# MINI PROJECT – II (2018-'19)

# "Recommendation Engine" SYNOPSIS



# **Institute of Engineering & Technology**

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# **About the project:**

Recommending the questions that a programmer should solve given his/her current expertise is a big challenge for Online Judge Platforms but is an essential task to keep a programmer engaged on their platform.

In this project, we are given the data of programmers and questions that they have previously solved along with the time that they took to solve that particular question.

Our aim is to build a model that can predict the time taken to solve a problem given the user current status. This model will help online judges to decide the next level of questions to recommend to a user.

This project will be based on the concept of machine learning and to be more specific in this project we will be testing, training and predicting data. After creating the model and getting an acceptable training and testing accuracy the model will be embedded on a website.

#### **Motivation:**

The project will be primarily focused towards training the model with optimal F1 score. It will be further tested on different clusters of testing data.

## **Future Prospects:**

The project can be deployed on a website or any other platform. Following the features & labels extracted in a proper manner our model will deliver the best possible suggestions to the user to solve the required questions/problems as per their expertise.

# **Requirements:**

#### Hardware:

- 8 GB Ram or more
- Intel i3 6<sup>th</sup> Generation (Minimum)
- Nvidia GeForce or better
- If neglecting the above requirements then a powerful cloud environment is required.

#### **Software:**

- Anaconda Package v4.4.4
- Python v3.6
- Scikit-Learn
- Google Colab

Signature of Project Supervisor:		

