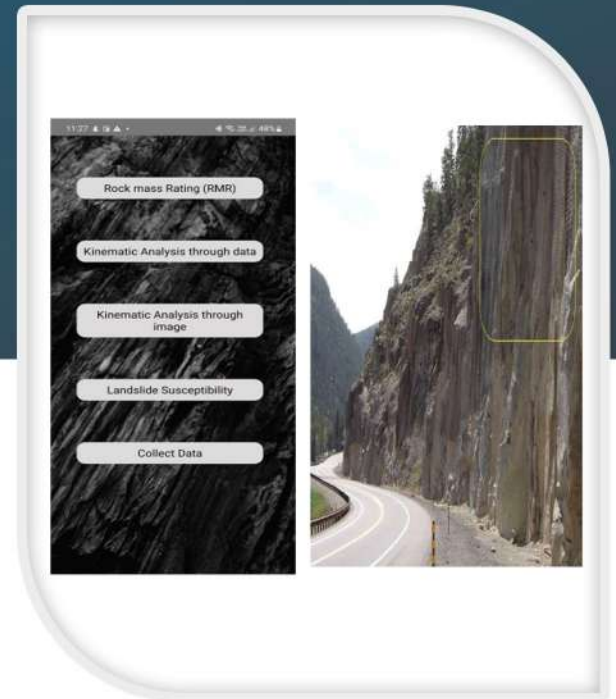


TECHNOLOGY DEVELOPMENT PROGRAM SMART CITIES AND SOCIETIES

RockMetrics

Rock mass characterization and rock slope failures detections



Issue Being Addressed

- ▶ Rockslides are caused by rock failure
- ▶ Debris sliding down slopes, completely or partially blocks river channels
- ▶ Mudslides increase the risk of flooding

Key Feature of the Technology/Product /App Which is Being Developed

- ▶ Estimated the RMR, RQD, Joint spacing, and GSI with the help of images, computer vision, and fewer inputs from the user. Integrated kinematic analysis, landslide susceptibility, and data collection in the application

CPS Relevance

- ▶ Data is collected on the cloud with the help of images, computer vision, and other inputs which are then modeled through CNN, and the app is developed using React native software to simulate the landslides

Impact & Benefits

- ▶ Helpful in tracking the characterization of the rocks, slope and land thereby helpful in primitive prediction of rock or landslides

Team

- ▶ Golla Amith, B. Tech
- ▶ Pawan Gangarapu, B. Tech
- ▶ PI: Professor Sandeep Chaudhary
Department of Civil Engineering
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Targeted Customers & End Users

- ▶ Construction industries
- ▶ Government organizations
- ▶ City administration and society

Commercialization Status

- ▶ Developed the technology that successfully simulates the rockslides on pilot scale and is available on google play stores