# Intermediate report CIT

# 2019 Week 11

* Drilling session (2019-03-14): 6 drilling sessions with different positions of the accelerometer and different concrete hardness levels (2 bars and 1 bar).
* All the sensors (ToF, accelerometer) and Xbee module are perfectly working.
* SQL-database: recorded all 6 drilling sessions data in the SQL database.
* SQL Graph visualization tool:
  + Features: can be launched from raspberry pi, can run query on the database, runs on PC browser.
  + Performance issues w.r.t larger datasets is fixed with improved efficiency.
* In-progress for next week:
  + Constructing the data pipeline for connecting the SQL data base and the machine learning algorithm.
  + Testing different algorithm strategies for automatic control (PS: This might take a while)
  + Adding more functionality to the SQL visualization tool (histograms, multivariate plots, etc.)

Visualization of the 6 drilling sessions (recorded this week) plotted by SQL tool is presented below:

