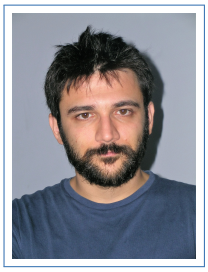

Ioannis Kordonis

Curriculum Vitae

Personal Data

Citizenship **Greek**.

Date of Birth **October 17th 1986**.

Place of Birth **Drama, Greece**.

Marital Status **Married**.

Contact Information

Tel **+306984936024**.

Email **jkordonis1920@yahoo.com**.

Address **Iliados 8th**, *Athens, Greece*, 11633.

Research Interests

My research interests lie in the area of Systems and Control with an emphasis on Dynamic Games and Stochastic Control theory and applications in the areas of Energy – Power Systems and Transportation Systems..

Work Experience

2020 **Research Associate: National Technical University of Athens, Greece**

2019 **ATER: IETR - Institut d'Electronique et de Télécommunications de Rennes**

Description: Temporary Teaching and Research Position

Research: Optimal management of grid connected battery energy storage systems

Advisor: A. Charalampidis

2017–2018 **Postdoctoral Research: IETR - Institut d'Electronique et de Télécommunications de Rennes**

Topic: Optimal coordinated management of battery energy storage systems

Advisor: A. Charalampidis

2016–2017 **Postdoctoral Research: University of Southern California, Los Angeles, California, USA**

Topic: Game Theoretic techniques for Multi-modal Freight Transportation Networks

Advisors: P. Ioannou, M. Dessouky

2015–2016 **Postdoctoral Research: National Technical University of Athens, Greece**

Topic: Max-Plus Stochastic Systems Stability and Identification

Advisors: G. P. Papavassilopoulos, P. Maragos

Education

2009–2015 **PhD in Electrical Engineering: National Technical University of Athens, Greece**

Thesis: *Dynamic Games with a Large Number of Players: Random Entrance and Random Interconnections*

Advisor: George P. Papavassilopoulos

Committee: G. P. Papavassilopoulos, P. Maragos N. Karcanias

2004–2009 **Diploma in Electrical and Computer Engineering National Technical University of Athens, Greece 2004-2009**

Major: Systems and Control Theory

Minor: Electronics and Electrical Machines

GPA: 8.16/10

Thesis: Nonlinear Control Techniques for HIV-1 Models

Advisor: G. P. Papavassilopoulos

Funding

2018 **Programme PRESTIGE post-doc: Campus France (PRESTIGE-2017-4-0014).**

Awards/Scholarships

2011–2014 **ELKE Scholarship, *(Special Account for Research of the National Technical University of Athens)*.**

2000–2004 **National Student Contest Awards in Mathematics, Physics and Chemistry**.
Mathematics: Second place in the Panhelenic Mathematics contest Euclid of the Greek Mathematical Society, 2001
Physics: Second place in the Panhelenic Physics contest 2003. Fifth place in the Panhelenic Physics contest 2004.
Chemistry: First place in the Panhelenic Chemistry contest 2001. First place in the Panhelenic Chemistry contest 2002 (second round). First place in the Panhelenic Chemistry contest 2003 (second round). Second place in the Panhelenic Chemistry contest 2004

2003–2004 **International Student Contest Awards in Physics and Chemistry**.
Physics: Bronze medal in the XXXV International Physics Olympiad in Pohang (Korea), 2004
Chemistry: Bronze medal in the 35th International Chemistry Olympiad in Athens, Greece, 2003

Publications

Journal Publications

J1 I. Kordonis, G. P. Papavassilopoulos "On stability and LQ control of MJLS with a Markov chain with general state space", IEEE Transactions on Automatic Control, Vol. 59, No. 2, pp. 535–540, 2014

J2 I. Kordonis, G. P. Papavassilopoulos "LQ Nash Games With Random Entrance: An Infinite Horizon Major Player and Minor Players of Finite Horizons", IEEE Transactions on Automatic Control, Vol. 60, No. 6, pp. 1486–1500, 2015

J3 I. Kordonis, G. P. Papavassilopoulos "Games on Large Networks: Information and Complexity", IEEE Transactions on Automatic Control, Vol. 62, No. 7, pp. 3178-3192, 2017

J4 I. Kordonis, A. C. Charalampidis, G. P. Papavassilopoulos "Pretending in Dynamic Games, Alternative Outcomes and Application to Electricity Markets", Dynamic Games and Applications, Springer, Vol. 8, No. 4, pp. 844–873, 2018

J5 I. Kordonis, P. Maragos, G. P. Papavassilopoulos "Stochastic Stability in Max-Product and Max-Plus Systems with Markovian Jumps", Automatica, Elsevier, Vol. 92, pp. 123–132, 2018

J6 S. Patmanidis, A. C. Charalampidis, I. Kordonis, G. D. Mitsis and G. P. Papavassilopoulos "Tumor growth modeling: Parameter estimation with Maximum Likelihood methods", Computer Methods and Programs in Biomedicine, Vol. 160, pp. 1–10, 2018

J7 A. Papadopoulos, I. Kordonis, M. Dessouky, P. Ioannou "Coordinated Freight Routing with Individual Incentives for Participation", IEEE Transactions on Intelligent Transportation Systems, Vol. 20, No. 9, 2019

