



## Machine Learning on Subsurface Data - Symposium

20.09.2018 at the Valhall auditorium at NPD offices

Time	Title	Presenter
8:00 - 8:10	Welcome/setting the scene	Grete Block Vagle, AkerBP
8:10 – 8:35	An Introduction: From Traditional Machine Learning to Deep Learning	Anders Waldeland, Norsk Regnesentral
8:35 – 8:55	Machined learned well lithology prediction from a disparate well log dataset and imperfect training data	Eirik Larsen /Earth Analytics
8:55 – 9:15	Streamlining petrophysical workflows with machine learning, focused on the estimation of clay volume, determination of mineral volumes and determination of porosity and water saturation	Lucy MacGregor <sup>1</sup> , Juan Berrizbeitia <sup>1</sup> , Nick Brown <sup>2</sup> , Anna Roubickova <sup>2</sup> & Marc Sabate <sup>2</sup> 1 – Rock Solid Images 2 – EPCC, University of Edinburgh
9:15 – 9:35	Automated fluid substitution from non-linear regression	Anders Dræge, Equinor
9:35 – 9:55	Sequential Bayesian methods for spatial on-line pore-pressure prediction from well log data	Jo Eidsvik, NTNU
<b>9:55 – 10:10</b>	<b>Break</b>	
10:10 – 10:35	Seismic facies classification away from well control - The role of augmented training data using basin modeling to improve machine learning methods in exploration.	Per Avseth (Dig Science) and Tapan Mukerji (Stanford University)
10:35 – 10:55	Automated seismic interpretation using machine learning and field interpretations	Espen B. Raknes, AkerBP Exploration
10:55 – 11:15	Using Machine Learning for Automated Seismic Facies Classification	Indy Chakrabarti /Emerson
11:15 – 11:45	Results from the first Stavanger Subsurface hackathon	Matt Hall, Agile Scientific
<b>11:45 – 12:35</b>	<b>Lunch and presentation of hackathon outcomes</b>	
12:35 – 13:05	Enabling Data Analysis at Scale (Cognite/AkerBP) and Walking the Talk on Johan Sverdrup (Equinor)	Giedre Malinaskaite, Cognite Thierry Laupretre, AkerBP
13:05 – 13:25	Can machines read text like Geoscientists do?	Paul H. Cleverley / Robert Gordon University Aberdeen
13:25 – 13:45	How fast is fast? Metrics of Machine Learning Enabled-Processing of High Volume Well Reports for Effective Data Search and Class Aggregation in Elastic Docs	Nina Marie Hernandez /Iraya Energies
13:45 – 14:05	Deep Learning on Cuttings Images – Computer Vision for Geoscience Interpretation	David Wade; Linn Arnesen / Equinor
<b>14:05 – 14:20</b>	<b>Break</b>	
14:20 – 14:50	New approaches to seismic interpretation using machine learning: Lightning session	Lukas Mosser Imperial College London / Aina Bugge Juell (Kalkulo AS)
14:50 – 15:10	Machine Learning in 4D Seismic Interpretation: Monitoring the Reservoir	Mike Brhlik /ConocoPhillips
15:10 – 15:30	Machine learning for uncovering patterns and making predictions in 'small to medium data' like Qemscan, petrography, core descriptions and geochemical point count data	Samuel Fielding / CGG Robertson
15:30 – 15:50	A Machine Learning Approach to Optimizing the Allocation of Steam used in ConocoPhillips Canadian Steam Assisted Gravity Drainage (SAGD) Project	Chris Olsen /ConocoPhillips
15:50 – 15:55	Wrap-up	Grete Block Vagle, AkerBP

### Organizing committee:

Peter Bormann, ConocoPhillips  
 Mark Hughes, Repsol  
 Alessandro Amato del Monte, Eni  
 Pernille Hammernes, Equinor  
 Grete Block Vagle, AkerBP  
 Sølvi Amundrud, NPD  
 Ellen Marie Skartveit, NPD  
 Tone Helene Mydland, NPD

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