**The Abstract**

Dengue fever is an acute mosquito-borne disease, transmitted when bitten by Aedes mosquitoes with any one of the four dengue viral serotypes. It occurs mostly in the tropical and sub-tropical part of the world, which covers over 100 countries and 300 million people which equates to 40% of the world population at risk of contracting this fever. I was born in Bangladesh a tropical-monsoon country and growing up, we experienced the continuous threat of mosquito bites specially in winter or wet season. This can cause catastrophic and an epidemic concern in some countries with poor living conditions and current Covid-19 epidemic situation makes it even harder for population in these zones.

Weather plays a huge factor in the outbreak of dengue, as mosquitoes lay their eggs in areas of stagnant water and Warm, damp weather. If we can study these meteorological factors and their relationship to mosquitos, we can provide awareness and people can take necessary precautions from future outbreaks. I will be using different classifications, **python** visualization functions and tools that we used in our data science and predictive analytics course to help me guide and gain insights on dengue cases. I will be using the 3 datasets provided in “***DengAI: Predicting Disease Spread***” competition in Kaggle hosted by DrivenData ([*https://www.kaggle.com/qcnguyen/dengai-predicting-disease-spread*](https://www.kaggle.com/qcnguyen/dengai-predicting-disease-spread)). The datasets include different environmental data on San Juan, Peru & Iquitos, Puerto Rico between (1990-2010) by various U.S. Federal Government agencies. I will be using the Training and test dataset for **Data Mining and knowledge discovery** to gain insights, on what are the different meteorological factors that increases misquotes which leads to more cases in San Juan, Puerto Rico and Iquitos, Pero. I will be using jupyter notebook from anaconda distribution and concepts of python from Udemy.