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ING. INFORMÁTICA

Materia:

Minería de Datos

Geometry y Gramáticas de gráficas

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**Gramática de los gráficos**

Graph grammar means that instead of constructing the graph what I know how to do is describe what the components are that make it up. The basic idea is to independently specify the building blocks and combine them to create virtually any type of graphic display you want. The building blocks of a chart include:

• Data

• Aesthetic mapping

• Statistical transformations

• Scales • Coordinate system

• Position adjustments

• Appearance

• Geometric object

**The layers (geom)**

The ggplot2 layers are also called geom. Once the base configuration is done, you can add the geoms on top of each other.

Example: a variable X is positioned on the X axis, a variable Y is positioned on the Y axis, it uses a third variable for the color fill of the final geometric figures.

In the two additional lines it is established: first, the argument geom\_point () indicates that one of the geometric elements to be positioned are points, without additional configurations; second, a smoothed trend line (using a linear regression procedure) that will display the linear trend of the point cloud is positioned - using the geom\_smooth command (method = lm, linetype = 2).

Don't forget that after the first line, the geometry functions must be added indicating a + sign.

