**Project pre-proposal**

**Project title:** Model as a Service

**Team number:** 1 / Xie, Tiancheng (Class ID: 25); Sun, Chen (Class ID: 23); Doss, Corey Jason(Class ID: 8); Dhabbah, Khalid Mohammed A (Class ID: 6)

**Project goal and Objectives:** Build an online platform which can deploy ML & DL model; Allow users to upload their own datasets and specify their requirements. Help them pick up a suitable model to generate result.

**Bonus**: Gather feedback and optimize the model! (will be a big challenge)

**Motivation:**

It is hard to get ML & DL model on those people who know nothing about the Coding but have dataset. To give another chance to use the predictive model. At the very early stage, we will do survey of this kind new feature application.

**Significance:**

Up to this point we’ve been experimenting with training our model. But the deployed service is no longer going to do training - it’s going to generate new prediction by scoring the user’s input based on our model. So we’re going to do some preparation to convert this experiment from a training experiment to a predictive experiment.

**Blueprint:**

This is a three-step process:

1.Remove one of the models

2.Convert the training experiment we’ve created into a predictive experiment

3.Deployed the predictive experiment as a web service

Assuming all the following ref. or API gonna be concerned:

SVM (ML), CNN (DL), Flask (Deployment tool), front-end interface;

Python-embedded web application;

**Bibliography:**

**[1]. Google AutoML:**

**https://cloud.google.com/vision/Team: Team 1**

**[2].Microsoft Azure**

<https://docs.microsoft.com/en-us/azure/machine-learning/studio/walkthrough-5-publish-web-service>

**[3]. Develop movie reviews classifier**

<https://towardsdatascience.com/embedding-machine-learning-models-to-web-apps-part-1-6ab7b55ee428>

**[4]. RESTful API**

<https://blog.csdn.net/hjc1984117/article/details/77334616>

**[5]. Deployment of Web App + ML Model + APIs — Tutorial**

<https://towardsdatascience.com/simple-deployment-of-web-app-ml-model-apis-tutorial-2ece8e66d98c>

**[6]. An example**

<https://www.quora.com/What-is-the-easiest-way-to-deploy-a-machine-learning-model-say-a-regression-for-production>