

## Map Matching Platform

### **Project Description:**

Map-matching is the process of aligning a sequence of observed object positions “GPS trajectory” with the existing road network on a digital map. This is an essential pre-processing step for many applications such as traffic flow analysis.

There are a lot of existing map-matching algorithms. However, there is no existing unified platform to capture the difference between these algorithms. Therefore, we want to build a dashboard to make it easier for the student/researcher to benefit from these resources and compare between them.

### **Duties/Activities:**

The Intern will work on an existing codes with the needs of tweaking these codes. Also, the intern will need to test the developed platform on different datasets under a variety of conditions to make the system more robust.

### **Required Skills:**

Understand of how to build GUIs. Have good scripting language skills such as Python and R.

### **Learning Opportunities:**

The intern will have opportunity to work closely with a scientist on promising research problems and participate in solving a real-world problem.

**Expected Team Size:** 2-3

### **Mentors**

Name: Mohamed Elshrif

email: [melshrif@hbku.edu.qa](mailto:melshrif@hbku.edu.qa)