HACK MSIT 2019

Team Name: Entrepre-Neural

Theme selected: FinTech

Idea

As we all know, businesses today work with huge amounts of data. Even startups in their birth stages have to deal with a lot of user generated information. And where there is **Big Data**, **Machine Learnin**g (ML) can play an important role.

ML and data mining can help **businesses** predict customer behaviours, purchasing patterns, and help in sending best possible offers to individual customers, based on their browsing and purchase histories.

The one thing that companies need to access this plethora of knowledge are **data scientists**. But what if we can **remove** this factor?

Our idea is to generate a platform for **entrepreneurs** and **individuals** lacking the knowledge of ML to be able to use the popular tools of Machine Learning such as

Regression, Classification, Cluster Analysis etc. without having to resort to someone with the knowledge of these topics.

Imagine a **Website** and **Android App** where you can upload your data (in form of CSV files) and choose your wanted Prediction tools. Decide what features you want to give priority to, and get results instantly based upon **your** data.
That is what we have to offer.

Plan of Action

Our plan of action is divided into 3 parts.

Stage 1: Machine Learning

Scripts regarding the various tools of ML will be generated and stored on our Server. They will be called as and when required.

Tools used:

1. Python 3.6
2. TensorFlow
3. Sci-kit library
4. Pandas library
5. Matplotlib and Seaborn

Stage 2: Website

Our main Website will be created which will serve as the machine for python scripts to run. People can

upload documents/data directly from website as well. Also, the server will create the API's for our Android Application to work.

Tools used:

1. Django REST Framework
2. Python 3.6
3. HTML5, CSS3.1, Bootstrap for front-end

Stage 3: Android Application

Android App will be created which will act as portable UI for our platform. It will fetch and upload data to the web server for processing via the API and display information in a unique and concise way.

Tools used:

1. Firebase
2. Retrofit, Google Play Service etc. libraries
3. Java, Kotlin and XML as the programming languages.

Hence Our 3 Stage plan would successfully create a working platform which will perform complex Machine Learning predictions at the simple press of a button. Our team also comprises of specialists each in their field.

We hope to see you at MSIT!