

4840-1031: Monday 14:55-16:40

Web Engineering (ウェブ工学)

<https://tinyurl.com/webeng2019>

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Goal

- Learn recent trends in Web related research including
 - Search engine, Information Retrieval
 - Natural Language Processing
 - Machine Learning, Data Mining
 - Social Media/Network
 - Big Data
 - Cyber-Physical Systems
 - Internet of Things (IoT)

Format

- Seminar Style
- Three or four students present research papers (published on top conferences/journals) at each session
 - Presentation: 15 min.
 - Q&A: 10 min.

Organization of sessions

- First half (Session 1 – 4)
 - Test of time award papers from WWW, KDD, etc.
- Second half (Session 5 – 11)
 - Recent research papers
 - WWW, WSDM
 - SIGMOD, VLDB, ICDE
 - SIGIR
 - KDD, ICDM
 - AAAI, ICWSM
 - ACL, EMNLP
 - Etc.

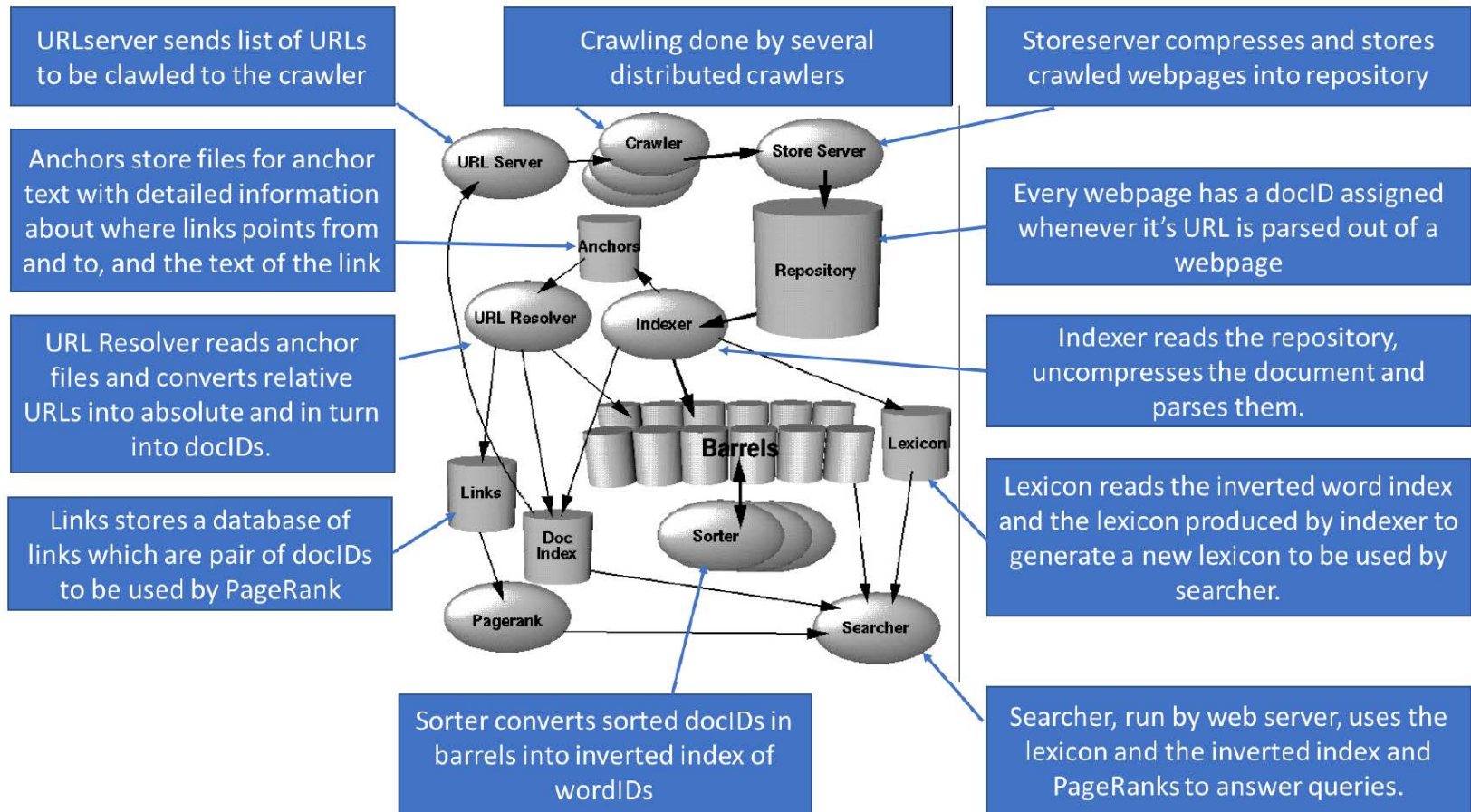
Test of Time Award Papers

- If you want to present in the first half sessions, you need to choose a test of time award paper in WWW, KDD, SIGIR, etc.
 - WWW Seoul Test of Time Awards
<https://www.iw3c2.org/ToT/>
 - KDD Test of Time Awards
<http://www.kdd.org/awards/kdd-test-of-time-award>
 - SIGIR Test of Time Awards
<http://sigir.org/awards/test-of-time-awards/>

WWW2015: Test of Time Awards

The Anatomy of a Large-Scale Hypertextual Web Search Engine [S. Brin, L. Page, WWW1998]

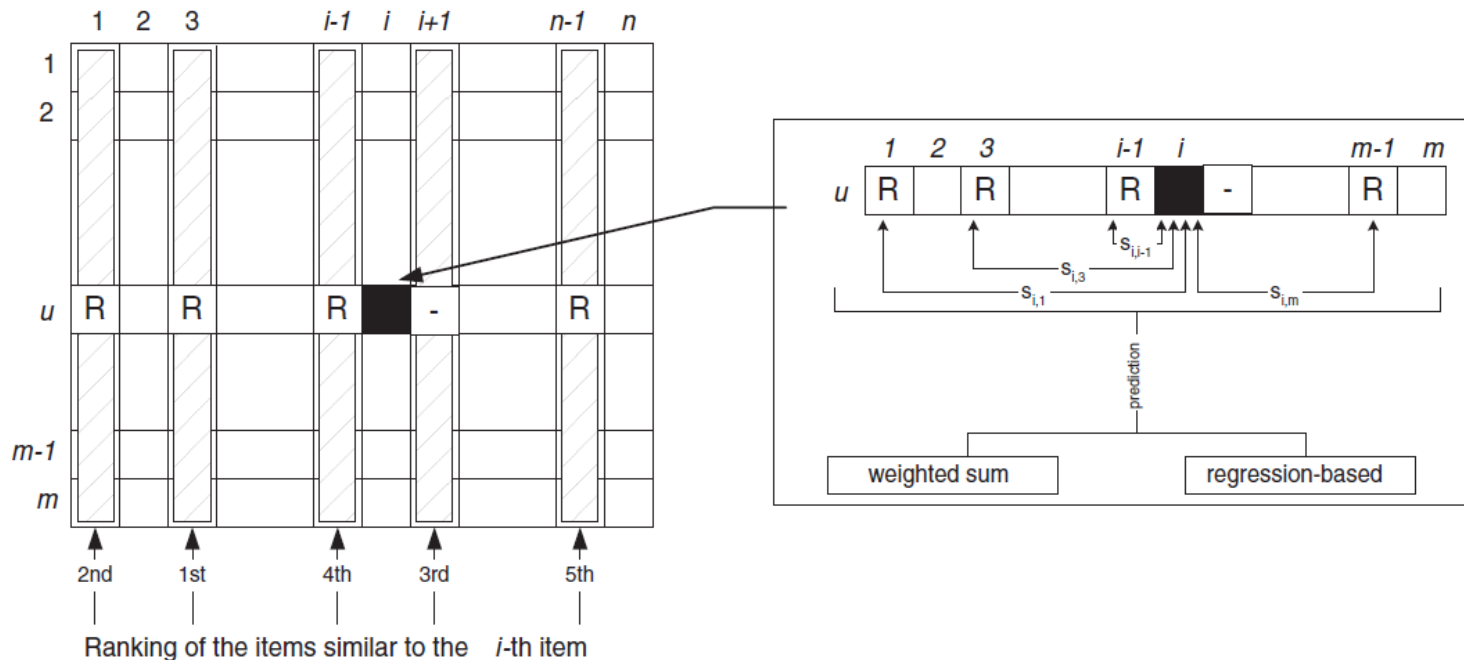
- Google's architecture in the early days



WWW2016: Test of Time Awards

Item-based collaborative filtering recommendation algorithms [B. Sarwar+, WWW1998]

