

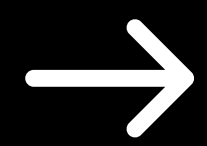
**REAL TIME MONITORING
TO PREVENT MINES
LOSING BILLIONS OF
DOLLARS**



GEOHAZARDS SLASH MINES' REVENUE AND KILLS WORKERS

Geohazards

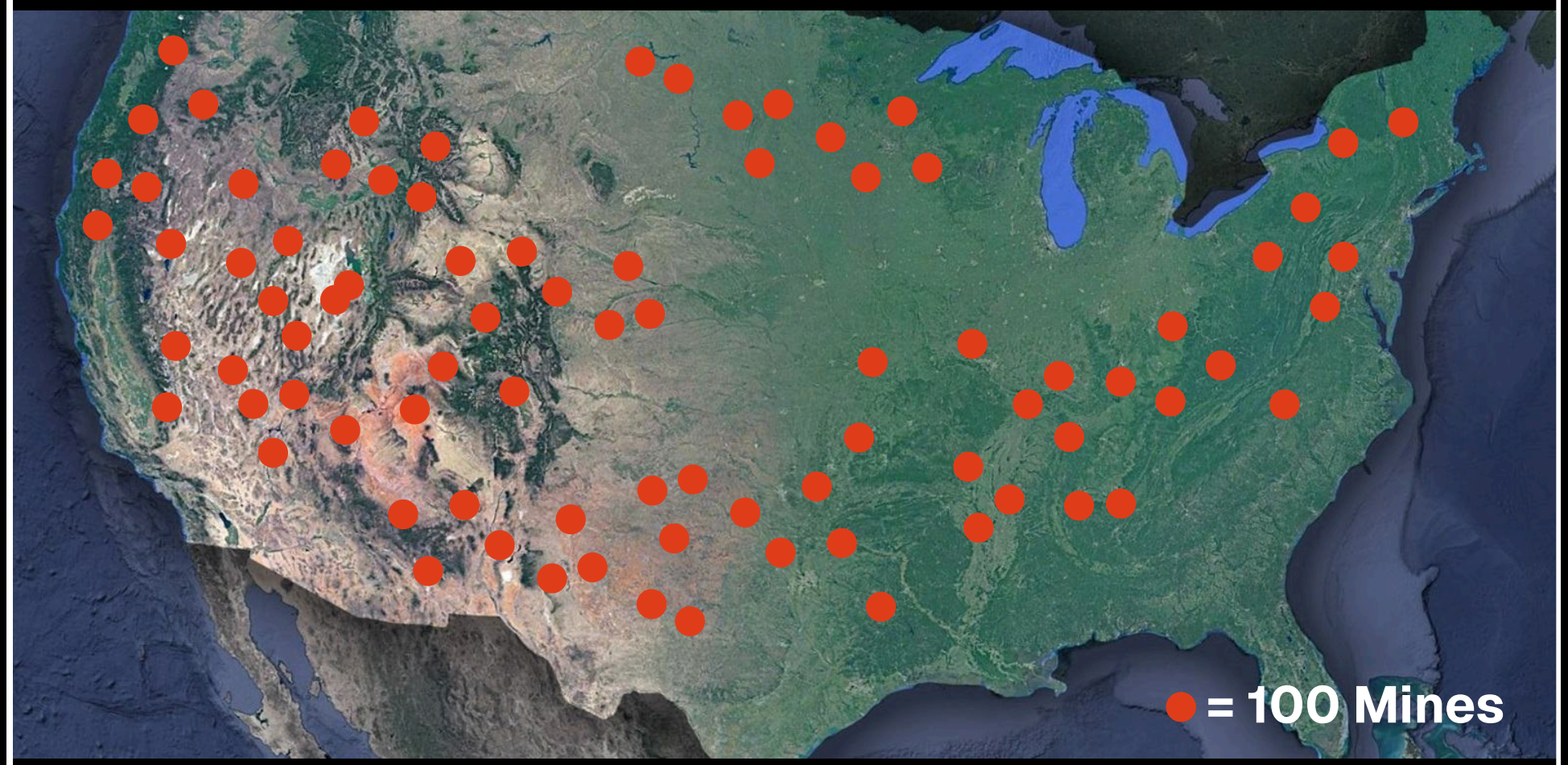
- Rockfalls
- Landslides
- Washouts
- etc.



