DEPARTMENT OF GEOSCIENCES AND GEOLOGICAL & PETROLEUM ENGINEERING

Imaging and Characterization

LIDAR Imaging

- Landslide monitoring and characterization
- Rock fall detection and prediction
- · Non destructive bridge load testing
- Robotic mapping of dangerous spaces
- Autonomous navigation

Optical Imaging

- Optical Sizing of fragmented rock
- Aggregate shape characterization
- Surface roughness measurement
- Tribology
- · Highway sign brightness measurement

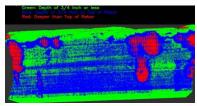
OtherTopics

- Multivariate analysis of borehole discontinuity data
- Underground health and safety monitoring

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Funding

- NIOSH (Nat. Inst. Of Occupational Health and Safety)
- MODOT (Missouri Department of Transportation)
- Toyon / Navy
- RMERC / UTC









Imaging and Characterization of Geological and Other Materials, Non-Destructive Testing

Keywords

 LIDAR Scanning, Image Processing, NDE, Rock fall, Slope Stability, Landslides, Mining Health and Safety, Ground Control, Autonomous Navigation, Comminution, Blast Assessment

Recognitions

 Outstanding teaching commendation award, Global Learning

