**Abstract**

Since the UN proposed The 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) in 2015, accelerating these goals has become a worldwide issue. This project intends to build a machine learning model to predict sustainable development given specific indicators and explore the relationship between the indicators and sustainable development.

This project uses the global indicator framework for the SDGs proposed by the UN. Moreover, we combine it with the Sustainable Development Index (SDI) dataset to establish supervised labels.

We explored five machine learning algorithms to build a system to predict sustainable development and identify key indicators, including Logistic Regression, AdaBoost, Random Forest, XGBoost, and TabNet. TabNet outperforms other models using its instance-wise feature selection. And then, we ranked the indicators by their global feature attributes. The results show that child mortality rate, services, value added per worker, access to electricity, CO2 emissions and GNI per capita are the most critical indicators for sustainable development. Thus, policymakers across countries can use the recommended model to predict their sustainable development and prioritize their SDGs.