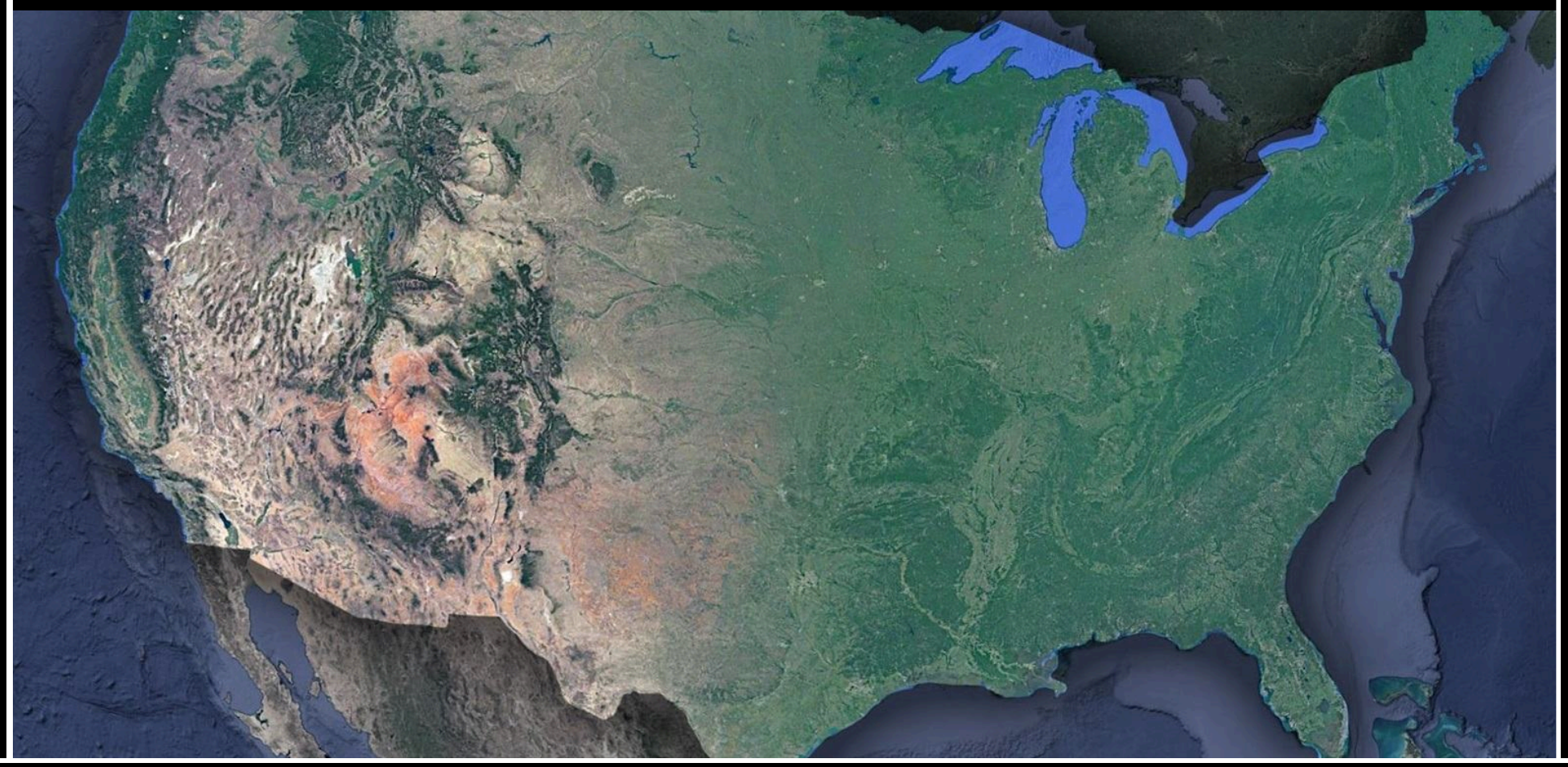
\$23B
losses per year

1,000
deaths per year

40,000 MINES IN THE USA ALONE



0 MINES CAN PREDICT GEOHAZARDS EFFECTIVELY





GEO-PREDICTION RESEARCHERS TURNED INDUSTRY EXPERTS



- Independent university research group focused on geohazard prediction
- Understood our research could be applied to mines
- Started building out a solution while meeting and learning from the industry

