

Relevant Paper:-

JUIndoorLoc: A Ubiquitous Framework for Smartphone-Based Indoor Localization Subject to Context and Device Heterogeneity [1]

Authors:-

Priya Roy, Chandreyee Chowdhury, Dip Ghosh, Sanghamitra Bandyopadhyay.

Dataset Information:-

- The data has been captured from 3rd, 4th and 5th floors of a five-storied building at Jadavpur University.
- JUIndoorLoc dataset, containing 25,364 samples, is divided into two datasets:
 - a) Training (23,904 samples) and
 - b) Testing (1,460 samples)
- Each sample of the two datasets consists of 177 attributes. These attributes contain RSSI values of 172 wireless access points (AP) along with the corresponding location point (cell) identifier, time, device identifier and contextual changes (open/closed room and presence/absence of the user in the vicinity).
- The RSSI values are represented as negative integer values ranging -11dBm to -100dBm (extremely weak signal). A negative value -110 is used to denote when an AP was not detected.

Attributes Information of JUIndoorLoc dataset:-

Attribute	MySQL data type	Description
Cid	VARCHAR(15)	A unique number to identify the indoor region where the capture is taken. Each cell number has two part, the first part is floor number and the second part is the position of a cell on the two-dimensional building map.
AP₀₀₁- AP₁₇₂	INT(4)	Received signal strength value of 172 APs. Negative integer values from -11dBm to -100dBm and -110 used to identify the APs which are not detected in scan duration.
R_s	BOOL	Represents status of the room, the value is either 1 or 0. 1 and 0 represent open and closed room respectively.
H_{pr}	BOOL	Represents the presence or absence of human, the value is either 1 or 0. 1 and 0 represent the presence and absence of human respectively.
Did	VARCHAR(10)	A unique identifier is assigned to each Android device, which is used to capture data. These device Identifiers are given below : D ₁ : Samsung Galaxy Tab 2, Android version 4.1.1 D ₂ : Samsung Galaxy Tab E, Android version 5.0 D ₃ : Samsung Galaxy Tab 10, Android version 4.0 D ₄ : Motorola Moto E 2nd Generation, Android version 5.1
T_s	BIGINT(8)	13-digit integer value used to record time when the capture is taken following library of java.util package.

Disclaimer:- This dataset can only be used for academic purpose.