# Predicting Failures in Complex Software System

As a Google Cloud Partner with a strong focus on Higher Education and research, Digital Schooling provides billing for Google Cloud services, provides cost-saving tips and recommends measures to optimise costs.

# The challenge

We face the main challenge of processing enormous amounts of data to comparatively evaluate different solutions to find the most effective one.

#### The solution

We used Google Cloud to experiment with large scale cloud applications for several weeks with a large variety of data traffic configurations and seeded failures to collect the data needed to comparatively evaluate different solutions.

#### The result

We collected a large data set that we used to validate our solution and propose a novel technology for predicting failures in complex software systems. The data we collected on Google cloud allowed us to confirm that our approach performs largely better than state-of-the-art approaches.

By utilizing Google Cloud to conduct experiments on extensive cloud applications and gather a substantial dataset, the researchers were able to validate their solution and introduce a groundbreaking technology for predicting failures in intricate software systems.



### **About Constructor Group**

Constructor Group is a research-focused institution located in Switzerland that aims to drive innovation and advance technology through interdisciplinary collaboration and cutting-edge education.

Vertical/horizontal solution: Education Primary project location: Switzerland



# About Digital Schooling UG

Digital Schooling specialises in the sectors of education, research, and health, as well as in companies in the EdTech, GovTech, and MedTech sectors.



## **Products**

Google Cloud Platform