

eResearch Education and Training

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INTRODUCTION

Raising the skill-levels of researchers as well as of those who support them, including people in IT departments, libraries, and even University Administration, is a key way of enabling researchers to take full advantage of eResearch opportunities. Wider uptake of eResearch techniques and methods is creating demand for educators to assist researchers in creating awareness of available techniques, aid in selection of appropriate tools and to build up best practice skills to ensure quality.

DESCRIPTION

To build awareness and skills means having knowledge of the services and tools, being able to format that knowledge into a meaningful form, and then delivering that knowledge to the people who need it. While there are currently many organisations involved, from individual institutions through state-based service providers to national programs, there is no coherent mechanism to bring all of the marketing (awareness) and training (skills) materials together. There is also no common channel for delivering those materials to the researchers and the support staff on campuses.

Given the large-scale investments in eResearch there is a requirement in ensuring that people use them, and use them very effectively. Skills are absolutely foundational to being effective.

The organisers invite eResearch Australasia participants to share their experiences in eResearch skill development, and will be exploring:

- the key messages, themes and skills that need to be communicated to eResearch practitioners
- the definition of an eResearch Body of Knowledge
- the best vehicle for delivery of these messages and skills (one-on-one support, training workshops, webcasts, user manuals, ... ?)
- the level at which this training needs to be delivered (undergraduate, postgraduate, post-doc, academic, professional staff etc) and what depth to provide for each of these groups. Is there a minimum level of eResearch literacy we should aim for in each group?
- the appropriate people to deliver the training at the local and national level
- mechanisms for sharing training resources
- how to ensure that skill development occurs simultaneously with infrastructure development
- how to measure the effectiveness of training and skill development.

It is expected that the discussion will cover everything from very specific training, such as parallel code development, up to more general eResearch methods and thinking, such as building data management plans.

It is hoped that the discussion will help further existing efforts and create new activities at a local level and at a National level.

WHO SHOULD ATTEND

- Facilitators and developers of training material in eResearch or traditional research
- Communicators and promoters of eResearch
- Researchers interested in building capacity in their domain
- Developers of tools to be deployed to the eResearch community
- Administrators of National eResearch activities

ABOUT THE PRESENTERS

Gaby Bright. Gaby manages eResearch Communications for VeRSI, the Victorian eResearch Strategic Initiative. She is raising awareness of eResearch as an integral part of existing research methodologies. Her role encompasses development, implementation and analysis of outreach strategies for VeRSI.

She manages the VeRSI outreach and awareness team, who are responsible for developing and delivering VeRSI project user manuals and usecases, eNewsletters and promotional material as well as positioning VeRSI as a key facilitator of, and contributor to, eResearch and related networks. Gaby and her team are increasing the awareness of VeRSI as well as the uptake of eResearch in Victoria.

Gaby undertook postgraduate research in particle physics, which took her to CERN, the birthplace of the web and home of some of the earliest eResearchers. She has tutored biomedical physics at Melbourne University and has been an invited speaker on the topic of physics career opportunities on multiple occasions.

Valerie Maxville. Valerie is the Education Program Leader at iVEC – the hub of advanced computing in Western Australia. iVEC is shared resource for advanced computing in WA, particularly serving the members at CSIRO, Curtin, ECU, Murdoch and UWA; working to increase high-end computing expertise in the wider community. With the Education Program, Valerie coordinates the iVEC training program, promotes eResearch in WA, organizes and supervises the summer internship program and is developing an outreach program for schools. She has a background in Computer Science (Curtin) and is completing a PhD in Software Engineering at ECU. Her passions are ICT industry development, encouraging the use of technology in new and positive ways and promoting careers in ICT.

As a volunteer in the local ICT industry, she is a Board member of the Australian Computer Society (ACS) WA and the Institute for Electrical and Electronic Engineers (IEEE) WA Section. Highlights of her voluntary work have been the ICTWA Conference (2006, 2007), ASWEC Conference 2008, ICT careers promotion at local Expos and the development and administration of the ICTWA Portal – <http://ictwa.org.au/>.

Dr Markus Buchhorn. Markus is Director of Services at Intersect, the peak eResearch body in NSW. He has been a leader in the emerging field of eResearch for over 15 years. Markus was previously Director of ICT Environments at the Australian National University, and is an advisor on NCRIS Platforms for Collaboration program, the Australian National Data Service, and a member of the National e-Research Architecture Taskforce (NeAT). He has been involved in national infrastructure programs such as APAC, (Australian Partnership for Advanced Computing), for High Performance Computing services and GrangeNet for high performance network services, and continues to be actively engaged in a wide range of international eResearch initiatives.