## **Android Compass**

I, Nathan Dumand, will work with Matthias Vermot-Desroches and Eva Labauvie—Raffaelli .

We chose to create a compass on Android.

For this project, we will use the different sensor available on our smartphone. We will use the accelerometer, the gyrometer and the magnetometer.

We will create an application thanks to Android Studio that will measure and show on screen the different orientation angle: roll, yaw and pitch.

It will be capable of measuring angles thanks to the rotational matrix while including the tilt. We will try to use what we learn in lecture.