

Master's Thesis

Evaluation of space processors for robotic and autonomous navigation

- o Evaluate the array processor architecture for image based navigation algorithms
- o Evaluating / Improving the existing image processing algorithm based on the images obtained from the embarked camera on the rover, especially considering what difficulties might appear wrt. the same implementation in Matlab or C/C++
- o Perform all steps to implement and test the image based navigation algorithms into the on-board processor (HPDP) and analyse results (Quality of detection and tracking of features, throughput and execution time of the algorithms)
- o Design of the motor control activities for the manoeuvring of the rover with a given μP
- o Documentation of all the evaluation, implementation, various analysis and test results

Advisors

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