[https://archive.ics.uci.edu/ml/datasets/Occupancy+Detection+#](https://archive.ics.uci.edu/ml/datasets/Occupancy+Detection+%23)

https://ianlondon.github.io/blog/encoding-cyclical-features-24hour-time/

|  |  |
| --- | --- |
| **Abstract**: Experimental data used for binary classification (room occupancy) from Temperature,Humidity,Light and CO2. Ground-truth occupancy was obtained from time stamped pictures that were taken every minute. |  |

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| --- | --- | --- | --- | --- | --- |
| **Data Set Characteristics:** | Multivariate, Time-Series | **Number of Instances:** | 20560 | **Area:** | Computer |
| **Attribute Characteristics:** | Real | **Number of Attributes:** | 7 | **Date Donated** | 2016-02-29 |
| **Associated Tasks:** | Classification | **Missing Values?** | N/A | **Number of Web Hits:** | 77369 |

**Source:**

Luis Candanedo, luismiguel.candanedoibarra **'@'** umons.ac.be, UMONS.

**Data Set Information:**

Three data sets are submitted, for training and testing. Ground-truth occupancy was obtained from time stamped pictures that were taken every minute.   
For the journal publication, the processing R scripts can be found in:   
[[Web Link]](https://github.com/LuisM78/Occupancy-detection-data)

**Attribute Information:**

date time year-month-day hour:minute:second   
Temperature, in Celsius   
Relative Humidity, %   
Light, in Lux   
CO2, in ppm   
Humidity Ratio, Derived quantity from temperature and relative humidity, in kgwater-vapor/kg-air   
Occupancy, 0 or 1, 0 for not occupied, 1 for occupied status

**Relevant Papers:**

Accurate occupancy detection of an office room from light, temperature, humidity and CO2 measurements using statistical learning models. Luis M. Candanedo, VÃ©ronique Feldheim. Energy and Buildings. Volume 112, 15 January 2016, Pages 28-39.

**Citation Request:**

Please cite the following publication:   
Accurate occupancy detection of an office room from light, temperature, humidity and CO2 measurements using statistical learning models. Luis M. Candanedo, VÃ©ronique Feldheim. Energy and Buildings. Volume 112, 15 January 2016, Pages 28-39.