## **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, Malaysia and Hong Kong. Members in 2016 term included Mudit Gupta (chair), Colin Priest, David Menezes, Frank Devlin, Frankie Chan, Kate Chen, Alvin Choong, Jerry Yu, Kok Fai Wai, Guoyu Huang and Paul Wang. In 2017 we are pleased to welcome Wei-Chyin Tan, Saliya Jinadasa, and Ankur Agrawal to the BDWP.

## Launched in 2015, the working party has made further tremendous achievements in its second year:

- a) Hosted inaugural Asia Actuarial Analytics Challenge 2016 on Kaggle in which 58 teams from countries all around the region participated.
  - Winner announcement: <a href="https://inclass.kaggle.com/c/sas-analytics-challenge/details/prize-winners">https://inclass.kaggle.com/c/sas-analytics-challenge/details/prize-winners</a>
  - Read the announcement and interview with the winner in the SAS Quarterly Newsletter:
    - http://actuaries.org.sg/files/library/newsletters/2017%20Newsletter/2016-17-Newsletter-SAS-Quarterly-Issue-03.pdf
  - Winner's reports (see PDF files): <a href="https://inclass.kaggle.com/c/sas-analytics-challenge/forums/t/24009/results/139905#post139905">https://inclass.kaggle.com/c/sas-analytics-challenge/forums/t/24009/results/139905#post139905</a>
  - IFoA sponsored a special discussion forum prize (photo below)



b) Conducted "text mining using machine learning" workshop organised by Frank Devlin and Colin Priest in June 2016 in Singapore. Read more about the workshop in the SAS Newsletter:

http://actuaries.org.sg/files/library/newsletters/2016%20Newsletter/2016-17-Newsletter-SAS-Quarterly-Issue-01.pdf (photos below)



- c) CPD presentations and afternoon forums
  - Frankie Chan and Devlin Frank presented in IFoA Asia Conference in Kuala Lumpur, Malaysia
  - David Menezes and Frankie Chan presented in General Insurance conference in Hong Kong.
  - Organised an afternoon forum with Eric Choo on the topic "The Bolts and Nuts of building a Big Data infrastructure" in Sept 2016 <a href="http://www.actuaries.org.sg/?q=node/15107">http://www.actuaries.org.sg/?q=node/15107</a>
  - Mudit presented with Ling Yit Wong at the Health & Retirement Conference <a href="http://actuaries.org.sg/files/PreConferenceMaterialsForRegisteredAttendees/2016conferences/HRC20161013presentations/SAS.HRC2016.D1.20161013.1415H.BigDataWP.pdf">http://actuaries.org.sg/files/PreConferenceMaterialsForRegisteredAttendees/2016conferences/HRC20161013presentations/SAS.HRC2016.D1.20161013.1415H.BigDataWP.pdf</a>
  - Afternoon forum in Singapore on Text Mining and Deep Learning for Stock Market prediction by Prof Yue Zhang from SUTD in May 2016
- d) Supported international actuaries bodies through information sharing, collaborations and by Colin Priest conducting machine learning workshops for regional societies in Thailand and Malaysia

## We have big plans for 2017 and some projects the working party is currently working on include:

- We are preparing for a two-day Big Data Bootcamp. Look out for more detail over the next few months
- Project underway on marketing analytics of banking data
- Project underway on analysing geographical transportation data from Singapore
- Preparations for a machine learning workshop in Hong Kong
- Asia Actuarial Analytics Challenge 2017
- More publications and CPD presentations

If you are interested in getting involved in any of the above projects, 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 the BDWP members.

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.