

CV enhanced cuttings monitoring

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Shakers are used in drilling to separate the retrieved cuttings from the drilling fluid (mud) which is then recycled. These cuttings contain valuable information on the subsurface, the formation currently drilled and can be early warning signs of problems. Cuttings monitoring today is still done manually and requires a person in a hazardous area next to the shaker paying constant attention. Information gain and early detection of problems depends very much on the experience and attention of the respective staff.

Shortcomings of the current procedure include:

1. Extended well cleaning time
2. Re-drilling of sections, damage or even loss of Bottom-hole-assembly (BHA)
3. Shaker Issues
4. Formation identification depending on staff expertise
5. Staff required during operations in hazardous area / HSE

The aim of the project is to mitigate the above to improve safety, optimize shaker efficiency and reduce non-productive time (NPT) during drilling operations through digitalization of cuttings monitoring using AI powered computer-enhanced vision recognition and training an algorithm using machine learning.