Industry Case Studies

Enterprise AI at Shell

https://c3.ai/enterprise-ai-at-shell/

2D Seismic to 3D Volumes

https://www.slb.com/resource-library/case-study-with-navigation/di/sri-lanka-explorecube

Reducing Flaring - *50 hours of work to 6 seconds*

https://www.slb.com/resource-library/case-study-with-navigation/di/wells-optimized-gas-flaring-minimize-all-in-just-six-seconds

Machine Learning + Oil and Gas Papers

Predicting perforation entry hole diameter

Nashed, S., Lnu, S., Guezei, A., Ejehu, O., & Moghanloo, R. (2024). Downhole camera runs validate the capability of machine learning models to accurately predict perforation entry hole diameter. *Energies*, *17*(22), 5558. https://doi.org/10.3390/en17225558

Optimizing Choke Size

Igbinere, S. A., Ohenhen, İ., & Christopher, E. F. (2025). OPTIMIZING CHOKE SIZE TO MINIMIZE SAND PRODUCTION IN OIL WELLS: a MACHINE LEARNING APPROACH. Gazi University Journal of Science Part a Engineering and Innovation, 12(2), 541–561. https://doi.org/10.54287/gujsa.1669814

Improving Inclination Measurement

Liu, Q., Kong, F., Chen, X., Wang, G., & Li, K. (2024). Improving the accuracy of dynamic inclination measurement by machine learning. Scientific Reports, 14(1). https://doi.org/10.1038/s41598-024-76032-6

Modelling of thermal cracking of LPG

Nabavi, R., Niaei, A., Salari, D., & Towfighi, J. (2007). Modeling of thermal cracking of LPG: Application of artificial neural network in prediction of the main product yields. Journal of Analytical and Applied Pyrolysis, 80(1), 175–181. https://doi.org/10.1016/j.jaap.2007.01.015