

The Dr. Theo Schöller Chair of Technology and Innovation Management, Prof. Henkel, offers an Interdisciplinary Project with the following topic:

Application of state-of-the-art web scraping techniques to patent pools and company data

Background and motivation

Big data, advanced analytics, or artificial intelligence are some of *the* buzzwords of the last years – mainly due to computing becoming cheaper and cheaper.

This comes in handy, as the chair is currently conducting empirical research in the area of IP management and building a large data set. We aim to find answers to key questions in the multi-billion licensing business by analyzing the membership of patent holders within patent pools. Thereby, we want to apply state-of-the-art web scraping techniques for collecting relevant data.

The IDP ideally starts by late May. An earlier/later start date is possible. You will be closely supervised by Pietro Fantini, who studies patent pools in his doctoral research (<https://www.ie.mgt.tum.de/tim/about-us/team/pietro-fantini/>).

Objectives and Methodology

The goal of this project is to build a data set with pools-specific and company-specific data by applying web scraping techniques. We plan to enrich available pool membership data with company-specific data to answer highly relevant questions, both for practitioners and academics.

To answer these questions, you will first develop a web scraping concept including a time plan for the data set based on jointly defined requirements (required data, data sources, etc.), then build and run data source-specific web scrapers and conduct data validation and quality tests.

What we offer

- Work on an exciting topic with high relevance for science and practice
- Development of a transferable skill set, i.e., data mining in general
- Close coaching and a jointly defined timeline including milestones
- A fun and challenging working environment

What we expect

- Master or advanced Bachelor student
- Structured, reliable, and independent working style
- Creative and logical thinking, persistence, and can-do attitude
- First experience with web scraping and data handling (cleaning, documentation, validation) helpful; willingness to acquire necessary skills expected
- Good grades

Contact

Please contact Pietro Fantini (pietro.fantini@tum.de) if you are interested in this topic. Your application should include your CV, a short letter of motivation (200 words max.), a current transcript of records and your preferred starting date. For more information on our general requirements, the application procedure and the style guidelines please go to <https://www.ie.mgt.tum.de/tim/teaching/project-studiesidp/>

