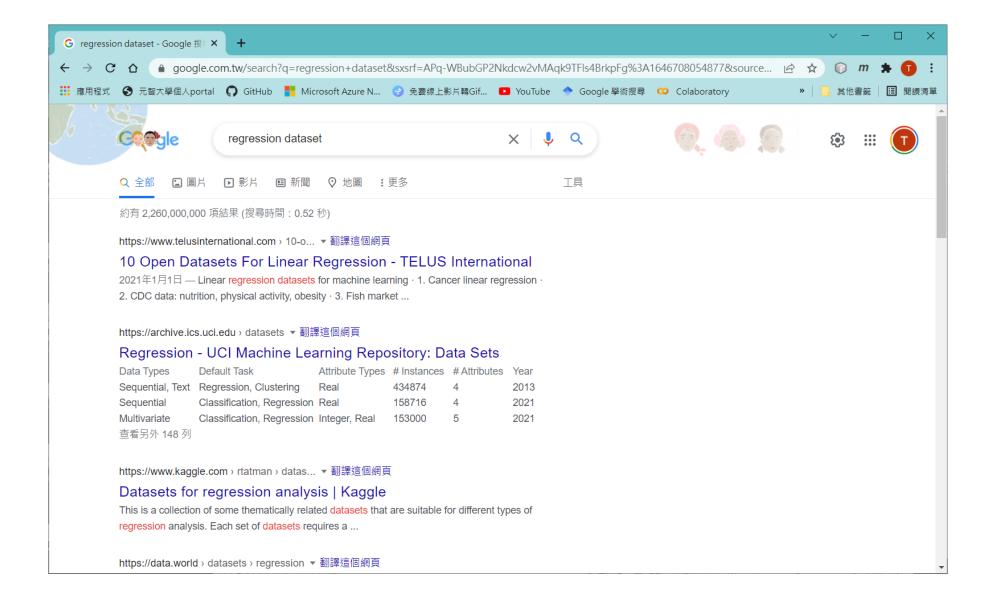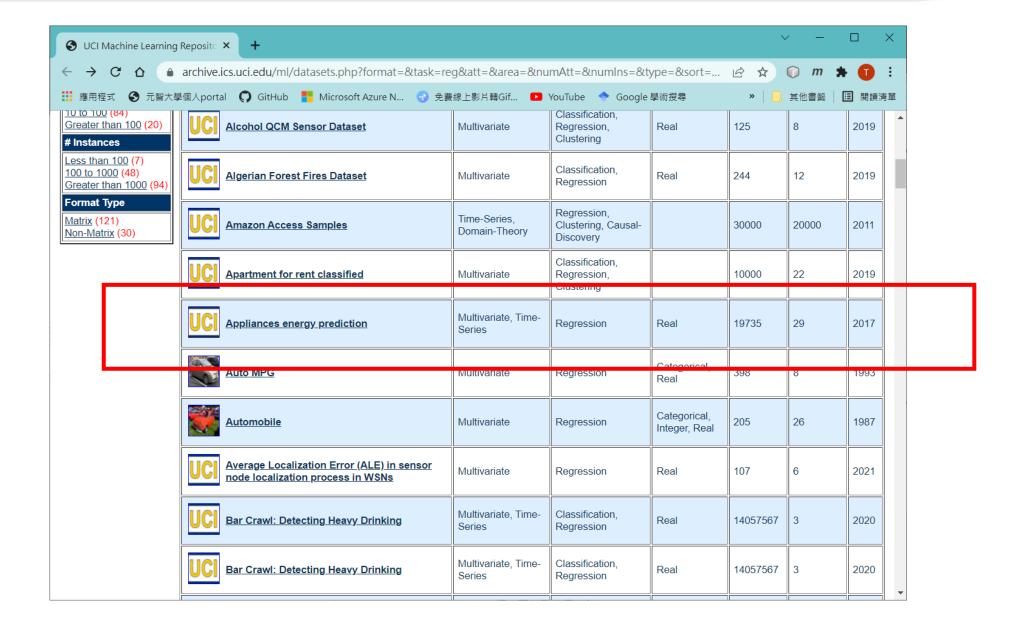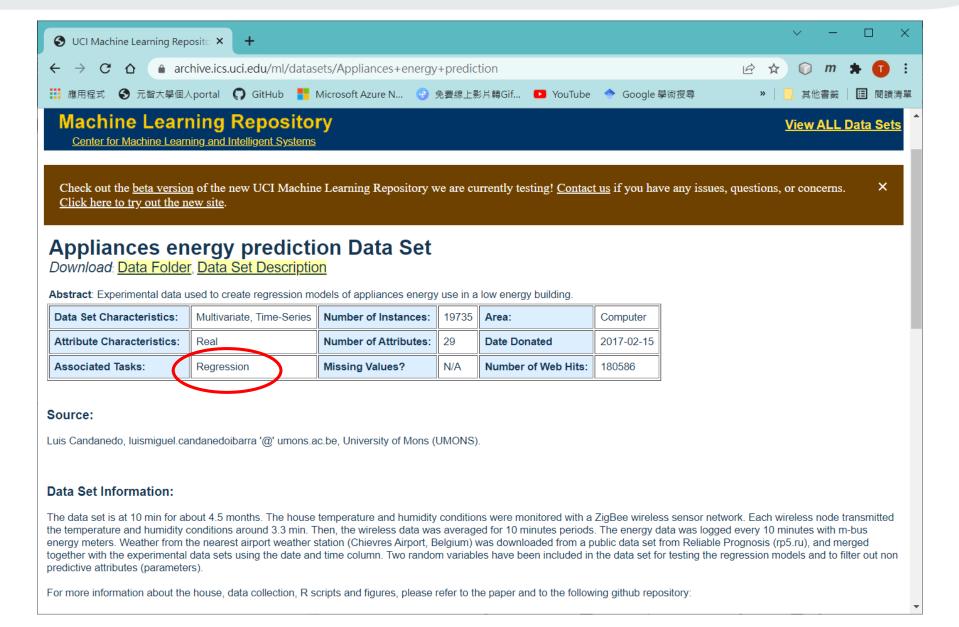# Regression dataset search
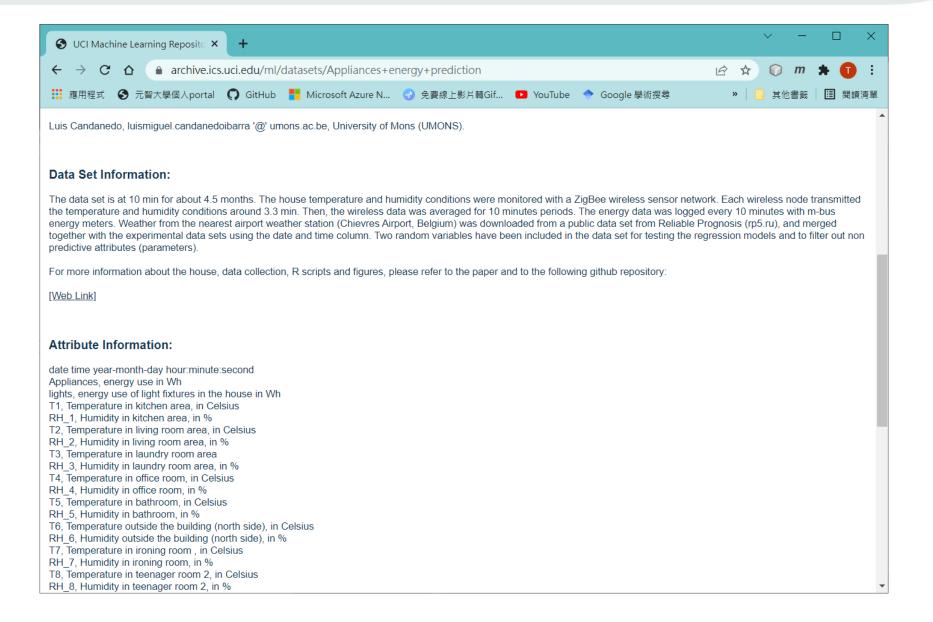
Appliances energy prediction data set

