National Taipei University of Technology

Computer Science and Information Engineering

Principles and Applications of Data Science

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Semester Group Project Proposal

The relationship between weather and human stress

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Introduction:

Motivation

Objectives

Project Plan and Deadlines:

Related Work and Resources:

* Write down the paper’s related work

1. Draw the scatter graph to see the distribution.
2. Use correlation coefficient to check if they have relationship.
3. Use K-NN algorithm to create a predictable model and calculate the accuracy.
4. Use SVM algorithm to create a predictable model and calculate the accuracy.
5. Use Decision Tree algorithm to create a predictable model and calculate the accuracy.
6. Use the data collected by XXX[reference kaggle paper]
7. Use the data of humidity and temperature from Taiwan to see the prediction of stress level in a year.

Methodology:

1. correlation coefficient
2. K-NN
3. SVM
4. Decision Tree

Tools:

1. Jupyter notebook
2. Python Library

Expected Results

Analyze the relationship between temperature, humidity and stress and create a predictable model which can use temperature and humidity to predict the stress level.

Timeline

3/10 discuss project plan

3/17 environment setting

3/27 plots data directly and analyze

4/02 k-nn done

4/07

4/20

6/15