AHRC ICT Methods Network Workshops

SERVICE ORIENTED COMPUTING IN THE HUMANITIES 1 & 2

KING'S COLLEGE LONDON, 17 – 18 DECEMBER 2006 AND 18 – 19 DECEMBER 2007

This event was jointly organized with the ESPRC Service-Oriented Software Research Network (SOSoRNet).

Traditionally the relationship between the arts and humanities and computer scientists has been one of consumer and producer respectively, with software being developed by computing professionals for use by humanists and arts scholars. In recent years this relationship has begun to change, with the older model no longer working. More and more, development of software for arts and humanities applications is being driven from within the community.

There is, however, as strong a need as ever for close working associations between software users and producers. These two jointly sponsored events, held a year apart, concentrated on the means of building these relationships and the development of service orientated software within the arts and humanities.

A key message to emerge from the first workshop was that communities of practice in the humanities are increasingly turning to service oriented approaches as their data becomes ever more complex and dispersed. The second event provided those researchers with a forum for intensive discussion, framed by a highly focused group of international speakers from the cutting-edge of service-oriented research as applied to the humanities (with examples from music, archaeology and medieval history); as well as from academics working with tools and resources that have the potential to develop new research methodologies based around the service-oriented approach.

Who was the Event Aimed at?

Participants in this workshop included humanist researchers working with, or interested in, advanced network technologies, as well as computer scientists interested in learning more about a new and rapidly developing area. Discussions and presentations at the event were focussed on the interactions between archaeologists, historians, computer scientists, music information retrieval specialists, library information scientists, and grid specialists (distributed computing).

Alerting Humanists to the Possibilities of Service-Based Computing

There are a wealth of resources available to enable humanists to manage the often voluminous and complex data which humanities research produces and requires. Web-based services, often freely available and highly flexible, are frequently overlooked by humanists when exploring the possibilities available for collecting, enhancing, and presenting their research. Web services such as Google Earth or Second Life can be utilized as readymade platforms for these types of tasks for a wide-range of humanities applications and fields. These workshops looked at specific tools and methods being developed expressly for humanists, as well as services which are adaptable to their needs, both of which have the potential to transform the humanities and allow for new means of answering questions which are central to the disciplinary concerns of humanists. Much of the work involves orchestrating the use of already existing resources, rather than finding new means of doing what could be done with the potentially very powerful services which already exist, so this workshop addressed the problems of getting these resources to humanists.

Speakers demonstrated a range of cutting-edge tools and methods. Particularly there was the MyMethod

work of David de Roure. Projects such as MyMethod are creating new forms of scholarly communication through collaboration. Stephen Downey spoke on his work on Music information retrieval, Michael Meredith on Virtual Vellum, and mc schraefel, a human computer interaction specialist spoke about her well-known mspace project; a Virtual Research Environment (VRE) for music. Stewart Jeffrey described the larger strategies of the Archaeological Data Service (ADS).

Cross-disciplinary Collaborations

There were numerous crossdisciplinary collaborations, for instance between Lorna Hughes and Stuart Dunn of the Methods Network, and Nicolas Gold, (Network Director of SOSoRNet). Between them they proposed a system called CHIMERA: a service-oriented computing model for archaeological research that integrates archaeological collections without having to build a huge ontology. A research student in the Department of Computer Science at Kings College London is now developing this project. It has resulted in collaborations with outside companies as well as a funding application to JISC.

About SOSoRNet

SOSoRNet is an EPSRC-funded (2005-2008) collaborative network to bring together communities involved in the design, development, and use of service-oriented software. The rationale for the network's creation was to share problems and solutions between communities to avoid re-inventing the wheel. The network has members drawn from industry and academia and holds variety of workshops on a range of topics including service-composition, geospatial service-oriented applications, services-science, dependability, source-code analysis for services, formal methods in services, and service-oriented humanities computing. It also runs broadly-based service-related workshops.