Appliances energy prediction data set

Understand the domain meaning of your data

Luis Candanedo, luismiguel.candanedoibarra '@' umons.ac.be, University of Mons (UMONS).

Data Set Information:

The data set is at 10 min for about 4.5 months. The house temperature and humidity conditions were monitored with a ZigBee wireless sensor network. Each wireless node transmitted the temperature and humidity conditions around 3.3 min. Then, the wireless data was averaged for 10 minutes periods. The energy data was logged every 10 minutes with m-bus energy meters. Weather from the nearest airport weather station (Chievres Airport, Belgium) was downloaded from a public data set from Reliable Prognosis (rp5.ru), and merged together with the experimental data sets using the date and time column. Two random variables have been included in the data set for testing the regression models and to filter out non predictive attributes (parameters).

For more information about the house, data collection, R scripts and figures, please refer to the paper and to the following github repository:

[Web Link]

Attribute Information:

date time year-month-day hour:minute:second
Appliances, energy use in Wh
lights, energy use of light fixtures in the house in Wh
T1, Temperature in kitchen area, in Celsius
RH_1, Humidity in kitchen area, in %
T2, Temperature in living room area, in Celsius
RH_2, Humidity in living room area, in %
T3, Temperature in laundry room area
RH_3, Humidity in laundry room area, in %
T4, Temperature in office room, in Celsius
RH_4, Humidity in office room, in %
T5, Temperature in bathroom, in Celsius
RH_5, Humidity in bathroom, in %
T6, Temperature outside the building (north side), in Celsius
RH_6, Humidity outside the building (north side), in %
T7, Temperature in ironing room , in Celsius
RH_7, Humidity in ironing room, in %
T8, Temperature in teenager room 2, in Celsius
RH_8, Humidity in teenager room 2, in %

Understand the domain meaning of your data

Build a NN to learn to predict energy use from environment sensor data

2.3. Regression HW.ipynb