## **National University of Computing and Emerging Science,**

**Lahore**

## 

**Data Science-8A**

**Project Proposal:**

FlyMetrics

**Submitted To:**

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**Team Members:**

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## **Introduction:**

The idea revolves around weather prediction using the current data gathered from different sources. The datasets have been prepared using drones and contains different climatic variables which allow the analysis to be precise and accurate. Since the data has been gathered from drones, the variables (attributes) are highly accurate and allow extremely low chance of error. Our team also believes that cleaning the data will be a fundamental step and will remove any doubts.

**Proposed Idea:**

The team will be developing AI algorithms to put the data under microscope and perform computational analysis on it. Predicting the weather will be the major goal of the project and machine learning and deep learning will be the main components. There will be two datasets and their attributes include.

Dataset one will comprise of temperature values collected over various frames of time at different venues around the world. The main data attributes will be:

* Date
* Average Temperature
* Average Temperature Uncertainty
* City
* Country
* Latitude
* Longitude

The second data set will focus on a single location and we will use data over longer period of time for the latter. The attributes for this dataset shall be:

* Date of Measurement
* Precipitation
* Actual Temperature
* Perceived Temperature
* Humidity
* Wind Speed
* Wind Bearing
* Visibility
* Cloud Cover
* Pressure

The attributes are tentative and are subject to changes, although minimal in nature. The team will inform the teacher regarding any change in the initial proposal, but implementing the project as stated in this proposal will remain a priority.

We believe that this project will allow the team to do a thorough analysis on the given data and bring solid results to the fore. Keeping learning at the core, our team will make sure that the process, and results are presented and explained properly to the class, which will enhance their experience of learning this course as well.