FESAus October 2020 Talk

Machine Learning Assisted Seismic Fault Interpretation – Fahad Khan

The machine learning assisted fault interpretation workflow has been able to identify a higher proportion of the structures in the seismic survey within a given timeframe. Input seismic is optimised through ingestion in an *OSDU* compatible data ecosystem. The fault detection process is discussed that provides prediction cubes as well as segmentation and extraction of fault planes to be analysed by the interpreter for a subsequent construction of a fault framework and structural model. The process assists exploration scale seismic interpretation as well as in field appraisal and development through building of multiple structural scenarios that feed into the *Agile Reservoir Modeling* process where generation of multiple uncertainty realisations for various scenarios is enabled through parallel *HPC* processes.

Fahad Khan *is a Senior Geoscientist with Schlumberger Software Integrated Solutions. He is based in Perth, with international experience in a wide variety depositional settings and field developments. He specialises in the development of geoscience workflows to optimise time spent on exploration and development workflows. He is a certified NExT Instructor, having previously delivered many Advanced Level courses.*

DATE: **Tuesday October 13, 2020** - 12:30 – 1:30 PM (WAST, GMT+8) **VENUE:** Ibis hotel (Perth), on the web (rest of the world)
COST: Members $30.00; Non Members $40.00; Students/Retirees $10.00; Remote (only if not based in Perth): $10.00
Online registration at www.fesaus.org by Friday 9th October at 11.00 am