

Education and Training BoF

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DESCRIPTION

A critical need across the research community is developing skills in technology-based research, for both researchers and the technology providers. Depending on the researcher, required skills include: data processing, modelling, analysis and management, visualisation, parallel programming and workflow management. These skills may need to be delivered through formal day-sized training through to 5 minute advisory clips. The providers face similar challenges in recruiting and keeping skilled staff with the technical knowledge to build, integrate, operate and support research infrastructure. The community faces a challenge of supplying a range of training to a wide audience with few resources. This BoF will share experience and inspiration, ultimately working to develop an action plan on how to identify, adapt, create/share resources and optimise delivery of training nationally (and internationally) to suit the different audiences.

BACKGROUND

This BoF was included in eResearch Australasia 2009, 2010, 2011 and 2013 and an informal discussion on education issues was organised by Valerie Maxville and Gaby Bright (VeRSI) at the 2008 conference. In 2012 a pre-conference workshop was held as the AeRO Third National Forum. We believe there is value in continuing the discussions around education in eResearch and HPC and hence put the BoF forward as an annual event.

From the AeRO Third National Forum [1]: “The discussion in this workshop indicates that the community is ready for a collaborative approach to skills development in eResearch. We have two key groups to support: researchers and enablers. Researchers are using, or want to use, the eResearch tools. For this group we need to raise awareness, improve technical skills, improve data literacy, make data discoverable and provide tools and services. For enablers, there is a need for technical skills, domain knowledge, project management and people skills. The opportunities in eResearch skills development include benefits of sharing, cross-disciplinary collaborations and new careers. We are challenged by lack of funding, lack of time to attend training, rapid change in IT and a lack of good trainers.”

OUTLINE

The BoF will begin with a series of short presentations followed by an open discussion. We will then break out into a facilitated discussion of what we can do to support eResearch education in Australia, before bringing the group back together for a wrapping up and prioritisation.

1. eResearch Education in Australasia (25 minutes)

Experience reports – speakers to include:

1. Pawsey Supercomputing Centre training activities - Dr Valerie Maxville
2. AeRO Education and Training activities – Dr Markus Buchhorn
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2. Open Discussion (35 minutes)

Proposed Collaboration plans to be presented by the speakers. The audience will have an opportunity to share their experience and respond to the collaboration plans.

3. Group Discussion (40 minutes)

The BoF will break into groups for a facilitated discussion.

4. Wrap Up and Action Items (20 minutes)

Report back on group discussions and plans going forward.

Note: Feedback from previous Education BoF's has been that there was not enough time to progress the topic. We request a two-hour session for the BoF this year. In 2012 a 3.5 hour Skills Development and Education AeRO Forum was held before the eResearch Australasia conference with 35 enthusiastic participants.

PARTICIPANTS

Previous BoFs and workshops have attracted an average of fifty attendees from a wide range of backgrounds. We expect to see educators, trainers, academics and institutional representatives – anyone who has an interest in building capability in eResearch and increasing the uptake of tools.

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

REFERENCES

1. Maxville, V.R. & J. A. Harrison, AeRO Third National Forum: Skills Development & Education Report, January 2013

ABOUT THE SPEAKERS

For each speaker, please provide a short bio of 150-200 words.

Dr Valerie Maxville

Valerie Maxville is an experienced educator who is passionate about technology and it's potential. As User Support Manager at the Pawsey Supercomputing Centre, Valerie is responsible for user engagement, community development, training, internships, helpdesk and merit allocation. She enjoys making technology accessible - taking on the challenge of communicating complex concepts to diverse audiences.

Valerie is the User Support Manager at the Pawsey Supercomputing Centre (formerly iVEC) an organisation providing advanced computing resources to support scientific research in WA and nationally. Since 2007 at Pawsey/iVEC she has coordinated and delivered training, internships, outreach and user engagement to increase awareness and uptake of computational science. Valerie holds a PhD in Computer Science (Software Engineering) and an Honours degree in Computer Science. As an industry volunteer, Valerie actively promotes careers in computing and local industry development. She is a Fellow of the Australian Computer Society (ACS) and a Senior Member of the Institute for Electrical and Electronic Engineers (IEEE).