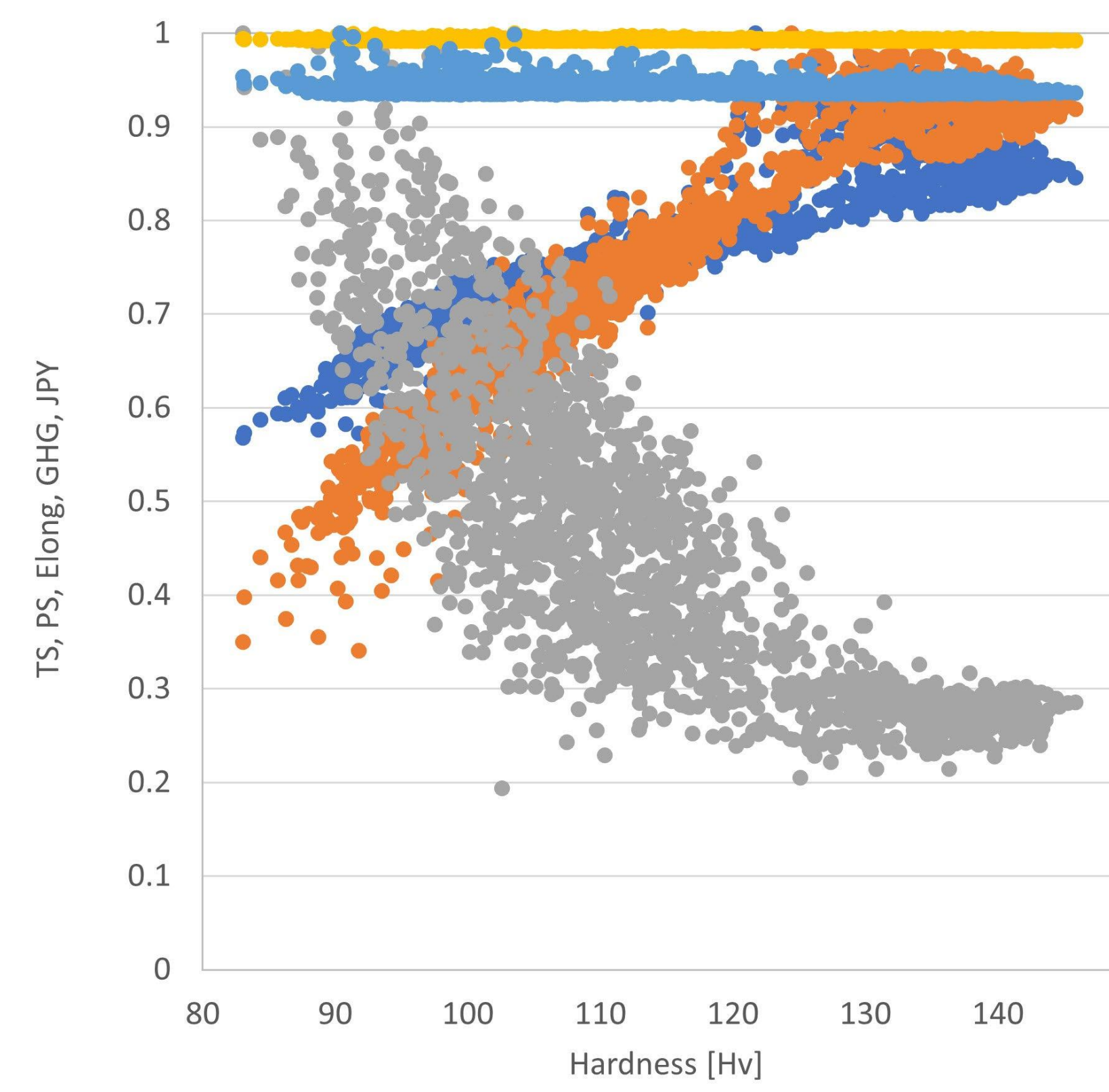


Multi-Sigma
By AIZOTH

Optimize R&D with AI-powered analysis

Multi-Sigma democratizes sophisticated AI analysis techniques while cutting time and costs associated with R&D experimentation



- ✓ DEEP LEARNING WITH MINIMAL DATA
- ✓ HIGH-PRECISION PREDICTIONS
- ✓ MULTI-OBJECTIVE OPTIMIZATION
- ✓ EXPLAINABLE AI
- ✓ NO-CODE AND CLOUD-BASED

Facing challenges with AI analysis?

