

# Tracking anomalies in the stream of logs for Nobl9

F33 designed, developed, and deployed the ML model for the business challenge.

## The challenge

Nobl9 wants to help their customers and employees by reading through logs and alerting them in case some unusual system behavior is about to occur. In order to do so, the company needs an automated solution for extracting knowledge from logs and detecting time ranges when systems do not act in a normal, expected way.

## The solution

The identified business challenge was formulated as an anomaly detection ML problem where the anomaly score was calculated as a "similarity distance" between a new log and a given set of logs from a healthy historical time range. Similarity distance was formulated as an encoder model. F33 created a reproducible procedure in Python language using Vertex AI functionality and TensorFlow Extended.

## The results

One outcome of this project was a baseline anomaly detection model that proved AI is useful for log analysis for Service Level Objectives. Another result was a scalable environment for developing and testing various ML approaches to obtaining knowledge from logs. F33 also delivered a standardized and reproducible workflow to experiment and compare different ML models.

“ The solution brought a lot of benefits to Nobl9’s functionalities. The most important was that it turned out to be possible to create an anomaly detection model based on logs that would improve and enrich existing Service Level Objectives functionality. F33’s MLOps Platform gave Nobl9 standardized and reproducible workflow to experiment and compare different ML models on their log data. ”

Marcin Kurc, CEO, Nobl9 Inc.

## About Nobl9 Inc.

The software reliability platform Nobl9 is in the noble pursuit of reliable software. We help software developers, DevOps practitioners, and reliability engineers deliver reliable features faster. Through software-defined Service Level Objectives they help link monitoring and other logging and tracing data to user happiness and business indicators.

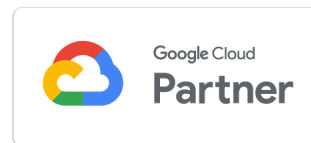
Industry: Software & Internet

Primary project location: United States



## About Fourteen33 Inc.

F33 is a Cloud, AI and Automation consulting company that was born from within Google Cloud.



## Products

Google Cloud Platform