FOUNDERS

BRADEN KISLIN
CEO

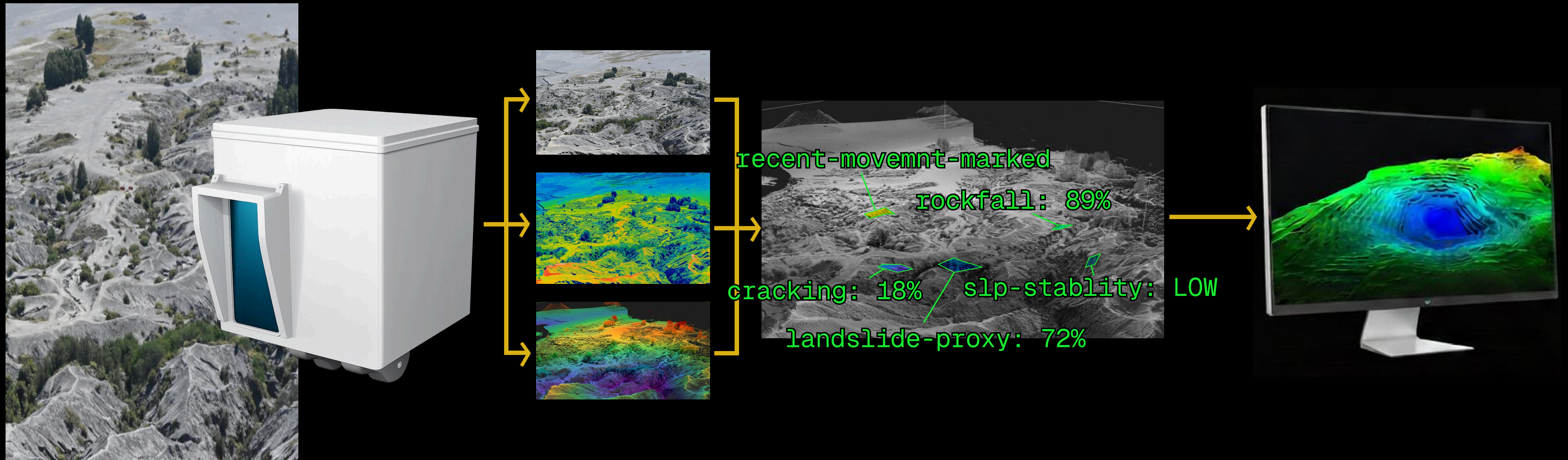
• Geomatics researcher

NAFIZUR RAHMAN
CTO

• AI Modeling at OSU



CASCADE LETS OPERATORS SEE THE HIDDEN RISK



Realtime Scanning

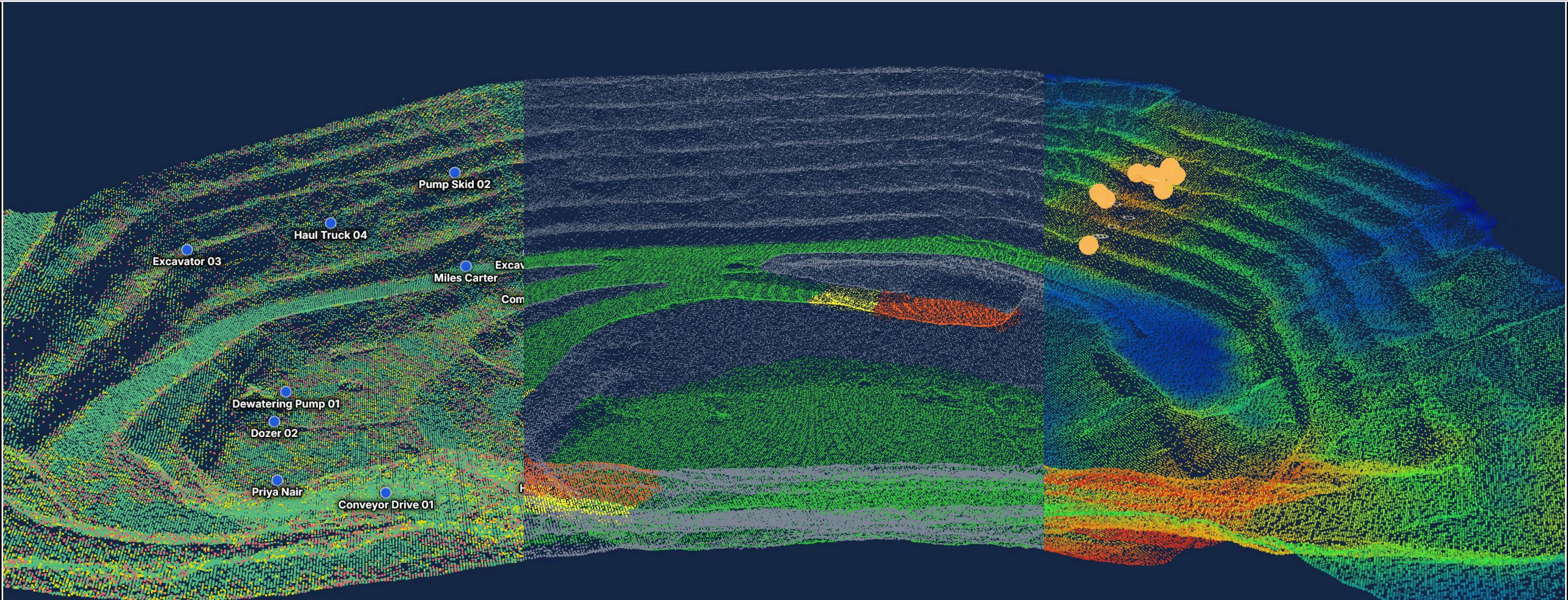
Constantly scan the terrain with a wide range of data

AI & Physics Analytics

Run the data through research backed models and then package it for operators



MINES GAIN UNPRECEDENTED FORESIGHT ON OPERATIONS



Track Assets

View Risk

Run Simulations



CASCADE INCREASES EFFICIENCY AND SAFETY

A mine with Cascade would get:

- Asset Tracking**
- Geohazard Prediction**
- Blast Planning**
- Tailings Monitoring**
- Slope Stability**
- Massive Archives of Data**

For the average mine, this would directly result in:

Increased Safety

20%

reduction in safety incidents

Increased Operations

11 Days

of additional mining per year

Increased Revenue

\$12.5M

revenue from a 10% efficiency increase



CASCADE IS A NEW LEVEL OF PREDICTION

Current Geohazard Mitigation

Useless

LBFoster
OptaSense®
A LUNA company

Post Event Detection

Unaffordable

BRUGG
Geobrugg
MACCAFERRI
Engineered Environmental Solutions

Infrastructure

Short Forecast

GroundProbe
Senceive

Prediction

All **reactive or limited** in forecasting ability



MINES AND PARTNERS ARE EXCITED ABOUT CASCADE

“Mines are unequivocally willing to pay.”

