## Tidy Data

January 31, 2018

## 1 Tidy Data

```
In [1]: import pandas as pd
        pacientes = ['Ricardo', 'Marielena', 'Miguel']
        a = [67, 80, 64]
        b = [56, 90, 50]
        untidy = pd.DataFrame({'pacientes': pacientes, 'a': a, 'b': b })
  Documentación relacionada: pandas.melt
  http://pandas.pydata.org/pandas-docs/stable/generated/pandas.melt.html
In [2]: def gather(df, key, value, cols):
            id_vars = [col for col in df.columns if col not in cols ]
            id_values = cols
            var_name = key
            value_name = value
            return pd.melt(df, id_vars, id_values, var_name, value_name)
In [3]: untidy
Out[3]:
                b pacientes
                     Ricardo
              56
        1 80 90 Marielena
        2 64 50
                      Miguel
In [4]: tidy = gather(untidy, 'medicamento', 'frecuencia_cardiaca', ['a', 'b'])
In [5]: tidy
Out [5]:
           pacientes medicamento
                                  frecuencia_cardiaca
        0
             Ricardo
                                                    67
                               a
        1 Marielena
                                                    80
                               a
        2
              Miguel
                                                    64
                               a
        3
            Ricardo
                               b
                                                    56
        4 Marielena
                               b
                                                    90
        5
              Miguel
                                                    50
                               b
```

## 1.1 Para saber más:

- https://garrettgman.github.io/tidying/(R-lang)
- http://www.prometheusresearch.com/good-data-management-practices-for-data-analysis-tidy-data-part-2/ (R-lang)
- https://tomaugspurger.github.io/modern-5-tidy.html (Python+Pandas)
- https://www.ibm.com/developerworks/community/blogs/jfp/entry/Tidy\_Data\_In\_Python?lang=en (Python+Pandas)
- http://connor-johnson.com/2014/08/28/tidyr-and-pandas-gather-and-melt/ (Python+Pandas)
- https://blog.rstudio.org/2014/07/22/introducing-tidyr/ (R-lang)