During my part-time study at Unil, I have primarily taken classes on the subject machine learning and cloud data technologies. It has been a perfect infrastructure for me to learn current technologies and more importantly to look for applications in real life or in my daily job.

While rowing regularly this year, I got the idea of improving the desktop log book most rowing clubs are commonly using. In my project I covered important use cases of the log book, e.g. display the previous rowing and overall statistics when looking up a specific member or boat.

Looking on a high level I have applied 3 types of technologies: IoT device for data recording, google cloud computing as data infrastructure and streamlit for the web application. More specifically, when equipped with a GPS sensor, an AWS M5stack device sends the geo coordinates to the data storage of google cloud computing. Given the access to the data, a web application provides an interface to end users to explore different use cases.

You will find the app demo below
https://youtu.be/YCD3bKuEIco