

סמינר - SEMINAR

הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום בי 8.01.2018 (כאי בטבת, תשעייח), בבניין דן קאהן, אודיטוריום 1, 30 .14.

:מרצה

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:על הנושא

Adaptive Control of Networks of Robotic Manipulators

The seminar will be given in English

להלן תקציר ההרצאה:

This talk describes joint research with Kim Nguyen aiming to develop robotic solutions for large-scale field crop agriculture, specifically coordinated dynamics of robotic manipulators on mobile platforms during travel across uneven terrain. As a test case, we analyze synchronization and consensus problems of networked manipulators operating on an underactuated dynamic platform in the presence of communication delays. An adaptive control framework, inspired by the L1 architecture of Naira Hovakimyan, is shown to ensure transient performance bounds and effective tracking in the presence of significant uncertainty and delay, even for fast adaptation. The talk explores key applications of such a technology, as well as some curious mathematical details associated with different communication topologies and the need for a functional-analytic theoretical framework due to the presence of delay.

מארחים: פרופי עודד גוטליב ופרופי אולג גנדלמן

בברכה,

מרכז הסמינרים מרכז הסמינרים