

Scientific Interest Group (SIG) Meeting

29 January 2024
12:00-13:00 CET

GoToMeeting (online)

From data to discovery: Exploring use cases for machine learning model on antibacterial specificity

Chaired by



Frederik
Deroose

Connecting Pharma

Presented by

Philip
Gibbon

FRAUNHOFER ITMP

Within the SIG Machine Learning (ML) group, we have been tackling the problem of identification of **anti-bacterial properties** of a compound through **in-silico approaches**. In this context, we aimed to build a **multi-classification ML model** using data collected from bacterial bioassays deposited in public repositories. We were able to successfully build the workflow (in KNIME and Python) to pre-process the data and train a collection of models. The resultant model can now predict the specificity of a compound towards Gram-positive, Gram-negative and Tuberculosis strains. In the next meeting, we would want to open the floor to identifying **use cases** for the utility of the model within the consortium and testing the **limitations** of our model. Additionally, we also have a publication in preparation for the same and would want to create a focused group of interested authors for contributions. These contributions would be either through the drafting of text for certain sections or through testing of the model on a number of datasets.



Yojana
Gadiya

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>> THIS MEETING IS OPEN TO ALL AMR ACCELERATOR PARTNERS <<

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