

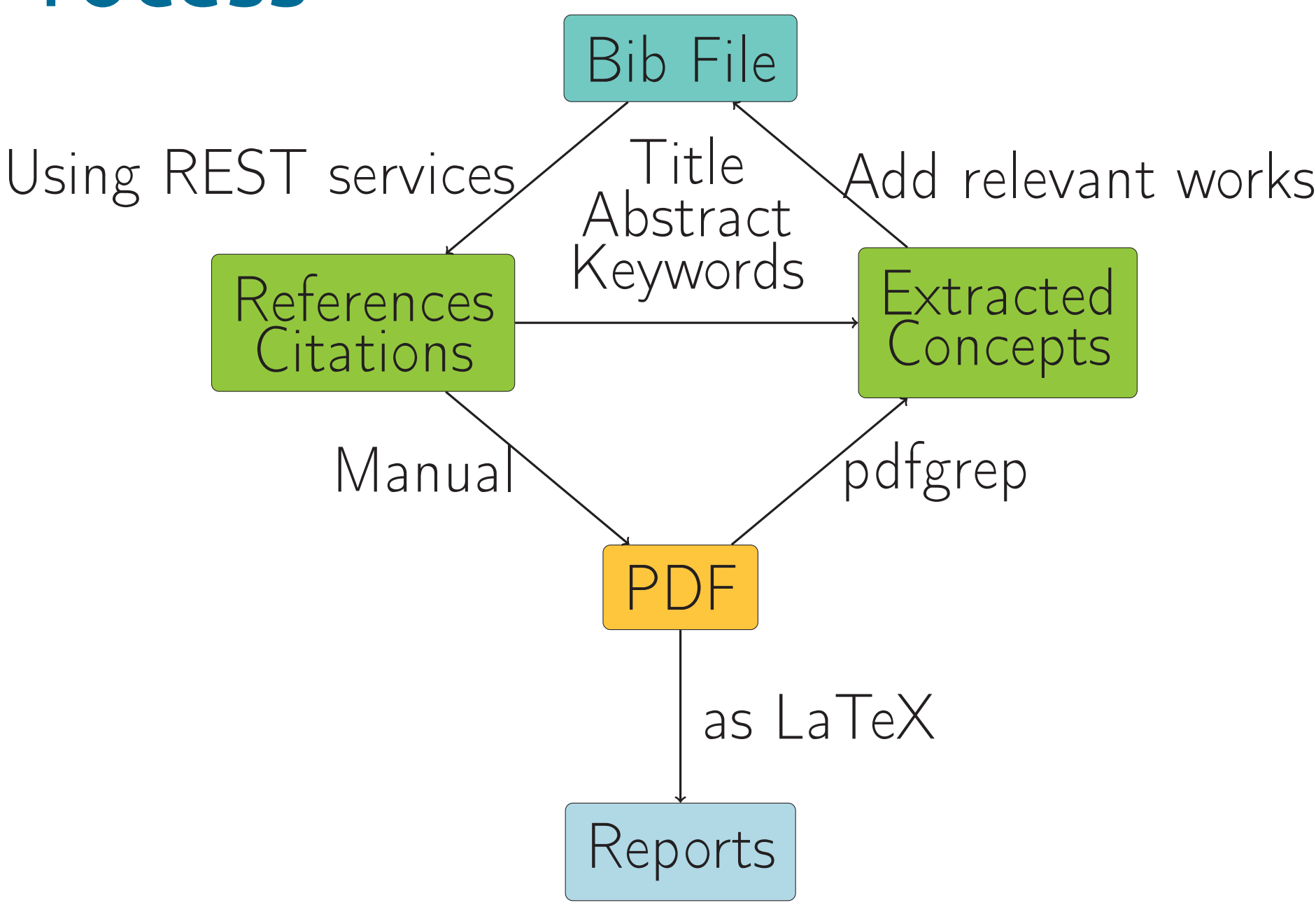
Problem

- A comprehensive and accurate literature survey is required for any project we undertake
- Using standard bibliographic search tools can be inaccurate, needing manual filtering (up to 90% misses)
- Manual search is error prone and time consuming, often misses relevant work
- A tool is needed to help find, classify, and rank relevant literature

