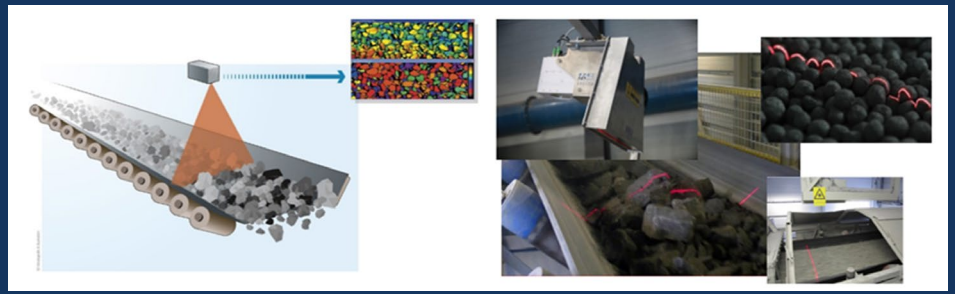
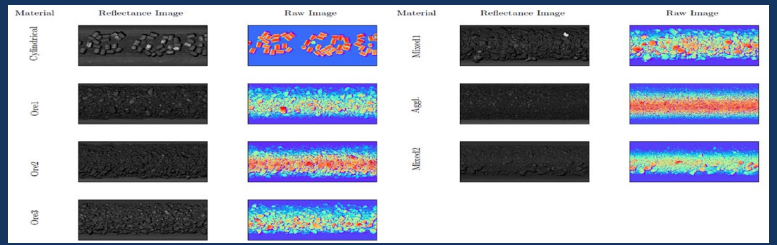
Depth Contrast: Self-Supervised Pretraining on 3DPM Images for Mining Material Classification

Prakash Chandra Chhipa[1], Richa Upadhyay[1], Rajkumar Saini[1], Lars Lindqvist[2], Richard Nordenskjold[2] , Seiichi Uchida[3] and Marcus Liwicki[1]

[1]Machine Learning Group, Luleå Tekniska Universitet, Luleå, Sweden, first.middle.last@ltu.se
[2]Optimation Advanced Measurements AB, Luleå, Sweden, first.last@optimation.se
[3]Human Interface Laboratory, Kyushu University, Fukuoka, Japan, uchida@ait.kyushu-u.ac.jp

3-Dimensional Particle Measurement (3DPM) Sensor





- Estimates the particle size distribution of mining material on conveyor belt
- 32-bit depth map (height of material) and corresponding pixel-mapped reflectance data
- Human labeling is so costly
- Material classification, how?

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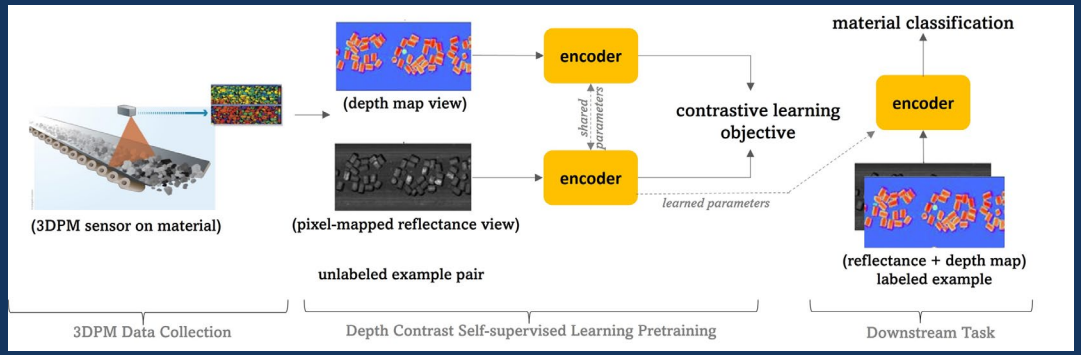
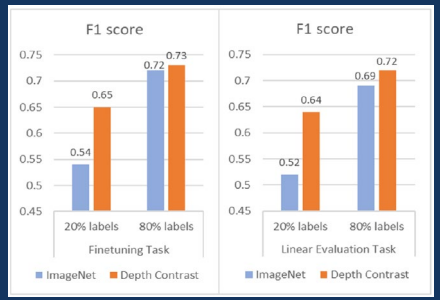


1. *Learns representations by exploiting supervision signal from data (depth maps) only*
2. *Not even human engineered augmentation in SSL*



Look at the results

Meet our wonderful team at poster!

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