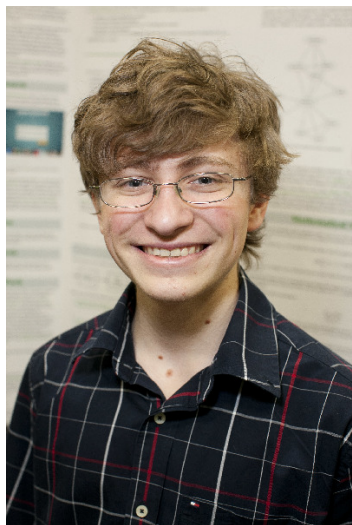


ESPC 2011 - Toronto (Ontario)



Nicholas Schiefer

Apodora: Markov Chain-Inspired Microsearch

Défi: Information

Catégorie: Sénior

Région: York

Ville: Pickering, ON

École: Holy Trinity School

Sommaire: A novel information retrieval algorithm called "Apodora" is introduced, using limiting powers of Markov chain-like matrices to determine models for the documents and making contextual statistical inferences about the semantics of words. The system is implemented and compared to the vector space model. Especially when the query is short, the novel algorithm gives results with approximately twice the precision and has interesting applications to microsearch.

Biographie

Nicholas is a Grade 11 student at Holy Trinity School. When not leading the robotics team, studying for a math contest, programming, or thinking about programming, Nicholas likes to read, ski, and blog. At school, he founded the HTS Hawks Robotics team, helps produce the school yearbook, was a member of the winning York Engineering and Science Olympics team, peer tutors mathematics, and has received the General Proficiency award for his academic average for the past four years. Outside of the classroom, Nicholas participates in the University of Toronto Mentorship Program, the Fields Institute Math Circles, and contributes to his small open source software projects. This past summer, Nicholas attended Shad Valley UBC, where his team received attention from the national media for their project, an automatically locking wheelchair break. During the summers, Nicholas spends his time programming, learning, and working as a Student-on-Call at the IBM Toronto Lab in Markham, Ontario. Once he graduates from high school, Nicholas hopes to pursue an undergraduate and graduate education in computer science and mathematics and eventually pursue a career in a related field.

Prix

Valeur

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