Distributed methods for computing the PageRank

Bachelor / Master thesis

Supervisor: Prof Themistoklis Charalambous

Description:
PageRank is an algorithm used by Google to assess the importance of a page by using the links in order to improve the quality of search results. In this project, the student will have to make a literature review on the existing methods for computing the PageRank, implement and compare the current state-of-the-art algorithms, and identify any limiting assumptions. If the time permits, the student will work towards proposing his/her own algorithm that can compete or even outperform the current state-of-the-art.

Keywords: Google PageRank, distributed coordination, distributed computing.

Deliverables:
- A thesis in which the current state-of-the-art is briefly described, some methods are implemented and compared, and possibly a new approach is proposed.

Work type: 40% literature review, 30% simulations, 30% theoretical analysis

Tools: MATLAB

References: