



atai Life Case Study



"The objective of this project was to explore innovative ways to harness real world data for the advancement of depression patients' therapies and support technologies. Thanks to the collaboration with Ishango, we gained insights beyond our expectations in a short period of time."

Dionisio Acosta-Mena

Director and Data Scientist at
atai Life

The Client



Atai Life Sciences is a biopharmaceutical company that focuses on developing innovative treatments for mental health disorders by leveraging data and technology in drug development. They have a digital medicine division that uses advanced analytics and machine learning to identify new drug targets for mental health disorders.

Project Brief

The goal of the project was to classify patients' depression levels and understand sleep subgroups by analysing public data sets using machine learning and signal processing techniques. The project involved utilising passive monitoring systems based on actigraphy signals (e.g. fitbit, actigraph, apple watch) to identify sleep phenotypes and to understand to what degree depression symptoms can be monitored.

Project Outcome

Ishango.ai team developed a supervised machine-learning model for predicting depression severity from actigraphy data, achieving an accuracy of 80% using a gradient-boosting classification model.