Research Graph

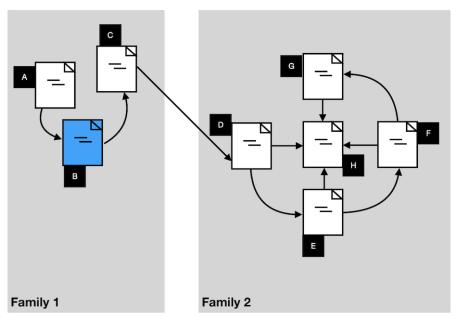
Fiona Guerin, Alvaro Silva, Andreas Zimmerer

Technical University of Munich

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Vision





Research Graph: Planned Features



Search papers	/
Display paper families	/
Filter papers	/
Display detailed paper information	/





Family types

Paper Timeline

Keyword Highlights

Influence Highlights

Paper Clusters

Mockup



Link:https://github.com/Jibbow/research-paper-graph/blob/master/doc/img/mockup.gif

Demo



Link:https://research-paper-graph-frontend.herokuapp.com/



To Do







- Frontend: Setup
- Frontend: Search papers
- Frontend: Display paper families
- Frontend: Filter papers
- Frontend: Family types
- Frontend: Zooming
- Frontend: Timeline
- Frontend: Clustering
- Frontend: Keyword highlights
- Frontend: Display detailed paper information
- Frontend: Influence highlights





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- Scraper
- Frontend: Zooming
- Backend: Family types
- Backend: Clustering
- Documentation: Clustering





- Scraper
- Database: Schema design
- Backend & Database: Setup
- Backend: Create, read, delete relations
- Backend: Search papers
- Backend: Filter papers
- Backend: Family types
- Backend: Clustering
- Documentation: Readme, presentations, ...

Lessons Learned



Plan

- Define your goals before you start.
- Design a mockup before you start.
- Define your architecture before you start.
- Define your technology stack before you start.

Team

- Define tasks and assign team members.
- Communicate regularly.

Technology

- Flask and SQLAlchemy serve Python backends very well.
- PostgreSQL is a good choice for many database problems, including our research paper graph.
- D3 is a good choice when you want to plot graphs.
- The Semantic Scholar API offers a huge amount of papers, including database papers.

Github



 $\verb|https://github.com/Jibbow/research-paper-graph|\\$

Thank you



