Master Internship 2016

Inertial Sensor Fusion

Supervisor

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Presentation of the project

The aim of this internship is to develop a new algorithm of sensors fusion. We focus on motion estimation based on inertial sensors. EKF is a non-linear filter that is very popular in the community of sensor fusion, it is the non-linear version of the Kalman filter. In this internship we will explore how to enhance this filter. On the technical aspects, the candidate have to be fluent in C/C++ and Matlab. After a literature review, much of the work will consist of signal processing and algorithms design. This internship can lead to a PhD.

Expected deliverables

This internship will lead to the delivery of a software. Another required deliverable is the report based on the state of the art on sensor fusion that has to be written in English.

Keywords

data fusion, inertial sensors, algorithmic, signal processing.

Applicant profile

- Master Degree or Engineer Student (last year of studies).
- C/C++, Maltab
- Git
- Good knowledge in Signal Processing.
- Strong motivation towards this challenging project.
- Availability for 5 to 6 months starting in the first semester of 2016.