

ASSETS 2006 Doctoral Consortium

*Yeliz Yesilada*¹, *Andrew Sears*²

¹School of Computer Science, University of Manchester Manchester, UK

yeliz.yesilada@manchester.ac.uk

²Information Systems Department, Interactive Systems Research Center, UMBC,
Baltimore, USA

asears@umbc.edu

Introduction

The Eight International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2006) was held between 22nd and 25th of October 2006 in Portland, USA. As part of this conference, a Doctoral Consortium was held on Sunday the 22nd of October. Ten students from five different countries and five faculty advisors were welcomed. Overall the Doctoral Consortium was a great success and was organised as follows: each student prepared and presented a brief summary of their dissertations followed by open discussion among the faculty and students. This helped us to ensure that each student got valuable feedback from all advisors. Presented dissertations covered a broad range of research topics focusing on advancing state of the art for disabled people. The following four topics were organised into the four sessions:

Wayfinding, Mobility and Wearable Systems

In this first session, three doctoral candidates presented their dissertations. First Thorsten Volkel (University of Kiel) presented his dissertation titled "*Personalised and Adaptive Navigation based on Multimodal Annotation*". His presentation was followed by Robert Lutz (New Jersey Institute of Technology) whose dissertation titled "*Prototyping and Evaluation of LandCons: Auditory Objects that Support Wayfinding for Blind Travelers*". The last presentation in this session was given by Troy McDaniel (Arizona State University) whose dissertation was titled "*Visio-Haptic Wearable System for Assisting Individuals Who Are Blind*".

Visually Impaired Users and the Web

In this second session, three doctoral candidates presented their work on enhancing Web accessibility for visually impaired users. Ravi Kuber (Queen's University) was the first presenter whose dissertation was titled "*Developing An Assistive Haptic Framework For Improving Non-Visual Access To The Web*". Kuber's presentation was followed by Yevgen Borodin's (Stony Brook University) talk whose dissertation titled "*Multi-Layer Dialog Generation for Non-Visual Web Access*". The last presentation in this session was given by Eleni Michailidou (The University of Manchester) whose dissertation was titled "*ViCRAM: Visual Complexity Rankings and Accessibility Metrics*".

Cognitive and Learning Disability

In this third session, there were two presentations. Joe Wherton (University of York) presented his dissertation titled "*Designing Cognitive Supports for Dementia*" and

Katherine Deibel (University of Washington) gave the second presentation whose dissertation titled "*Understanding and Supporting the Use of Accommodating Technologies by Adult Learners with Reading Disabilities*".

Education and Disability

In this last session, there were two presentations. Maria Dolores Paredes-Garrido (University of Granada) gave the first presentation whose dissertation titled "*An Evolutionary System for the Sc@ut Platform*". The last presentation was given by Benjaporn Saksiri (Clemson University) and was titled "*Virtual Sign Animated Pedagogic Agents To Support Computer Education For Deaf Learners*".

Our faculty advisors included Dr.Armando Barreto (Florida International University), Dr.Stephen Brewster (University of Glasgow), Dr.Jinjuan Feng (Towson University), Dr.Arthur Karshmer (University of San Francisco) and Dr.Richard Ladner (University of Washington). It was important for us to ensure that students with such a broad range of dissertation topics would get valuable feedback from different perspectives and they could benefit from most of this event therefore our faculty advisors were specialised in different areas of accessibility.

Students were accepted to participate in the Doctoral Consortium based on two-page long descriptions of their dissertations and a letter of recommendation from their PhD supervisors and/or advisors. In this abstract, they were asked to clearly describe their research problem, the motivation behind their research, the proposed solution, the progress of their research and finally discuss envisioned contributions. This year each submission was peer-reviewed by our faculty advisors. Students were evaluated based on metrics related to the originality of work, importance and potential impacts to the accessibility field, and the soundness and correctness of the proposed approach to address the problem. This review process helped us to ensure that we have chosen students whose dissertations focus on advancing the state of the art of accessibility, which is the major theme of the conference. Updated versions of these two-page long abstracts are included in this newsletter to give the SIGACCESS community an idea of the research topics covered at the Doctoral Consortium.

The Doctoral Consortium was sponsored by National Science Foundation. Expenses of all doctoral consortium candidates, faculty advisors and doctoral consortium organisers were covered in part by this NSF funding. This year part of this funding was also used to invite students from last year's Doctoral Consortium to meet students from this year and share their experiences.

Many people contributed to the success of the program. First we would like to thank the students for their participation. Without their dedication this event would have not been possible. We would also like to thank the faculty members for their exceptional work and dedication in the review process and giving exceptional feedback to students and making this event very successful. Finally, we express our deepest appreciation to the National Science Foundation for its support.