Wikipedia Walker

Wikipedia is an amazing trove of knowledge. There even exists a game *The Wikipedia Game* where players have to navigate from one topic to another as fast as possible, using the fewest number of link clicks.

We would like to build a tool that can beat the game, and do more! You will be implementing an online graph traversal algorithm with a few interesting twists. What if we don’t want the shortest path but the most interesting one? What is interesting? Maybe a path through the most obscure pages of Wikipedia? Ideally, this system can be easily extended for ProofWiki or Wikiquote and other wiki sites. We will be looking at different optimization strategies such that the system can run online on the most up-to-date version of Wikipedia.

In this thesis, we will build a tool that can tap into the live Wikipedia website, traverse and cache it on the fly, and find the shortest or most interesting routes between two or more Wikipedia articles. As a plus, the student will build a website where users can interact with the tool. The inspiration for the final website could be similar to sixdegreesofwikipedia.com.

Requirements: Knowledge in a programming language of choice and graph algorithms. Experience with runtime and caching optimization and website building is an advantage.

We will have weekly meetings to address questions, discuss progress and think about future ideas.

Contact

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