

Development of an IoT platform for luxury watch telemetry

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Project Description

Richemont owns several of the world's leading companies in the field of luxury goods, with particular strengths in jewelry, luxury watches and writing instruments.

The goal of this project is to build a prototype of an IoT platform that could be embedded in a watch, in order to collect and transmit relevant data to follow the behavior of the watch (accuracy of time keeping pace, shocks, temperature, etc.). This project is particularly recommended for those students registered in the EPFL course: EE-490g "Lab On Apps Development For Tablets, Smartphones And Smartwatches".

Specifically, the students' tasks include:

1. Design of the IoT platform including sensors, energy and communication.
2. Production of prototype.
3. Development of a companion App to collect data and display result.
4. Data analytics to suggest improvement of the watch.

The project will be carried out at EPFL (in the Embedded Systems Lab.) and with visits and stays at Richemont International SA in Meyrin or Neuchâtel, Switzerland.

Requirements:

1. Good knowledge of embedded systems architectures and Apps programming,
2. Good programming knowledge (C, C++, Python etc.) and App development (particularly if you have finished or are registered for the EE-490g subject at EPFL),
3. Basic knowledge about signal processing.