

## V. Improve the translation of execute summaries/abstracts

1. One of the principal challenges in ~~mobile robots~~ embedded robotic is to develop a vision system allowing the robot system ~~with permanent vision to~~ localise itself in its environment, ~~to identify dynamic objects and share these information with other robots with which it cooperates. That way, Thus~~ starting from an image captured by an omnidirectional camera, the vision system ~~of vision recherches~~ looks for markers to determine the actual position of the robot and objects with contrasting colors that move in its environment. ~~More~~ A variety of algorithms that treat and validate images are used to localize the objects in addition ~~of to a Kalman filter filter of Kalman~~ to treat data as well as a client/server network architecture to share informations.
2. The actual evolution of embedded systems tends to ~~grant~~ give them a computing power more and more important while conserving, even improving, their energetic autonomy. Even if a long time ago these techniques ~~of the diminishment of the consommation~~ *reduced consumption techniques* have been researched, they now become paramount in the elaboration of an embedded system. This document presents a certain number of techniques ~~permitting which allow for a reduced energy consumption the reducing of the energetice consommation.~~ Certain solutions are purely hardware material, others purely based on software and others, finally, are called hybrids, ~~necessitating requiring~~ requiring a collaboration between both soft and a hardware material part and a software part. One of these hybrid solutions is studied in more details ~~more in detail~~: the dynamic adaptation of the supply voltage. This technique illustrates the impact that a low-consumption technique can have on a system, in this case the modification of the CPU scheduler ~~for the diminishment of the consommation on a system.~~ In this precise case, the modification of the (CPU) scheduler.
3. The effective management of a data lake ~~necessitates requires~~ requires a management system of high-performance meta-data. Numerous works ~~have studied pointed out~~ this aspect, proposing solutions. Nevertheless, a few works have interested themselves ~~delved~~ in the data lakes dedicated to spatial information. However, this geographical dimension is fundamental once one wishes to explore the different trajectories of development projects within the same territory. In this article, ~~we are interested we focused on particularly in~~ the implementation of a data lake for the metropole of Montpellier. The conceptual solution leans on ISO 19115 to describe the spatial meta-data that has been rolled out in the frame of data lakes. The implementation based on HDFS and GeoNetwork is presented and discussed. The source code is equally ~~put at the disposition of the community also available for the community.~~

4. The first epidemiological modelling work was carried out at the end of the eighteenth century to evaluate the effectiveness of variolisation: number of deaths avoided and increase in life expectancy [Bernoulli, 1760]. Despite the remarkable progress in transmissible diseases' biological studies, which has provided many tools to quantify the spread of infectious agents among the population, the veterinary (and medical) field has long remained reluctant to use mathematical models. Today, the emergence and persistence of many infectious diseases pose theoretical and practical questions that cannot be addressed without a mathematical study of the natural and/or a control of the dynamics of infections in the population concerned. Taking the example of the emergence of Rift Valley fever in sub-Saharan Africa, we show that modelling the transmission-diffusion of a disease makes it possible to design epidemiological forecasting and early warning tools in line with the recommendations of the OIE, FAO and WHO [S2E4 , 2001].