1. **X\_test.csv (Test data)**

Header of the X\_test.csv file represents MAC addresses of BLE transmitters. There are 17 BLE transmitters in total as shown in table below.

|  |  |
| --- | --- |
| No. | MAC Address |
| 1 | CD4533FFC0E1 |
| 2 | D2B6503554D7 |
| 3 | D7EE034361F8 |
| 4 | DD697EA75B68 |
| 5 | DF231643E227 |
| 6 | E43355CA8B96 |
| 7 | E6D9D20DD197 |
| 8 | E8FD0B453DC4 |
| 9 | F1307ECB3B90 |
| 10 | F1EDAF28E08A |
| 11 | F69A86823B96 |
| 12 | F8EE8B0847A4 |
| 13 | FDAE5980F28C |
| 14 | EC72840D9AD3 |
| 15 | E96AF2C858BA |
| 16 | E13B805C6CB0 |
| 17 | FB2EE01C18CE |

Following table shows one sample of BLE beacon’s fingerprint.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CD4533FFC0E1 | D2B6503554D7 | D7EE034361F8 | DD697EA75B68 | … | FB2EE01C18CE |
| -87 | -96 | -81.25 | NaN | … | NaN |

* -87 is signal strength of BLE beacon seen by BLE receiver CD4533FFC0E1, unit is in dBm.
* -96 is signal strength of BLE beacon seen by BLE receiver D2B6503554D7, unit is in dBm.
* NaN represent no signal received, or signal from BLE beacon is too weak to be detected. Typical signal strength is between -40dBm (very near to receiver) to -98dBm (very far from receiver).

1. **y\_test.csv**

y\_test.csv records the corresponding location where each test sample is collected. The location is recorded in PinId R1 - R5 as shown in table below.

|  |
| --- |
| PinId |
| R1 |
| R2 |
| R3 |
| R4 |
| R5 |

1. **pinInfo.csv**

PinInfo.csv is a dictionary to the actual (x, y) coordinate of each pin in meters. There are 5 test pins created in total.

|  |  |  |
| --- | --- | --- |
| pinId | x | y |
| R1 | 6.136286 | 5.525337 |
| R2 | 8.744416 | 5.499414 |
| R3 | 12.449 | 4.948626 |
| R4 | 15.80239 | 4.987387 |
| R5 | 28.96587 | 10.06317 |

1. **X\_test\_submission.csv**

This is the dataset that you need to run your prediction model on and provide the predicted output in (x,y) coordinates.

1. **submission.csv**

Sample submission format of your model’s prediction output.