Rice FinTech - Project Proposal

Google Forms <forms-receipts-noreply@google.com>

Wed 4/6/2022 4:29 PM

To: paragmb@hotmail.com <paragmb@hotmail.com>

Thanks for filling out Rice FinTech - Project	t Pro	posal
---	-------	-------

Here's what was received.

Rice FinTech - Project Proposal

Email * paragmb@hotmail.com

Enter Group Number or Name *

3

Enter Project Title *

Natural Gas Forecasting/Scheduling

Enter team members first and last name *

BJ Ajimotokan, Onur Guvener, Parag Borkar

Enter project description *

What will be the project about?

Using time series forecasting models, develop a machine learning model to forecast natural gas pricing and consumption based on 10 years of historical data. Further, develop a correlation table (and/or heatmap) which contains the correlations between following variables: natural gas price, natural gas consumption, natural gas exports, storage and ambient temperature.

Enter project objective *

Based on the previous question, Why do you choose this type of project?

This machine learning model will help natural gas supplier/scheduler prepare for better inventory controls in future. These kind of machine learning tool can come up with automated forecasting models and allow one person to do the work of multiple data scientists.

Enter research questions to answer *

How would you structure your initial questions to start finding answers to your project objective?

How do we reduce the error in natural gas inventory scheduling?

Enter links or describe datasets to be used *

U.S. Energy Information Administration (www.eia.gov) for natural gas price, consumption, storage and LNG exports data National Centers for Environmental Information (ncei.noaa.gov) for U.S. average temperature data

Enter rough breakdown of tasks assignments for each team member *

Datasets & Research - Parag; Correlation matrix/table (and/or heatmap) - Parag; Time Series Forecasting (using Prophet) for natural gas pricing and consumption - Bolaji; Alternate Time Series Forecasting (using ARIMA or equivalent) for natural gas pricing and consumption - Onur

Create your own Google Form

Report Abuse