STANFORD
UNIVERSITY

June 29, 2011

The HCI Group at Stanford University has an opening for an exceptional student to write his or her Master's thesis as a visiting researcher of the Stanford Computer Science Department.

We are working on tools and strategies that help people be more productive. If you are interested, please contact Nicolas Kokkalis (kokkalis@stanford.edu) with subject "Intelligent Task Management" by July 15, 2011 (earlier if you intend to apply for scholarships).

Project Description

To-do lists and project management software require their users to manually keep the lists current and relevant. These to-do lists can grow unwieldy and also contain tasks that should be archived. Because users loath to do information gardening, they fall back to pen and paper, email, or flat text files. Privileged users have Executive Assistants to organize their tasks but not everyone can afford this premium solution. This work seeks to create an intelligent task list that automatically handles organization and maintenance, while it integrates naturally to our social environment where tasks are shared between users.

A specific problem we are currently working on is the fact that people often struggle with to-do list items that are too vague or high level. Our system identifies these items and decomposes them into actionable sub-steps. We introduce an innovative crowd sourcing strategy for decomposing tasks that the system encounters for the first time. Other tasks are directly decomposed by our novel structured-prediction machine learning technique in real-time, instead of costing more human energy of the crowd.

Further Information

We are looking for a highly motivated student, preferably with computer science or engineering background. Our code base is written in Ruby on Rails, however prior knowledge of the language is optional as long as you enjoy learning new things.

The position is available for the 6-month period from September 26, 2011 to March 23, 2012 (Academic Fall and Winter quarters). Using our existing visa and travel templates all administrative issues related to this exchange can be completed within two months. Note that during the visa application process, you will have to submit a proof of sufficient funding for tuition fees ($7,800), health insurance (approx. $2,000; can be waived) and living expenses ($2,500 per month), adding up to a total of approx. $25,000. Financial support may be available from (German or European) scholarships or a Stanford fellowship depending on your individual application.