User-Centered Design of a Recommender System for a ‘Universal’ Library Catalogue

We are seeking a PhD student to investigate the development of recommender systems for the retrieval of journals, books, digital media, video, etc. in a cloud-based multi-institution, international catalogue. You should have a background in library and information science, information retrieval, computer science or a related discipline. The post is available from 1st October 2010 and offers an outstanding opportunity for a dedicated and motivated individual to investigate recommender systems for library catalogues. The post is funded (fees and maintenance) for three years by an AHRC Collaborative Doctoral Award, involving a partnership between the University of Sheffield and OCLC Online Computer Library Center, Inc. (http://www.oclc.org/), a world-leading organisation in the field of digital libraries.

In order to develop a suitable recommender system you will follow a 'user-centered' approach: first establishing user needs and the criteria which influence and shape users' satisfaction with recommendations. Then analysing resources held by OCLC, including bibliographic records, transaction logs and library holdings data, you will design, build and evaluate an interactive recommender prototype for the WorldCat ‘universal’ library catalogue, the worlds' largest and most comprehensive bibliographic database. There are many opportunities to conduct original research in this project: the resources provided by the industrial collaborator are unique, you will have the opportunity to work with a world-leading digital library company, develop a relationship with LIS professionals in the US and UK and gain access to end users of a global 'universal' catalogue service only possible through collaboration with OCLC. The award will include a 3 month visit to OCLC Research in Dublin (Ohio) to meet and collaborate with leading-edge researchers and software developers in the field. Results from this project are likely to benefit academics, practitioners and library users alike.

Supervisors: Dr. Paul Clough (University of Sheffield), Mrs. Barbara Sen (University of Sheffield) and Dr. Lynn Silipigni Connaway (OCLC).

Entry requirements: It is expected that applicants will have at least a first class honours or a good upper second class degree, or successfully completed an MSc/MA, in computer science, library and information science, or a related discipline.

Required skills: Familiarity with quantitative and qualitative research methods and software for data analysis, ability to work independently, excellent written and oral communications skills, knowledge of formal research process, including writing and presenting results/findings, ability to implement prototype recommender systems and familiarity with databases and database software.

Funding Notes: This award covers full fees and maintenance at the standard AHRC rate and only UK and EU residents are eligible. This is an AHRC Collaborative Doctoral Award with a duration of 3 years and candidates must meet the eligibility criteria: http://www.ahrc.ac.uk/FundingOpportunities/Documents/Guide%20to%20Student%20Eligibility.pdf

For further details see: http://ir.shef.ac.uk/cloughie/resources/ahrc-cda2010.html