

Interdisciplinary Project at the Dr. Theo Schölller  
Chair of Technology and Innovation Management

## Utilizing GitHub for Management Research

### Background and motivation

With Open Source Software (OSS) gaining more and more popularity among technology companies, research in the area of how companies engage in OSS development is gaining further importance. Yet, quantitative data on OSS activities of companies is scarce. Here, GitHub - the largest OSS development platform globally - offers a promising resources for management research for two reasons: Firstly, many companies active in the OSS space use GitHub as their means of choice to open source their OSS projects or contribute to other projects. Secondly, GitHub offers a extensive set of APIs though which the activities of these companies can potentially be tracked. Therefore, the opportunity to utilize GitHub for management research should further be explored, also, as in our increasingly digital economy it is critical for researchers to move beyond traditional data source like patent or publication data to analyse innovation activities of companies.

This interdisciplinary project should build the foundation to conduct research utilizing GitHub data by understanding the GitHub ecosystem and its potentials for management research, building a workflow to create a database of relevant GitHub data and prototype algorithms to test the database in a managerial context.

### Your responsibility

We are looking for a team of 1 - 3 students working in full- or part-time. The project starts as soon as possible. This project will require the team to program access to API-interfaces, a database using SQL and Python (preliminary) and utilize cloud services like Google Cloud (particularly BigQuery) or other data analytics tools (e.g. R, Alteryx). Ideally you have experience in some of the languages / tools mentioned above. In any case, you should be willing to learn more about them and be curious.

### We offer

- Learn key basics of innovation management (course recommended: Innovation management intro and Marketing or Entrepreneurship)
- Learn key aspects of open source development (increasingly relevant across all tech companies)
- Highly relevant practical skills (cloud-based databases, APIs, ML, git)
- Flexible and fun working environment

### Contact

Please send your application, including CV and transcript of records to Michael Vetter ([michael.vetter@tum.de](mailto:michael.vetter@tum.de)). In case of questions do not hesitate to contact us.

