Charis Stamouli

University of Pennsylvania \sim stamouli@seas.upenn.edu \sim www.charis-stamouli.github.io

RESEARCH INTERESTS

Control Theory, Machine Learning

EDUCATION

University of Pennsylvania (UPenn)

09/2020-present

Ph.D. in Electrical and Systems Engineering

National Technical University of Athens (NTUA)

09/2014-11/2019

Diploma in Electrical and Computer Engineering (MEng, five-year degree)

- Thesis: Multi-agent Formation Control based on Distributed Estimation with Prescribed Performance Advisor: Kostas J. Kyriakopoulos
- GPA: 9.50/10, rank in top 3% of class

PROFESSIONAL EXPERIENCE

Teaching Assistant at UPenn

CIS520: Machine Learning

01/2022 - 04/2022

ESE500: Linear Systems Theory

08/2021-12/2021

• Designed homework and exam sets, held office hours, taught classes

Research Assistant at NTUA

Department of Mechanical Engineering, Control Systems Lab

11/2018-05/2020

Conducted research in formation control of multi-agent systems based on distributed estimation

Robotics Intern at National Centre for Scientific Research "Demokritos"

Institute of Informatics and Telecommunications, Roboskel Lab

07/2018 - 08/2018

- Collected images of obstacles using a camera placed on a mobile robot
- Extended and implemented an algorithm for obstacle recognition during the autonomous motion of a vision-enabled mobile robot

Teaching Assistant at NTUA

Programming Techniques

02/2017-06/2017

• Assisted students in the lab sessions

PUBLICATIONS

Conference papers:

- C. Stamouli, E. Chatzipantazis, and G. J. Pappas, "Structural Risk Minimization for Learning Nonlinear Dynamics," IEEE American Control Conference (ACC), 2024. To appear.
- C. Stamouli, A. Tsiamis, M. Morari, and G. J. Pappas, "Adaptive Stochastic MPC under Unknown Noise Distribution," Conference on Learning for Dynamics and Control (L4DC), PMLR, pp. 596-607, 2022.
- C. J. Stamouli, C. P. Bechlioulis, and K. J. Kyriakopoulos, "Robust Dynamic Average Consensus with Prescribed Performance," 2019 IEEE 58th Conference on Decision and Control (CDC), pp. 5420-5425, 2019.

Journal papers:

- C. J. Stamouli, C. P. Bechlioulis, and K. J. Kyriakopoulos, "Robust Dynamic Average Consensus with Prescribed Transient and Steady State Performance," Automatica, vol. 144, 110503, 2022.
- C. J. Stamouli, C. P. Bechlioulis, and K. J. Kyriakopoulos, "Multi-Agent Formation Control Based on Distributed Estimation with Prescribed Performance," in IEEE Robotics and Automation Letters, vol. 5, no. 2, pp. 2929-2934, 2020. Presented at ICRA 2020.

Preprints:

• C. Stamouli, I. Ziemann, and G. J. Pappas, "Rate-Optimal Non-Asymptotics for the Quadratic Prediction Error Method," arXiv preprint arXiv:2404.07937, 2024.

HONORS AND AWARDS

Ganster Engineering Fellowship Department of Electrical and Systems Engineering, UPenn		2020
The Dean's Fellowship Department of Electrical and Systems Engineering, UPenn		2020
NTUA Thomaidion Award for the publication "Robust Dynamic Average Consensus with Prescribed Performance"		2019
Eurobank EFG Award for ranking first in my high school on the Nationwide University Entrance Examination		2014
SKILLS		
Programming Languages	Python, C/C++, MATLAB (proficient), Java, Prolog, ML (past experience) English (fluent), Spanish (advanced), Greek (native)	