- ❗ Traditional analysis requires large datasets and tends to achieve only moderate levels of accuracy
- ❗ Typical methods handle a single objective, leading to suboptimal results to complex problems
- ❗ Conventional AI can act as a 'black box', with little insight into how variables contribute to outcomes
- ❗ AI implementations often require expensive infrastructure, support personnel, and training

Multi-Sigma can help!

- ✓ Our platform can achieve high-accuracy predictions using minimal data without overfitting
- ✓ Our AI automatically explores conditions that satisfy multiple objectives simultaneously
- ✓ Factor analysis makes it possible to analyze the contributions of variables, making AI explainable
- ✓ Our software runs in any web browser and is built on the trusted Google Cloud Platform

Trusted by 100+ leading organizations:



Use Cases:

AGRICULTURE

CHEMICAL ENGINEERING

MECHANICAL ENGINEERING

FINANCIAL SERVICES

HEALTHCARE & SCIENCE

Application: Materials Engineering



Challenge

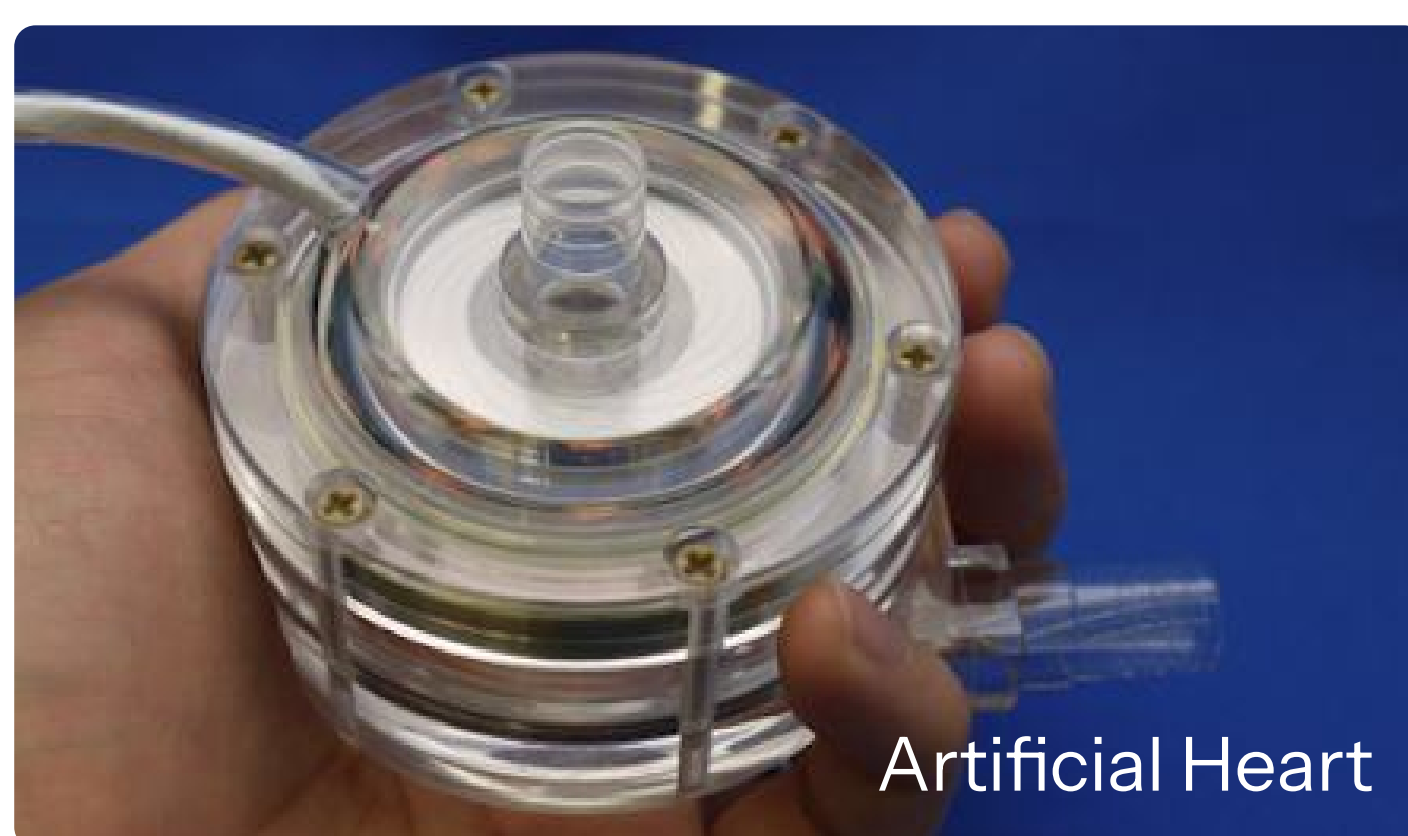
AIST scientists aimed to improve the power and safety for special hydrodynamic bearings in an artificial heart. Bearing design involves numerous parameters, and optimizing them through trial and error has limitations.

