

Programme d'études	Maîtrise / Génie électrique
Domaines (sujets) de recherche	<p>Digital Signal Processing Improvement by Real-Time Implementation on the GEDEX Navigation Platform: Comparison between Simulation and Real-Time Performances.</p> <p>The general objective of this Master's research project is to implement real-time algorithms developed in simulation for the GEDEX navigation platform. The first goal is the conception of a real-time prototyping board which will include new developed Kalman filter and other digital signal processing improvements. A second goal will be the integration of the real-time demonstrator board with the GEDEX navigation platform. This step will allow the use of real navigation raw data acquired on the real platform. It will allow also a better understanding of raw measurements of the GEDEX sensors. An improvement of these algorithms will be done by comparing and analyzing the simulation and real-time performances. Algorithms will be first of all implemented in Matlab/Simulink and after a complete evaluation and validation in simulation, they will be implemented and tested in real-time (on the GEDEX navigation platform). New simulations will be required for improving the algorithms, in order to obtain better performances. The main goal of the project is to give a thorough insight into real-time implementation of digital signal processing in the case of the GEDEX navigation platform.</p>
Financement	<p>A research grant is available. To apply for this Grant, please fill the electronic form at:</p> <p>http://profs.etsmtl.ca/ele/profs/rlandry/avis_en.html</p> <p>or www.etsmtl.ca/rlandry click section: "Research trainee"</p>
Autres informations	NSERC - CRD RESEARCH GRANT BETWEEN ETS AND GEDEX COMPANY
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