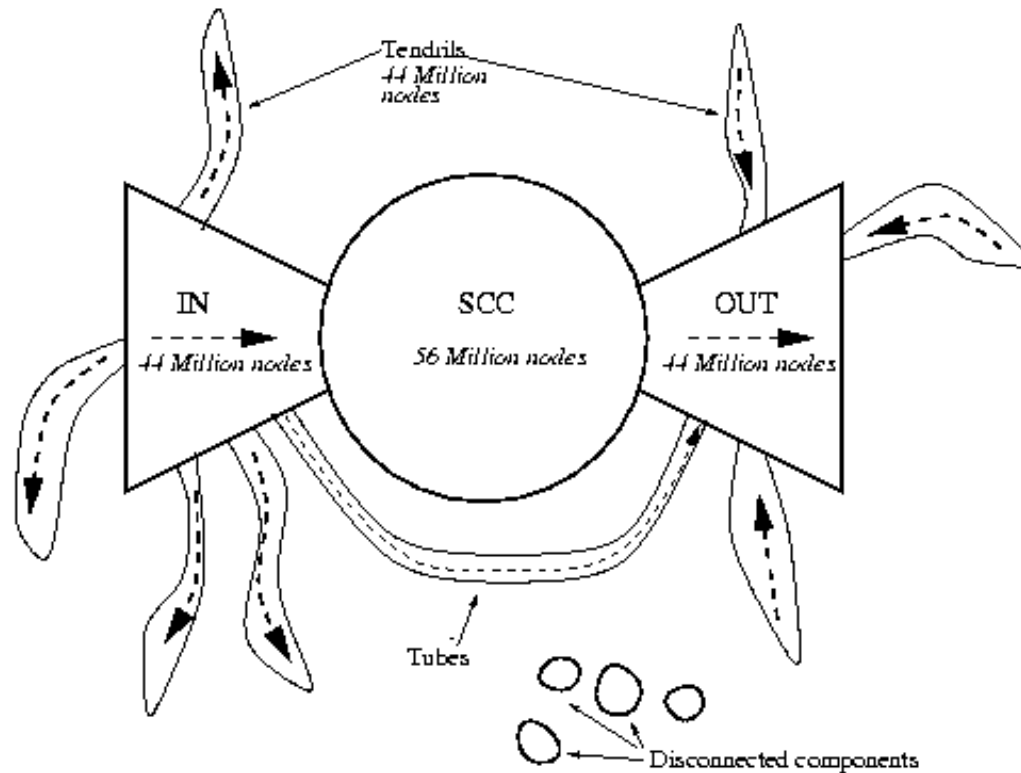
- Many collaborative filtering systems now use this approach



WWW2017: Test of Time Awards

Graph Structure in the Web [A. Broder+, WWW2000]

