Meeting notes on

The 1st ICT Perspectives & NoN Meeting

Held 29 November 2011, BCS London

Introduction

This document provides a short and incomplete set of notes on the above meeting as recollected by Mike Chantler.

Agenda

1000	Arrival & Coffee
1030	Welcome, thanks & Round-Table Introductions
1045	Working together (Liam Blackwell)
1100	ICT Perspectives (Mike Chantler)
1140	Topic modelling (Michael Fourman)
1200	Discussion
1230	Lunch
1330	Network presentations (Chair: Ian Henning)
1410	Discussion /coffee
1500	Round-table summary
1530	End of Meeting

Working Together (Liam Blackwell)

Liam gave a short talk and took questions on ICT's strategy for working together.

ICT Perspectives (Mike Chantler)

Mike presented the rationale and goals for the project (Figure 1) which were motivated by the ICT Next Decade workshop[i].

The main points of the presentation concerned:
- There are circa 50k grants in the ICT Perspectives database (from EPSRC, FP7 and NSF)
- Single term (tfidf) vector processing has been applied to the whole database which weights the usage of a term by a number of factors (including frequency of use within a grant summary tensioned by frequency of use across the databse)
- At-a-glance visualisation of portfolios, sub-portfolios etc. in the form of wordless are provided.
- Cluster analysis with visualisation and drill down to show natural structure is being investigated and some early examples were shown using dendrograms linked to term search.
- Illustrative examples of trends over time and funder were also shown.

- Investigator linking is provided.
- Grant summaries are provided with wordle visualisation and links to the ten most similar grant summaries ('similar' in term-based tfidf sense). A text match explanation showing why grants are selected as being similar is provided.
- It was noted that there are many possible perspectives (clusterings) depending upon the features and clustering methods that are used.

Figure 1: ICT Perspective Goals slide

Topic Modelling (Michael Fourman)

Michael gave an overview of topic modelling and showed how Mallet (an open source software package from University of Massachusetts Amherst) could be used to analyse EPSRC project summaries.

Mallet includes a fast and scalable implementation of Gibbs sampling, for efficient document-topic optimization and tools for inferring topics for new documents given trained models. See http://mallet.cs.umass.edu/topics.php.

Discussion

A short discussion ensued at which it was decided that major discussion was to be delayed until after lunch.

Network Presentations (Chair: Ian Henning)

A series of quick-fire presentations was provided by the following representatives of ICT networks:

- Dr. Marina Jirotka
- Prof. Mark Plumbley
- Prof. Mark Sandler
- Prof. Anthony O'Neill
- Prof. Steve McLaughlin
- Prof. Dimitra Simeonidou
- Prof. Alwyn Seeds
- Prof. Chris Hankin [spoke without slides]

Slides from these presentations are available at:
http://www.researchperspectives.org/?page_id=490

Zoe Brown agreed to provide a list of ICT networks that will be included on the ICT Perspectives website.

It was noted that the different networks used different networking mechanisms

Discussion/ Round-table summary

During the discussion the following points and suggestions arose:
1. ICT Perspectives could be extended to include:
   a. Funding data (this is available but currently only the number of grants is used as a volume indicator)
   b. Investigator clustering (as opposed to term or grant clustering would be useful). Investigators could be clustered using grant synopses or their expertise field.
   c. Automatic linkage to a publications database (e.g. Google Scholar).
   d. List of grant project partners, both industrial and academic.
   e. Geographical display (e.g. hotspots on Google maps).
   f. An ability to restrict the '10 nearest grant' to a range of start dates (e.g. to filter out older grants) or funder.
2. The scope could be widened to include another RC (e.g. BBSRC) to show generality and help publicise the value of ICT.
3. JANET could be useful for hosting the RP website (http://www.ja.net/services/web-services/janet-web-hosting-service/applying-to-use-the-web-hosting-service.html).
4. EPSRC GoW is changing to include more intelligent search?
5. EPSRC GoW is changing to include an investigator updatable project outcomes/impact section that could be included in clustering. See:
   a. http://www.epsrc.ac.uk/about/infoaccess/Pages/roaccess.aspx

       b. http://www.epsrc.ac.uk/newsevents/news/2011/Pages/pathwaystoimpact.aspx

6. A linked data format should be established for representing project and network descriptions
7. "MATLAB Central" portal/repository of tools would be useful.
8. It would be useful to include emerging researchers (non-grant holders) but it was unclear as to how this could be efficiently implemented.
9. The JISC 'what-we-do' database at http://www.jisc.ac.uk/whatwedo.aspx could be exploited. (Furthermore ICT Perspectives should monitor this for possible duplication of effort).
10. OpenBiz (JISC) is relevant to the project http://www.jisc.ac.uk/events/2011/03/jisc11/programme/2externalengagement.aspx
11. Virtual journalism / analogist domains (goldsmiths)
12. The VOSviewer bibliometric network viewer tool should may be interesting (http://www.vosviewer.com/)

Next meeting

It was suggested that the next meeting should be held in May and that the Networks should be allocated more time (and moved to the morning) .

Next steps

After a telephone conversation between Mike Chantler, Liam Blackwell, Zoe Brown and Andrew Rose on 8 December it was decided that the project should focus on:

(i) Ensuring that the basic services are useable and easy to use.
(ii) Immediate porting to a 3rd part hosting service.
(iii) Implementation of discussion points 1.a, b, and f.
(iv) Initiation of discussions of likely usage and scoping of tools with local academics and Networks

Attendees

Liam Blackwell EPSRC
Zoe Brown EPSRC
Gerald Buller Heriot Watt University
Mike Chantler Heriot Watt University
George Constantinides Imperial College London
Dave Corne Heriot Watt University
Tom Crick University of Wales Institute
David Foster University of Manchester
Michael Fourman University of Edinburgh
Fraser Halley Heriot Watt University
Chris Hankin Imperial College London
Ian Henning University of Essex
Ian Horrocks University of Oxford

Marina Jirotka University of Oxford
Kevin Jones City University London
Karol Kalna Swansea University
Nick Kingsbury University of Cambridge
Mark Leeson University of Warwick
Steve McLaughlin University of Edinburgh
Peter O'Hearn Queen Mary University of London
Anthony O'Neil Newcastle University
Mark Plumbley Queen Mary University of London
Andrew Rose EPSRC
Mark Sandler Queen Mary University of London
Alwyn Seeds University College London
Dimitra Simeonidou University of Essex
Bernd Carsten Stahl De Montfort University

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i http://www.epsrc.ac.uk/newsevents/news/2011/Pages/ictnextdecadereport.aspx