in the field of language problems in the field of language technology and artificial intelligence in general. After successful completion, students will be able to analyze a concrete AI application for ethical problems and communicate the results of the investigation to others.  |                                  |                                       |                         |                                       |
| Inhalte                          | <p>The increasing technical progress and the ever-widening spread in the field of artificial intelligence (AI) also brings with it new ethical challenges. There are also many ethically relevant problems in the field of language technology based on learning algorithms, such as</p> <ul style="list-style-type: none"> <li>- Data protection and privacy: Where does the data for the models come from?</li> <li>- Bias: Many NLP models contain stereotypical associations such as "man - Doctor, woman - nurse".</li> <li>- Harm: what damage can artificial intelligence cause?</li> <li>- Resources: How harmful are very large AI models to the environment?</li> </ul> <p>The seminar is structured as follows: In the first face-to-face session at the beginning of the semester (TBD), you will be given an overview of various ethical issues in the field of language problems, language technology and AI in general. In the following phase, you will deal intensively with the current state of research on a specific problem. This includes independent research for relevant, current publications (predominantly in English) and a written paper. At the attendance date towards the end of the semester (date TBD), you will present your results to the other participants in a presentation and give each other feedback.</p> |                                  |                                       |                         |                                       |
| Inhaltliche Voraussetzung        | Keine   |                                  |                                       |                         |                                       |
| Lehr- und Betreuungsformen       | Betreuung und Beratung durch Lehrende   |                                  |                                       |                         |                                       |
| Anmerkung                        | Für die Teilnahme an einem Seminar ist ein gesondertes Anmeldeverfahren im Vorsemester über folgenden Link erforderlich: <a href="https://webregis.fernuni-hagen.de">https://webregis.fernuni-hagen.de</a> .  |                                  |                                       |                         |                                       |
| Formale Voraussetzung            | mindestens drei Pflichtmodulprüfungen sind bestanden  |                                  |                                       |                         |                                       |
| Verwendung des Moduls            | M.Sc. Data Science  |                                  |                                       |                         |                                       |

## Prüfungsformen

Prüfung

Stellenwert  
der Note 1/12

Art der Prüfungsleistung

benotete Seminarartnahme:  
Ausarbeitung (soll 10-15 Seiten  
umfassen) und Vortrag

Voraussetzung