

MKT 5000 MS Thesis Project Announcement

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Semester, Academic Year: Fall Semester 2020

Project Title: Real-Time (High Precision) Localization of a Hand-Held Mine Detector

Project Description : Student will design and develop some add on capabilities to the hand-held mine detector, designed and developed by TÜBİTAK BİLGEM. The main expectation is to equip the device with navigation sensors to achieve desired high precision position and velocity information of the detector, apply multi-sensor fusion using some filters (e.g. kalman), classify the device motion profile and incorporate it in to the mine detector measurements to create a confidence index using some AI based algorithms and improve efficiency of the overall detector system. Ideally the student is expected to travel to Gebze when needed (e.g., to formalize the stakeholders' expectations and requirements, progress presentations) though during corona days some meetings will be virtual, be efficient with Matlab/Simulink or python, knowledge of stochastic processes, good math and programming skills are desired.

Interested students, send CV to email: aydiny@yildiz.edu.tr