



Contribution ID: 17

Type: **not specified**

## **Improvement in the purchase of imported goods through machine learning models for intelligent decision making**

*Thursday 29 September 2022 16:00 (30 minutes)*

Demand planning related to making purchases of Stock Keeping Unit (SKU) to maintain the Service Level Agreement (SLA) given by the company's strategy and thus avoid stock breaks, has an important role in the operation of the supply chain and the operation of the company. Demand forecasts based on qualitative methods and manual methods based on historical data have an impact on production planning, consequently, on the fulfillment of the products required by the customer. We implemented a recommender system based on machine learning model that effectively adapts to variations in demand for products that are classified under an ABC model. Scikit-learn libraries are used to implement demand prediction models that are trained with historical product information. The result is a proposed prediction model with a better level of confidence than the current prediction model used by the company.

**Presenters:** Mr GONZÁLEZ-CRUZ, Adolfo (Universidad de Tarapacá); Dr ARRIAGADA, Mauricio (Universidad de Tarapacá)

**Session Classification:** Conferencia INFONOR-CHILE