



FESAus Monthly Technical Meeting

“Data Analytics and Machine Learning, What is it and How can I use it?” - Chris Dyt - CSIRO

Abstract: :

Analytics techniques and Machine Learning are currently extremely popular in a range of fields, and petroleum exploration and production is no exception. However, their benefits and limitations are generally poorly understood by geologists. This talk will introduce in a very non-technical way the concepts behind various techniques. The discussion will focus on the importance of identifying the exact problem that needs to be solved, understanding the meaning behind the data and selecting the correct method of solution. We will provide three examples where different approaches have been applied to the interpretation of well logs. The three different approaches range from heavily user involved techniques, completely unsupervised classification of the logs and a mix of data analytics and expert rule-based classification. The final system will be discussed in more detail as it stresses the importance of understanding the physics behind the problem that is being solved.

About the Presenter:

Chris Dyt is an applied mathematician with 20 years' experience working in petroleum geology. Chris' PhD in Astrophysics left him desiring to use his mathematics on a more practical application, and was lucky enough to join the University of Adelaide and develop a stratigraphic forward modelling code Sedsim. In 2000 CSIRO acquired the software and Chris joined as well. In the following years Chris has been fortunate enough to work across a broad range of modelling projects and is currently working in the Geoscience Data Analytics team based at ARRC WA.



DATE: Tuesday 12th November, 2019 - 12:00 – 1:30 PM **VENUE:** Hotel IBIS- 334 Murray Street, Perth
COST: Members \$30.00; Non Members \$40.00; Students/Retirees \$10.00
Online registration at www.fesaus.org by
Friday 8th November at 11.00 am



Note: Limited seats for unregistered attendees may be available: \$50.00 cash door charge