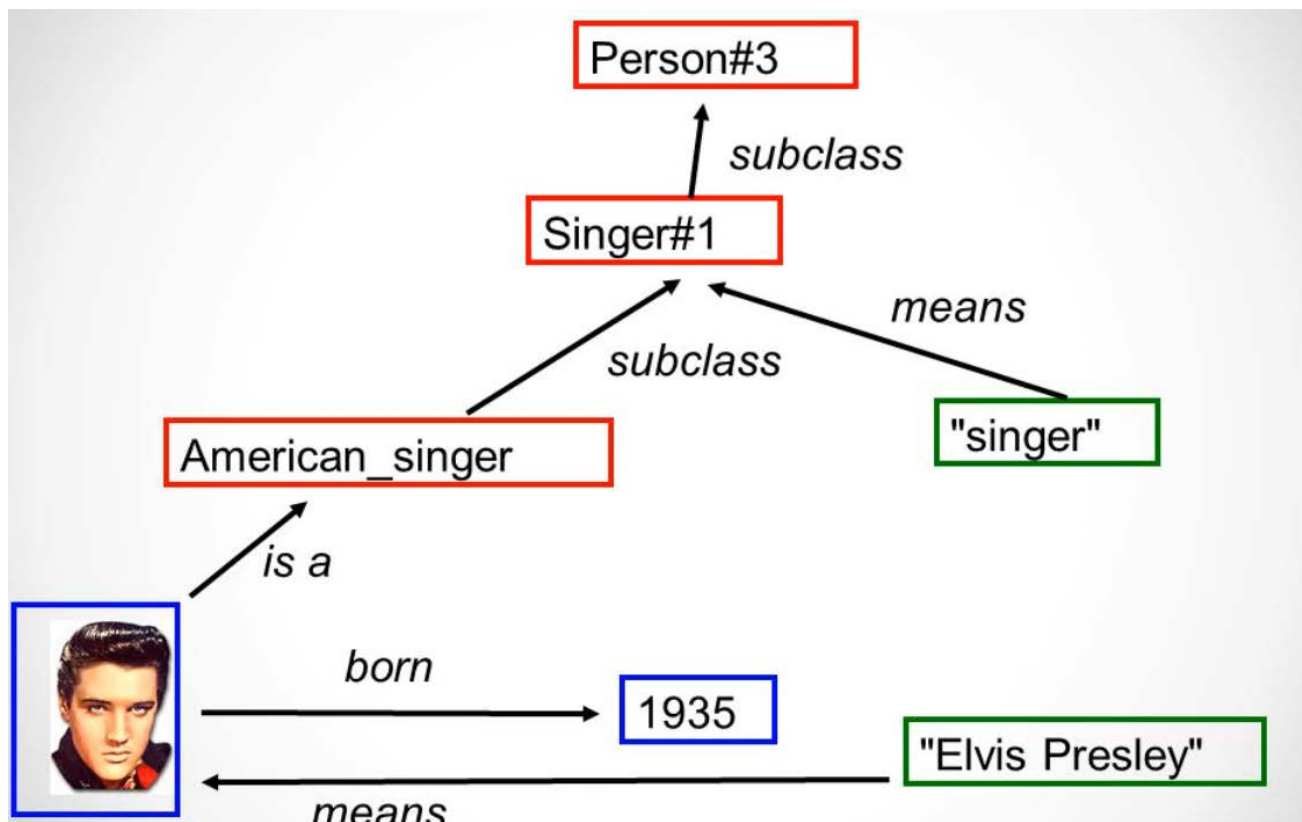
- The first large-scale empirical study of the dynamics of the Web



WWW2018: Test of Time Awards

YAGO: A Core of Semantic Knowledge Unifying WordNet and Wikipedia [F. Suchanek+, WWW2007]

- Among the first projects to extract semantic knowledge at large scale from Wikipedia



Recent research papers

- If you want to present in the last half sessions, you need to choose:
 - Choose full research papers (over 8 pages) in top conferences/journals published in recent 3 years (2017 – 2019)
 - DO NOT choose workshop, poster, and preprint (e.g. arXiv.org) papers
 - Topics of the papers should be related to Web, and include experiments with real data
 - Cross-disciplinary papers are recommended

Schedule

Date		Session
9/30	Mon	Guidance
10/7	Mon	Guidance
10/21	Mon	Session 1: Test of time award papers
10/28	Mon	Session 2: Test of time award papers
11/7	Thu	Session 3: Test of time award papers
11/11	Mon	Session 4: Test of time award papers
11/13	Wed	Session 5: Recent papers
11/18	Mon	Session 6: Recent papers
11/25	Mon	Session 7: Recent papers
12/2	Mon	Session 8: Recent papers
12/9	Mon	Session 9: Recent papers
12/16	Mon	Session 10: Recent papers
12/23	Mon	Session 11: Recent papers

Assignment

- We decide presenters for the first sessions
 - If you want to present in session 1, inform me ASAP
- **All students should e-mail following info. by 9 Oct.**
 - Student ID Number, Name, e-mail for slack
 - 3 candidate dates, and
 - 3 papers you want to present with complete bib info.
- **Assignment & Schedule will be released on 11 Oct.**
- Note:
 - Students who select earlier day have more chance to present a preferred paper
 - Let me know ASAP, if you change the paper to present

Slack

- We use slack.com to announcement and chat in sessions
- I will check your questions and comments in sessions and mark them if they are “good” (Mark will become scores for your credits)
- After receiving your e-mail, I will invite you to **webeng2019.slack.com**
- Your name in slack should be “Your_Name_StudentID” (Please do no use nicknames)

Credits

- Point system:
 - **100** points (優)
 - **80** points (良)
 - **60** points (可)
 - Less than 60 points (不可)
- Scores:
 - Presentation: **40** pts.
 - Good question/comment: **10** pts./session
(Do not count multiple times in a session)
 - Attendance: **0** pts.