GSC 2019 - The Annual Workshop of Graduate Students in Systems & Control

Monday, April 29, 2019

Technion, Electrical Engineering (Meyer) building, Room 1003, 10th floor

Call for participation

- Under the auspices of IAAC – the Israeli Association for Automatic Control.
- Sponsored by the Bernard M. Gordon Center (BMGC) for Systems Engineering at the Technion, and the Viterbi Faculty of Electric Engineering.

Dear Friends and Colleagues,

You are cordially invited to participate in GSC'19 — the annual meeting of graduate students in the field of Control and Systems Theory.

The event will be held on Monday, April 29, 2019, at the Andrew and Erna Viterbi Faculty of Electric Engineering, Meyer Building Room 1003.

The program is attached below.

Attendance is open to all. **If you intend to join us, we will however appreciate it if you pre-register by informing Lior at** liorgold@technion.ac.il. Registration will also secure a place in the (free) workshop lunch. Speakers are of course registered by default.

Guests who arrive by car can show this invitation at the gate to be admitted to the Technion campus. Some information on campus parking is provided in the following map.

For any questions, please email Lior as well.
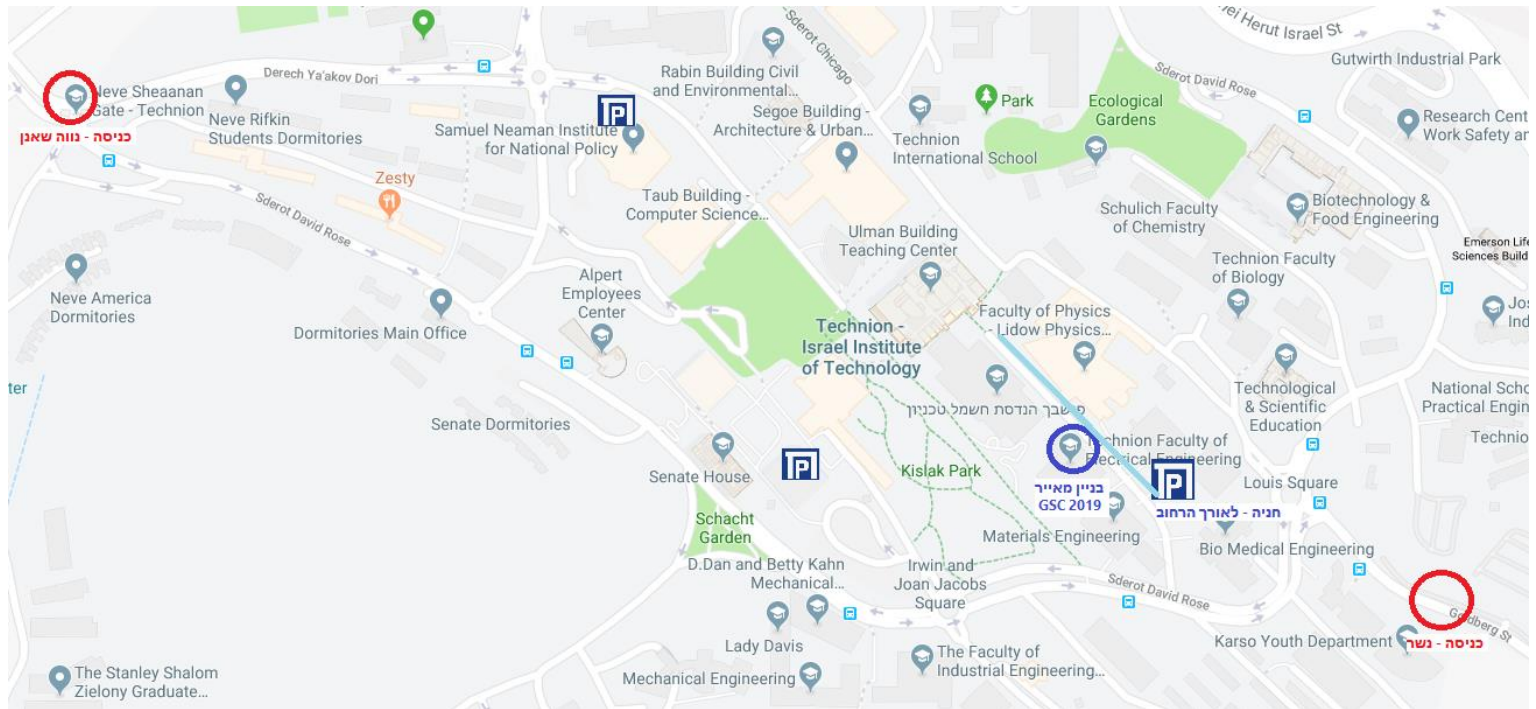
We look forward to seeing you at GSC'19 !

