

ShortTitle: CoreBreakOut

Title: Segmentation and data extraction from wellbore core photos

Project leads and contact details:

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Suggested team size: 2-4

Logistics: Can work from anywhere, with periodic meetings (and free lunch) at the Ovintiv office in downtown Denver

Project description: Images of “core” (a cylinder of rock extracted from the subsurface using a drill rig) can tell geologists about the amount and quality of critical minerals (e.g., lithium for batteries), hydrocarbons, and water in the subsurface. Terabytes of core images exist but are often underutilized - using python and established packages (i.e., <https://github.com/rgmyr/corebreakout>, see figure below), you would help build capability to analyze large core-image datasets to extract features useful for resource characterization.

