

Data Analytics Day : Friday 22 November 2019

R computer hands-on presentation

Schedule	Topic	Summary	Format	Speaker	BIO
8:30-9:00	<i>Registration coffee</i>				
9:00-9:10	Key note speaker			Professor James PANG (NUS)	
9:10-10:00	Actuarial Data Science: R in Insurance	Some examples of using R in insurance by actuaries e.g. for pricing, reserving, visualizing dataset, linking to Excel, SQL, writing report.	Presentation	TIAN Yuan 	Yuan is a qualified actuary working for AM Best as a Senior Financial Analyst in Singapore. Before moving to Singapore, she had about 10 year work experience in both personal and commercial general insurance in the UK. Her roles covered a broad range of actuarial areas including pricing, reserving, risk management and data analytics. Outside work, she likes travelling, dancing and piano.
10:00-12:00		Loading a claim dataset into R · Manipulating and cleaning the dataset · visualizing dataset e.g histogram, box plot. · Fitting distributions and model selection · Output to csv/excel, and producing the report and analysis in a R markdown document 30 mins practice: A question will be handed out for a short exercise.	Computer hands-on		
12:00-1:00	<i>Lunch</i>				
1:00-2:00	Machine Learning: In theory and practice	Machine Learning has changed the business landscape in the recent few years and that has had a massive impact on how we think about work and business processes. But what is Machine Learning and how do we use it in our day to day work? This talk aims to tackle just that.	Presentation	Karthikan SELVARAJ 	Karthik is a Data Scientist at Aviva Singapore with deep expertise in using AI and Data Science to drive material value across the insurance value chain.
2:00-3:00	Machine Learning in R	This workshop provides a step-by-step tutorial for participants seeking to build and examine a workable machine learning model in R. Cross-validation, model tuning, and diagnostic tools are considered in the context of a practical dataset.	Computer hands-on	Nick GABRIELE 	Nick is a graduate student studying Business Analytics at the National University of Singapore . He previously worked as a valuation actuary in annuities, reinsurance, and group health.
3:00-3:30	<i>Break coffee</i>				
3:30-4:00	Introduction to the Kaggle world	A introduction of the most popular data science competition and community, What is it, how to participate, and why you should look at it.	Presentation	TAN Wei Chyin 	Wei Chyin is a qualified actuary with 14+ years of experience in US and Asia Pacific. In his current role with NTUC Income , he works with digital transformation office in introducing new business models into the market.
4:00-5:00	Visualisation of Transportation data featuring real-time weather	Singapore that could be considered in motor insurance pricing or predictive analysis of motor claims. It showcases the available data source from various government or service agencies such as LTA, data.gov.sg, weather.gov.sg, and techniques in sourcing the data in real-time via AWS (Amazon Web Services). Lastly, we will present the data visualisation techniques and discuss potential next steps involving advanced analytics such as machine learning.	Presentation	Kate CHEN 	Kate has worked on consulting projects in direct insurance and reinsurance markets, and is a qualified actuary with Institute and Faculty of Actuaries. She is interested in studying big data analytics and their applications in insurance industry and their role in self-driving car development.