

Big Data Working Party (BDWP)

The objective of the Big Data Working Party is to explore the future of big data, analytics and unstructured data in Asia and what actuaries need to do to have the right skillsets that will be in demand for such work.

The working party is made up of actuaries from life insurance, general insurance, and consulting backgrounds as well as data scientists based in Singapore and HK. Members include Mudit Gupta (chair), Clementine Vie, Colin Priest, David Menezes, Frank Devlin, Frankie Chan, Kate Chen and Xavier Conort.

Launched in 2015, the working party has achieved a lot in its first year:

- a) Developed a case study using diabetes hospitalisation data from USA to demonstrate machine learning techniques which is used to deliver CPD training to actuaries
- b) Presentation at the SAS General Insurance conference in 2015 to publicise the SAS' big data initiative and how actuaries need to upgrade their skillset with new tools and techniques:
<http://actuaries.asn.au/Library/KnowledgeBank/GINewsletters/2015/02BAUforActuariesBigDataWorkingParty.pdf>
- c) The working party also published an article along similar theme in HK actuarial society magazine:
[http://www.actuaries.org.hk/upload/File/Newsletter-volume3-2015\(FINAL\).pdf](http://www.actuaries.org.hk/upload/File/Newsletter-volume3-2015(FINAL).pdf) (page 8)
- d) Conducted two Machine learning workshops led by Colin Priest in SMU campus on 28 September. It gathered 60 participants from 4 countries from a diverse mix of disciplines. Syllabus:
<http://www.actuaries.org.sg/files/events/MLW%202015-09-28/MachineLearningWorkshopBrochure2015.pdf>

Figure 1 Participants at the machine learning workshop

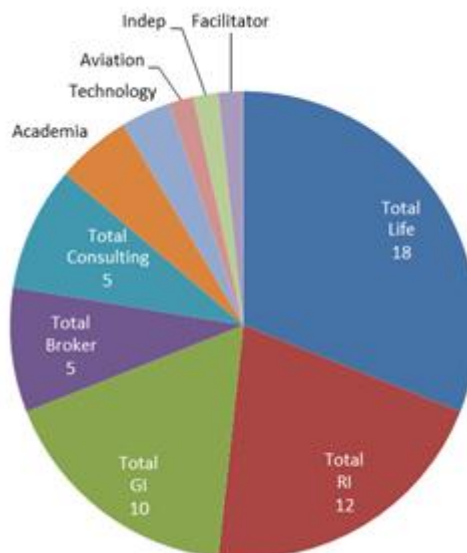


Figure 2 Photos from the machine learning workshop



We have big plans for 2016 and several projects in the pipeline:

- a) Developing more case studies with an emphasis on local or insurance data and on text mining that actuaries may readily apply in their work
- b) Look into IT/technology aspects of big data relevant to actuaries
- c) Following the success of the machine learning workshop in 2015 we are planning to launch an advanced workshop as well as re-run the intermediate workshop
- d) Actuarial Analytics Challenge: Kaggle competition for members to apply their knowledge of data analytics in a competition
- e) More CPD sessions and speakers to share data analytics case studies that they have worked on in Singapore and other locations including Malaysia and Hong Kong

This is an exciting time for our profession as our tools and techniques, and scope of work evolve with changes in technology. If you are interested in getting involved in any of the above projects, or have an idea you wish to pursue or have any suggestions for the working party please feel free to reach out to any one of us.

We are also looking out to organisations wishing to collaborate with us by providing data for analysis and for speakers to share case studies that they have worked on. Please also reach out to us if you have any contacts you would like to refer to us.