Impact

By combining neural networks and multi-objective genetic algorithms, AIST increased the generating force of the bearings and reduced red blood cell damage.

Benefits

Results defied conventional wisdom. Through Multi-Sigma's analyses of 30 to 60 iterations for 7,200 parameter combinations, AIST found an innovative solution with less than 1 percent of the typical effort.



Artificial Heart

Multiple objective variables and higher accuracy

Multi-Sigma predicts multiple objective variables and performs multi-objective optimization, providing more accurate results than the competition.

Sample datasets

	DataRobot	Multi-Sigma
Product characteristics	0.96	0.518
Anomaly detection from waveforms	0.1883	0.012
Est. of man-hours in assembly manufacturing	6.6177	3.723
Formulation of raw materials	0.1306	0.0406



Kotaro Kawajiri

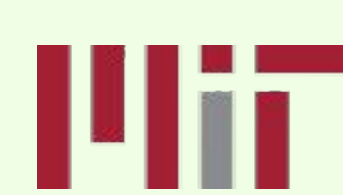
Founder, AI Expert,
Head of R&D



2014-Present



2019-2020



2011-2013



2005-2023

AIZOTH Mission

Empowering organizations to leverage AI to enhance processes and improve outcomes



2023



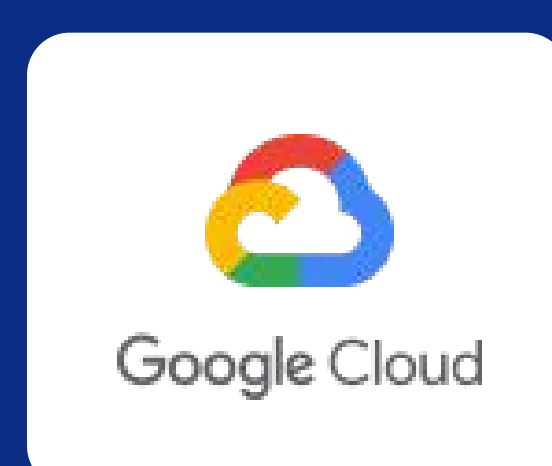
2023



2021

Get started effortlessly

Upload a CSV file and see optimized analysis in a cloud-based, browser-friendly platform



Free Trial

Contact us to start your one-month free trial or schedule a free consultation: info@aizoth.com | www.aizoth.com/en

