Student Assistant: Frontend Developer in an NLP project for Digital Humanities



Description: Language Technology Group at the Department of Informatics, University of Hamburg, is looking for a motivated student assistant (m/f/d) with a strong interest in state-of-the-art NLP technologies and modern web frameworks to assist us with the frontend development of a novel web application for social scientists.

The flood of information available for a given topic is above what humans can digest. Finding, examining, and describing complex phenomena of modern societies is of great interest to social scientists. Fortunately, state-of-the-art artificial intelligence can understand human language in context and assist with several tasks.

The LT group is building the D-WISE Tool Suite (https://github.com/uhh-lt/dwts), which aims to leverage AI models to enhance the workflow of different tasks of social and cultural science researchers.

Tasks:

- Getting to know the project, i.e., goals, architecture, frameworks, and technologies
- Implement various features as React components, e.g.:
 - o Core functionalities like project & user settings, authorization, timeline, ...
 - Video and audio annotation
 - Retrieval of similar text spans
 - Interactive visualizations for knowledge management (e.g., graph viz)
 - Visual analytics with NLP (e.g., sentiment analysis, topic model, clustering ...)

(Once you're comfortable with the project, we'll discuss what features you'd like to work on.)

Requirements:

- Fluency in English or German
- Experience with:
 - React (or similar)
 - Git
 - JavaScript (TypeScript is beneficial)
 - HTML & CSS
- Team player

Tech Stack:

- Frontend React, TypeScript, MUI, React Router, React Query, Redux, ...
- Backend Python, FastAPI, PostgreSQL, Elasticsearch, spaCy, PyTorch, ...

Salary: 12-16€ per hour

Hours per month: 40-60 hours Start date: 01.08.23 or later

Questions? Come to my office F-430 or write a mail to **tim.fischer@uni-hamburg.de Interested?** Please send a <u>short</u> application letter highlighting your previous experiences with web development to **tim.fischer@uni-hamburg.de**