With best regards and happy Pessah,

Ron Meir & Nahum Shimkin: GSC'19 organizers

Moshe Idan: IAAC president

Technion campus map and some open parking options:

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Workshop Program

8:30	**Gathering**
9:00	**Opening remarks**
Session 1	
9:10	**Maor Braksmayer**, ME, Technion. PhD, Advisor: Leonid Mirkin. *H2 performance in networked control: accomplish more by doing less.*
9:30	**Arseny Livshitz,** AE, Technion. PhD, Advisor: Moshe Idan. *Adaptive Laser-Range-Finder Terrain-Following Approach.*
9:50	**Anna Clarke,** AS&R, Technion. PhD, Advisor: Per-Olof Gutman. *Kinesthetic Training Module for Mastering Body Flight: Proof-of-Concept Experiment.*
10:10	**Oriel Halvani,** ME, Technion. MSc, Advisor: Yizhar Or. *Nonholonomic dynamics of the Twistcar vehicle: asymptotic analysis and hybrid dynamics of frictional skidding.*
10:20	**Yazan Safadi,** CEE, Technion. MSc, Advisor: Jack Haddad. *Optimal Integrated Traffic Routing and Signal Control in Simple Urban Road Networks: An Analytical Solution.*
10:30	**Mayank Sewlia,** AE, Technion. MSc, Advisor: Daniel Zelazo. *Distributed Event Triggered Control for Second-Order Multi-Agent Systems.*
10:40	**Coffee Break**
Session 2	
11:00	**Rami Katz,** EE, TAU. PhD, Advisor: Emilia Fridman. *Network-based boundary observer-controller design for 1D heat equation.*
11:20	**Ayal Taitler,** AS&R, Technion. PhD, Advisors: Erez Karpas and Per-Olof Gutman. *Minimum Time Validation for Hybrid Task Planning.*
11:40	**Oren Wiezel,** ME, Technion. PhD, Advisor: Yizhar Or. *Geometric vs. variational optimal control of gaits for 3-link swimmers.*
12:00	**Eyal Bar-Shalom,** EE, TAU. MSc, Advisor: Michael Margaliot. *Ribosome flow model with different site sizes.*
12:10	**Benny Kosarnovsky,** ME, BGU. MSc, Advisor: Shai Arogati. *A String of Tethered Drones – System Dynamics and Control.*
12:20	**Liraz Mudrik,** AE, Technion. MSc, Advisor: Yaakov Oshman *Estimation-Based Guidance Using Optimal Bayesian Decision.*
12:30	**Lunch**

Session 3	
14:00	**Guest lecture: Dr. Sharon Rabinovic, RAFAEL** *Industry Perspective*
14:20	**Omer Orki,** ME, BGU. PhD, Advisor: Shai Arogeti. *Control of Mixed Platoons Consist of Automated & Manual Vehicles.*
14:40	**Dror Freirich,** EE, Technion. PhD, Advisor: Ron Meir. *A Distributional Perspective on Learning in Control Problems.*
15:00	**Dror Hurwitz,** AS&R, Technion. MSc, Advisors: Sagi Filin and Itzik Klein *The Contribution of Quadrotor-Formation and Imaging-Configurations for Improved Solutions to Navigation and Mapping Scenarios.*
15:10	**Shimon Komarovsky,** CEE, Technion. MSc, Advisor: Jack Haddad. *Robust Interpolating Traffic Signal Control for Uncertain Road Networks.*
15:20	**Daniel Jano,** ME, BGU. MSc, Advisor: Shai Arogeti. *Drone`s attitude estimation for a corridor-like environments using camera and rate gyroscopes.*
15:30	**Coffee break**
Session 4	
15:50	**Eyal Weiss,** EE, TAU. PhD, Advisor: Michael Margaliot. *A Generalization of Linear Positive Systems.*
16:10	**Tom Jurgenson,** EE, Technion. PhD, Advisor: Aviv Tamar. *Harnessing Reinforcement Learning for Neural Motion Planning.*
16:30	**Bhargav Jha,** AE, Technion. PhD, Advisor: Tal Shima. *Cooperative Guidance and Collision Avoidance for Multiple Vehicles.*
16:50	**Orr Krupnik,** EE, Technion. MSc, Advisor: Aviv Tamar. *Multi Agent Reinforcement Learning with Multi-Step Generative Models.*
17:00	**Ron Hartston,** ME, Technion. MSc, Advisors: Miriam Zacksenhouse and Reuven Katz. *Implementation of a Natural Dynamic Controller on an Under-actuated Compass-Biped Robot.*
17:10	**Or Raveh,** EE, Technion. MSc, Advisor: Ron Meir. *Communication constraints for Multi-Agents systems in Reinforcement Learning.*
17:20	**Concluding remarks**