NACCO Executive

**WE HAVE TALKED WITH 300+ MINES
THEY ALL SHARE THE SENTIMENT**

Mine Partners to prove it out

2

active partners

9

in the pipeline



Discussions of pilots to augment their autonomous capabilities



Monitoring risky bridges to protect trains crossing over them



Negotiating pilot with a company that owns 100+ mines

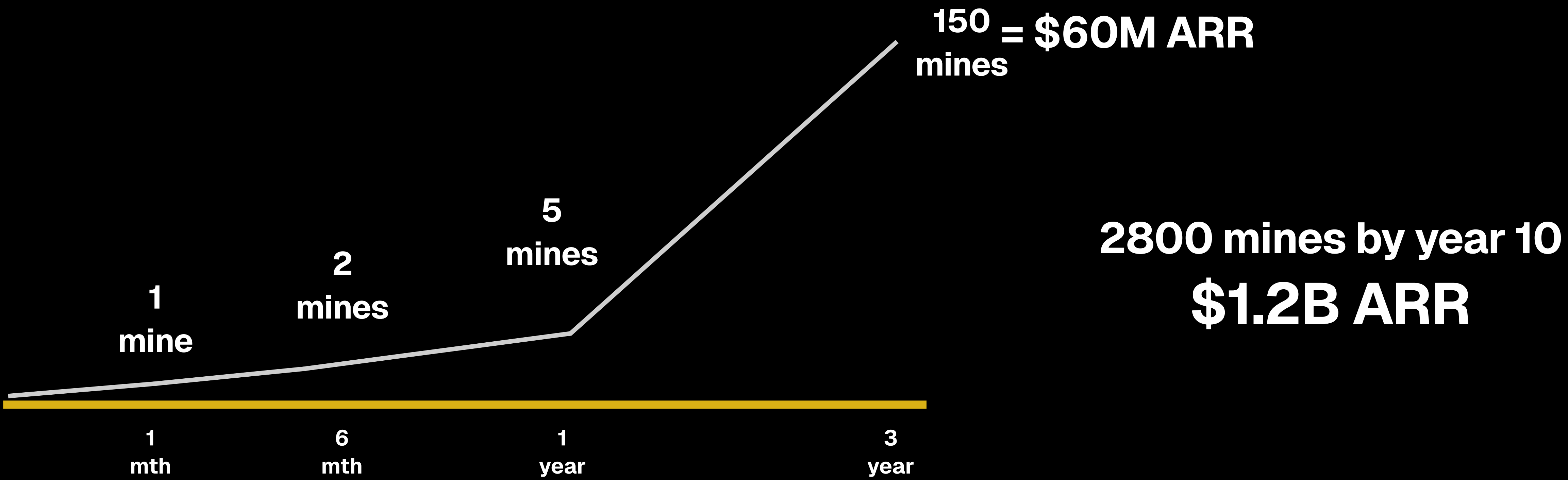


CASCADE WILL BE MAKING \$60M ARR BY YEAR 3

OUR ITM: WESTERN AGGREGATE MINES

400k ARR

from an average mine



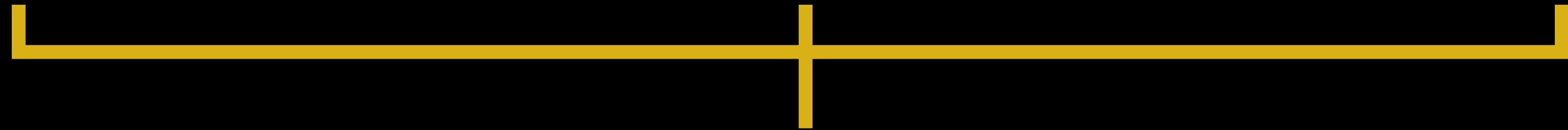


CASCADE IS THE FUTURE OF MINING AND OTHER INDUSTRIES

Tons of high quality data

Real-time and active information

AI and Physics enabled analytics



Cascade is geophysical intelligence

AUTOMATION



Making sure we fit into a continuously more autonomous industry

SAFETY



Prioritizing our tech to keep workers safe and away from danger

RAILROADS



Working on expanding to other industries with risky terrain



**Work with us to predict
geohazards and save lives.**