

Machine learning approach to forecasting of counterfactual demands in supply chain

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This is a continuation of a project that has been tackled in 2021-22 as well as in 2022-23. The student will have to continue to improve the current model and/or to develop a new approach to achieve higher accuracy in demand forecasting for one of the largest retail suppliers. What is special about the forecasting problem is that products are under various promotional campaigns and hence the model will be challenged by sparsity of the data. The existing models include cross-sectional statistical models, machine learning models, and alike. The student needs to have good background in machine learning, optimization, python programming and others. The student will be working with data scientists from a sponsoring company and may have to implement the project on the company's information system.

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