

# Text Mining and Transaction Sequencing using Machine Learning Workshop

Friday, 27 October 2017

Big data and analytics are becoming increasingly important for actuaries and data scientists. This workshop is aimed at introducing actuaries to machine learning tools and techniques that will be useful for dealing with big and unstructured data, but which is not primarily numeric in nature. These techniques might be used in asset management; in claims analysis of free text remark fields within a policy administration system; reviewing claims file notes in general insurance; automated claims processing/work allocation; fraud detection; sentiment analysis in customer feedback or to analyse news items to understand exposure to a calamitous event.

This is a hands-on workshop where participants will use R (software) to learn how to perform text mining using machine learning techniques. Please see the detailed syllabus below.

<b>Learning objectives</b>	<ul style="list-style-type: none"> <li>• Knowledge of how to apply simple text mining model types in R with basic understanding</li> <li>• Ability to choose between models, set up models, analyse results, and make modelling decisions</li> </ul>
<b>Topics covered</b>	<ul style="list-style-type: none"> <li>• Word Clouds</li> <li>• Sentiment analysis of Twitter feeds</li> <li>• Whether two financial news stories are about the same event</li> <li>• Text mining on sequence of events e.g. sequence of medical diagnoses or customer product purchases</li> </ul>

## About the Facilitator

### Colin Priest

Director, Customer Success, APAC, Data Robot



Colin is an Australian actuary with more than 25 years of experience in general insurance, including 6 years in Asia. Even though Colin's actuarial work has included practically all lines of business and all types of actuarial roles, Colin has also enjoyed his experience in non-actuarial roles such as CEO of a high-tech start-up company, relationship management, portfolio management, marketing, customer analytics and artificial intelligence for video security systems.

If you ask him, he will tell you an amusing story involving his project work for a pharmaceutical company...

## Who should attend?

Actuaries and analytics professionals working in <b>marketing, valuation, asset management</b> and other forms of <b>predictive modelling</b>	Actuaries and analytics professionals interested in <b>data science</b>
Actuaries and analytics professionals interested in <b>setting up analytics</b> functions	Students wishing to expand their knowledge of <b>machine learning</b>

# Workshop Details

## Compulsory Requirements

Because of the technical nature of this workshop, there are important requirements which participants must consider before registering:

<b>Laptop computer</b>	<ul style="list-style-type: none"><li>Participants will be required to bring their own laptop with R installed to this workshop</li></ul>
<b>Prerequisite knowledge</b>	<ul style="list-style-type: none"><li>Writing R scripts at a beginner level</li><li>Statistics as covered by a typical actuarial syllabus, particularly GLMs</li><li>Nice to have – attended prior April 2017 workshop</li></ul>
<b>Pre-work</b>	Pre-work materials will be emailed to registered participants prior to the workshop. These will cover topics such as: <ul style="list-style-type: none"><li>Setting up R &amp; do tutorials for basic understanding</li><li>Some introductory reading material</li></ul>

## Date & Time

This one full-day workshop will be held on **Friday, 27 October 2017** from **10:00 am to 5:00 pm**.

## Venue

Deloitte Hong Kong Office  
6/F, Cityplaza 4, 12 Taikoo Wan Road  
Taikoo Shing, Hong Kong

The ASHK wishes to express thanks to Deloitte for its kind offer to host the workshop.

## Registration Fees & Deadline

**Registration Fees** (*refreshments for two breaks included; lunch self-arranged*)

<b>ASHK Member</b>	HK\$ 800 per person
<b>HKFI Member</b>	HK\$ 800 per person
<b>Non-Member</b>	HK\$ 1,300 per person

Closing date for registration: **Monday, 16 October 2017**

## Continuing Professional Development (CPD)

Actuarial members may find it a useful contribution to their CPD. A maximum of **5 CPD hours** (1 CPD hour = 60 minutes) can be claimed. The amount of hours recorded is left to the discretion of the individual.

## Group Size

The number of participants in this workshop will be limited to a class-room sized group. (*Seating is limited, so please register early to avoid disappointment.*)

ASHK is delighted to bring into Hong Kong this workshop developed by Singapore Actuarial Society Big Data Working Party. For more information, please visit <http://www.actuaries.org.sg/>.



ACTUARIAL SOCIETY  
H O N G of K O N G  
香 港 精 算 學 會

# Text Mining and Transaction Sequencing using Machine Learning Workshop

Friday, 27 October 2017

## Registration Form

Seating is limited!

Book by 16 October 2017 to avoid disappointment!

### PERSONAL PARTICULARS

Name of Company		
Name of Member(s)*:		
Name of Non-Member(s):		
Contact Person		
Tel	Fax	
Email		

**FULL HOUSE**

\* Please note if the individual is an ASHK or HKFI member in brackets.

### REGISTRATION (Deadline for Registration: 16 October 2017)

ASHK Member	<input type="checkbox"/>	HK\$ 800@	x	_____	persons
HKFI Member	<input type="checkbox"/>	HK\$ 800@	x	_____	persons
Non-Member	<input type="checkbox"/>	HK\$ 1,300@	x	_____	persons

### Notes:

1) Please return your completed form with your payment:

**The Actuarial Society of Hong Kong** - 1803 Tower One, Lippo Centre, 89 Queensway, Hong Kong

TEL : (852) 2147 9168

FAX : (852) 2147 2497

EMAIL : [sarahhui@actuaries.org.hk](mailto:sarahhui@actuaries.org.hk)

2) Registrants can settle their registration fee by crossed cheque (payable to "The Actuarial Society of Hong Kong") / bank transfer / electronic payment. The relevant bank account details will be provided upon request made to [sarahhui@actuaries.org.hk](mailto:sarahhui@actuaries.org.hk). Receipts will be issued upon request.

3) Bookings are on a first-come-first-served basis. No reservations will be accepted after 16 October 2017.

4) **Cancellations must be made by contacting [sarahhui@actuaries.org.hk](mailto:sarahhui@actuaries.org.hk) in writing. Cancellation before 16 October 2017 will be subject to a HK\$ 150 administrative charge. Please note cancellations made after 16 October 2017 or no shows will be charged at full rate.** The Society reserves the right to cancel the workshop if conditions warrant.