Assumptions

- All relevant works in an area are connected by either citations or references
- We need to find works in journal *and* proceedings
- Any recent work will have a DOI as identifier
- Combination of different search end-points will provide most of required information
 - OpenCitations, Scopus, Crossref, (WoS)
 - No search engine provides all required information
- *Human in the loop*, not fully automatic

Process



Bibliometric Overview

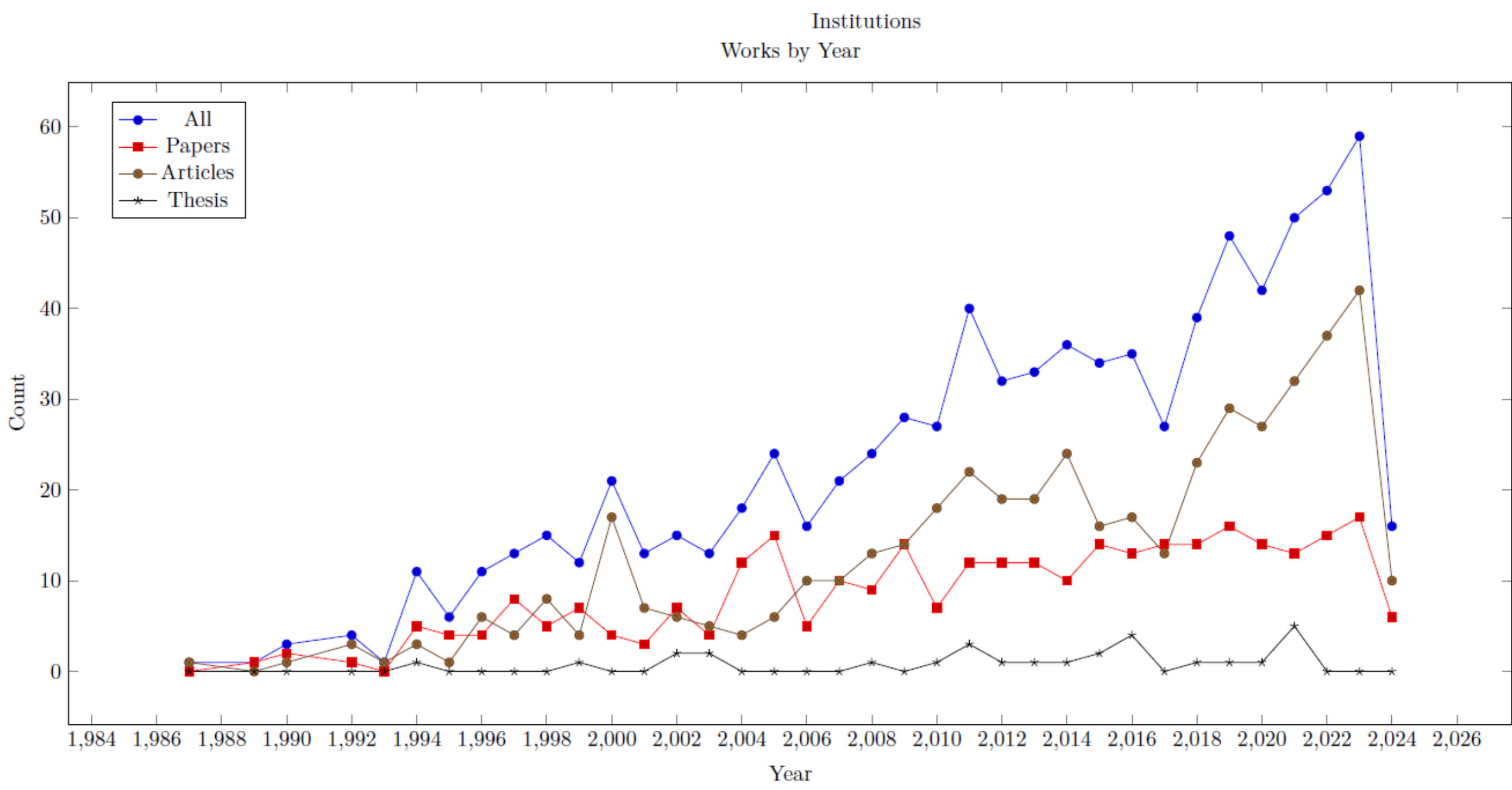
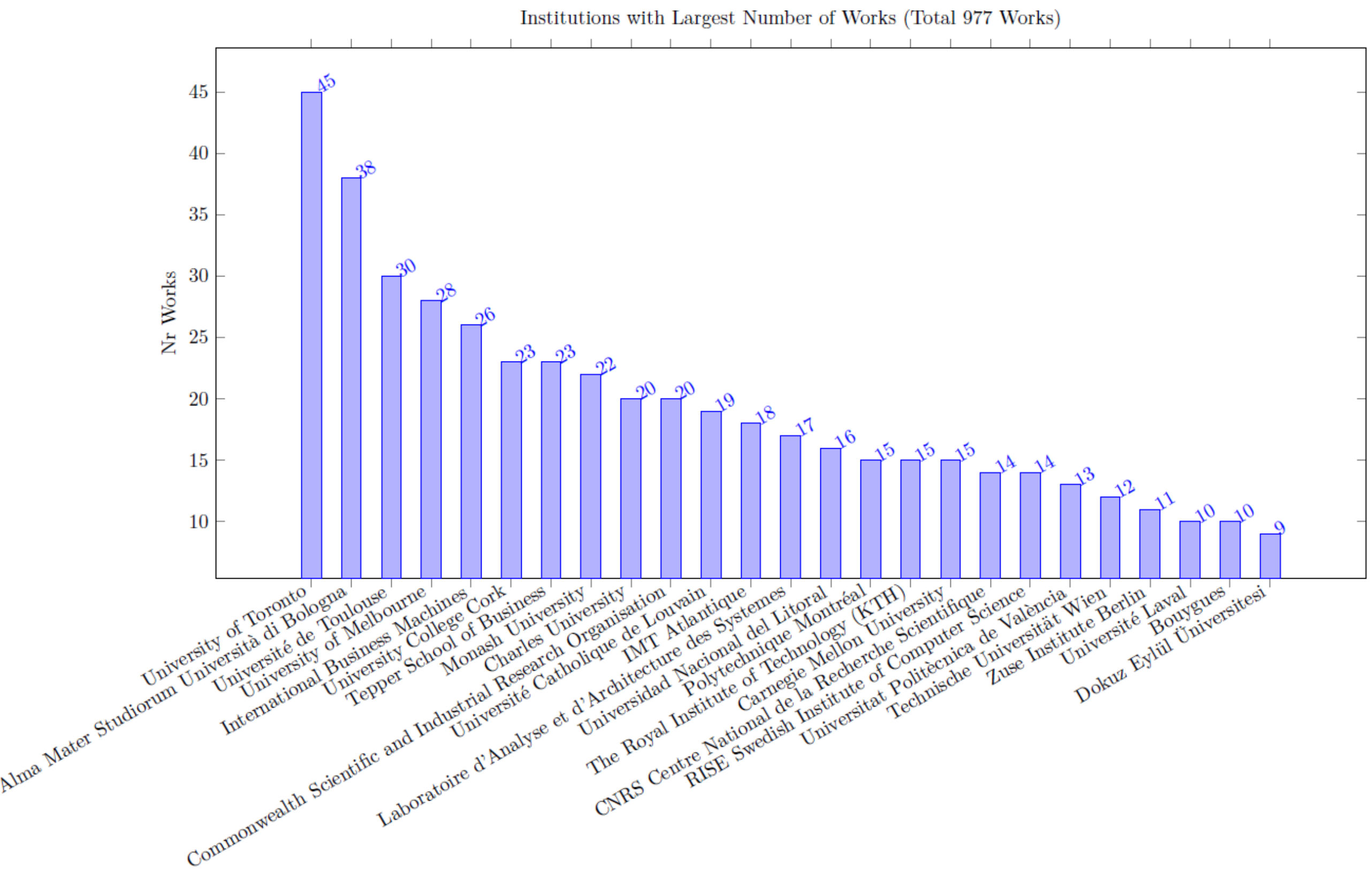
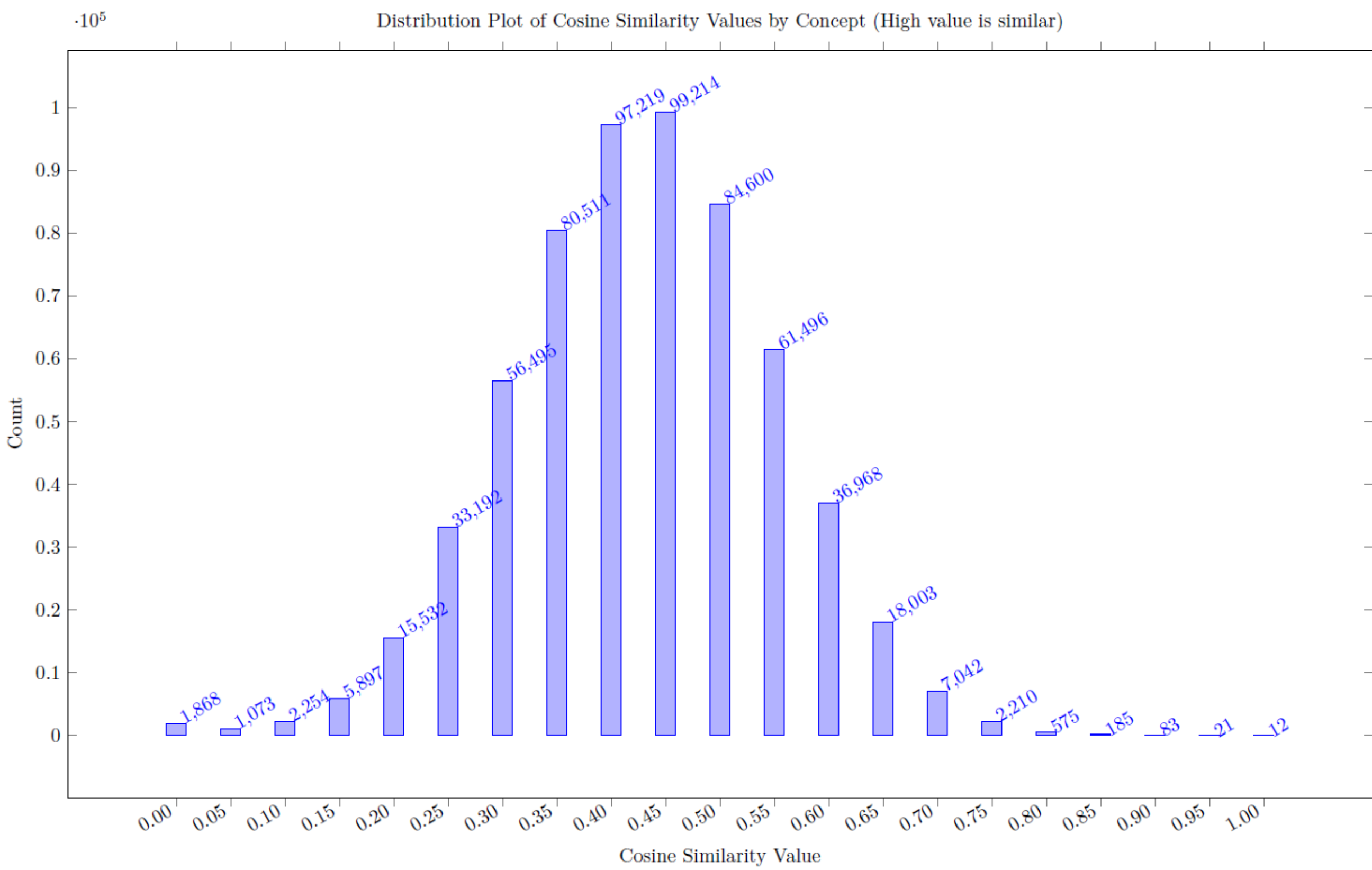
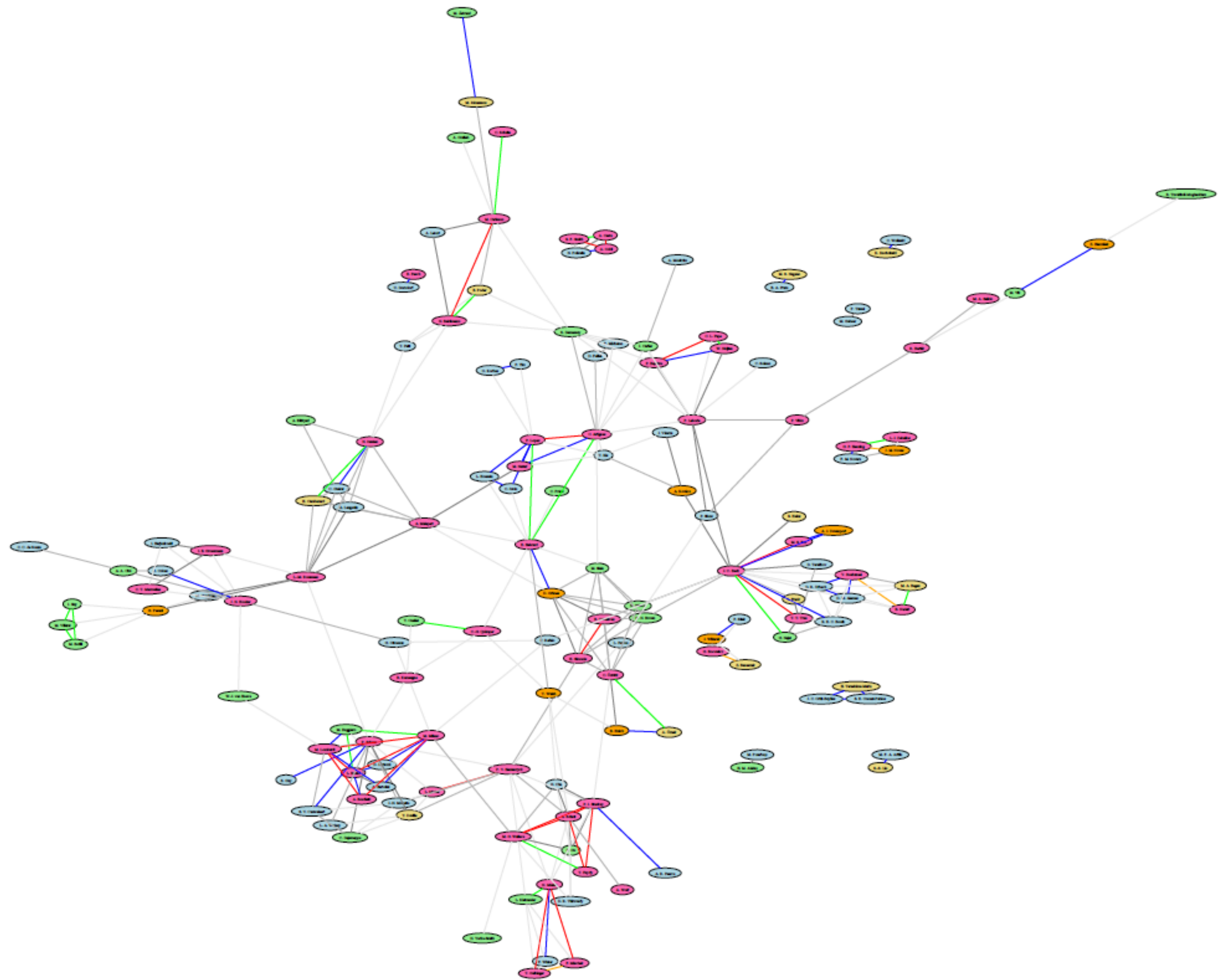


Figure 1: Coauthor Graph Drawn with fdp (Graphviz, CoauthorLimit = 4)



Case studies

Topic	Work With	Seed Library	Ontology Terms	Works Found	Works Considered
CP & Scheduling	H. Simonis C. Öztürk	DBLP 223	407	1,263	28,313
Medical & Drones	G. Taçadao B. O'Sullivan L. Quesada H. Simonis	WoS 106	119	495	14,681
AI & Counter-Terrorism	H. Simonis B. O'Sullivan	Book 32	183	1,603	75,792
Uncertain & CP	J. Lopez H. Simonis	Manual 6	13	106	3,328

Limitations

- Some relevant works do not have DOI
 - Theses, Workshops
 - Older AI conference proceedings (before 2006)
- No access to some journals, book chapters, books (no pdf)
- Identifying authors without orcid is tedious at best
- If only the databases made all their data available

To learn more

