Interactive Visualization of Building Energy Consumption with Tableau Software

**Project Description:** Monitoring energy consumption in modern buildings is crucial for environment preservation and economical reasons. We collected data from sensors in a building and develop basic graphical representations. We want to store this data stream in a database and visualize these data to report on the variation of the different measures through time and their possible correlations, and to guide for appropriate action leading to reducing energy consumption. We need to use Tableau Software to design and implement interactive visualizations that will help better understand these data and report them in the most effective graphical way. We also need the pipeline to collect the sensor data into a database.

**Duties/Activities:** Read the data from sensors and store them in a database. Implementing interactive visualization of the data with Tableau Software.

**Required Skills:** Base knowledge of Excel, data visualization, and database

**Preferred Intern Academic Level:** BSc 1st year or BSc 2nd year

**Learning Opportunities:** Advanced visualization and interactions with Tableau, PostgreSQL database

**Expected Team Size:** 2

**Mentors**

Name: Michaël Aupetit  maupetit@hbku.edu.qa

Abdlmonem Beitelmal  abeitelmal@hbku.edu.qa