

# EARTH AI: Solving mineral resource shortage with Katana1 & GCP

Katana1 worked alongside EARTH AI to plan, deploy and migrate to Google Cloud Platform. Together, they executed a phased transition from AWS to a robust and scalable GCP deployment. K1 also assisted with customer upskilling

## The challenge

EARTH AI manages multi-TB datasets that require comprehensive AI to optimise targeting of geological surveys. Originally using AWS, EARTH AI was interested in GKE and massive -scale components. With a rapid plan to expand into the US market EARTH AI requested Katana1's knowledge, know-how and on the job training to build out solid GCP foundations and scale rapidly into GCP

## The solution

EARTH AI built a massively-parallel ML training and prediction system using GKE, Cloud Storage, Filestore, Firestore and Cloud SQL. Datasets are divided into shards, each shard processed by GKE running on preemptible GKE GPU nodes. Throughput of the system can be adjusted to match the criticality of the job, and the compute footprint scales down to 0 post-processing, optimising cost of processing

## The results

EARTH AI is able to process high volumes of data quickly and cost-effectively. Enormous datasets are stored in an accessible format that aids processing. The platform also enables future use of TPUs to further accelerate ML processing

“ I told our google account manager that we needed technical help. I was immediately escorted into a taxi, and the next thing I knew I was locked in a room full of crazy long swords and intense-looking people. They forced me to work out our cloud solution. I was so scared that I finished the draft of a full solution in under 4 hours. Will definitely do it again. Seriously though, Katana1 is rad ”

Yifan Gu, CTO Earth AI



## About the customer EARTH AI

Our mission at EARTH AI is to fundamentally improve the efficiency of mineral exploration in order to provide enough metals and minerals for the current and future generations.

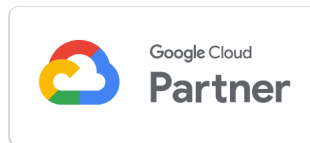
Industry: Energy & Utilities

Primary project location: Australia



## About the partner KATANA1 PTY. LTD.

Katana1 drive customers to master their data with a focus on design and migration to solid, scalable and fit for purpose platforms



## Products

- Google Cloud Platform
- Google Cloud Training