J8 I. Kordonis, M. Dessouky, P. Ioannou "Mechanisms for Cooperative Freight Routing: Incentivizing Individual Participation", IEEE Transactions on Intelligent Transportation Systems Vol. 21, No. 5, 2019

S9 S. Patmanidis, A. C. Charalampidis, I. Kordonis, G. D. Mitsis and G. P. Papavassilopoulos " Individualized growth prediction of mice skin tumors with maximum likelihood estimators", Computer Methods and Programs in Biomedicine, Vol. 185, March 2020

Book Chapters

BC1 I. Kordonis, G. P. Papavassilopoulos "Effects of Players' Random Participation to the Stability in LQ Games", Advances in Dynamic and Mean Field Games, eds. Apaloo, Joseph, and Bruno Viscolani, 2018

BC2 I. Kordonis "A Model for Partial Kantian Cooperation", to appear in the Advances in Dynamic Games and Applications, edited by David Ramsey and Jerome Renault. An early version is available online arXiv:1609.01921v2

Submitted Papers

S1 A. Papadopoulos, I. Kordonis, M. Dessouky, P. Ioannou "Personalized Pareto-Improving Pricing-and-Routing Schemes for Near-Optimum Freight Routing: An Alternative Approach to Congestion Pricing", submitted to Transportation Science Part C

S2 I. Kordonis, A. C. Charalampidis, P. Haessig "Optimal Control of MDP over a Long Operation-Dependent Time Horizon and Application to Battery Energy Storage Systems", submitted to IEEE Transactions on Automatic Control

S3 A.-R. Lagos, I. Kordonis, G. P. Papavassilopoulos "Games of Social Distancing during an Epidemic: Local vs Statistical Information", submitted to Dynamic Games and Applications

Conference Publications

C1 I. Kordonis, G. P. Papavassilopoulos "A Nash LQG Game with an Infinite Horizon Major Player and Many Randomly Entering Minor Players of Different Time Horizons", Eighth International ISDG Workshop, 2011, Padova

C2 I. Kordonis, G. P. Papavassilopoulos "LQ Nash Games with Players Participating in the Game for Random Time Intervals", 15th International Symposium on Dynamic Games and Applications, 2012 Bysice, Czech Republic

C3 I. Kordonis, G. P. Papavassilopoulos "Games on Large Random Interaction Structures: Information and Complexity Aspects", IEEE CDC, Firenze 2013 (invited)

C4 I. Kordonis, G. P. Papavassilopoulos "Dynamic Games among Agents with Partial Information of the Structure of the Interactions Graph: Decision Making and Complexity Issues", IEEE SMC, Manchester 2013 (invited)

C5 I. Kordonis, G. P. Papavassilopoulos "Cheating in Adaptive Games Motivated by Electricity Markets", 6th International Symposium on Communications, Control and Signal Processing, IEEE 2014 Athens

C6 I. Kordonis, G. P. Papavassilopoulos "Network Design for Fast Convergence to the Nash Equilibrium in a Class of Repeated Games", 24th Mediterranean Conference on Control and Automation, Athens, Greece June 21-24, 2016

C7 I. Kordonis, G. P. Papavassilopoulos "Random Entrance and Duration of Overlapping Generation Games: Impact on Stability and Gains", 17th International Symposium on Dynamic Games and Applications, July 12-15, 2016, Urbino, Italy

C8 S. Patmanidis, A. C. Charalampidis, I. Kordonis, G. P. Papavassilopoulos, G. D. Mitsis "Comparing Methods for Parameter Estimation of the Gompertz Tumor Growth Model", 2017 IFAC World Congress

C9 I. Kordonis, G. P. Papavassilopoulos "Network Design in the Presence of a Link Jammer: a Zero-Sum Game Formulation", 2017 IFAC World Congress

C10 I. Kordonis "A Model for Partial Kantian Cooperation", presented at European Meeting on Game Theory SING14, June 2018, Bayreuth, Germany

C11 I. Kordonis,A. Papadopoulos, M. Dessouky, P. Ioannou "Mechanisms for Cooperative Truck Routing" presented in the 18th International Symposium on Dynamic Games and Applications July 9-12, 2018, Grenoble, France

C12 A. Papadopoulos, M. Dessouky, P. Ioannou, I. Kordonis "A Coordination Mechanism for the Freight Routing Problem with Discrete Time Intervals", presented in the 18th IEEE European Control Conference (ECC), 2019

C13 A. Papadopoulos, M. Dessouky, P. Ioannou, I. Kordonis "Pareto-Improving Pricing Schemes for Route Assignment of Heterogeneous Users", presented in the 2020 IFAC World Congress

C14 I. Kordonis, A. C. Charalampidis, G. P. Papavassilopoulos "A Nonlinear Control Approach for an HIV-1 Model", 4th Conference of student Electrical Engineers, Patras, Greece, Nov 2010

Under Preparation

P1 I. Kordonis, A. C. Charalampidis, P. Haessig "Optimal Battery Participation in Regulation Markets", preparing for conference submission

P2 I. Kordonis, A. C. Charalampidis, "A Two Time Scale Approach for Optimal Management of Grid Connected Batteries ", preparing for journal submission

P3 A. R. Lagos, I. Kordonis, G. P. Papavassilopoulos, "Games with Equity Constraints", preparing for journal submission

P4 I. Kordonis, A. R. Lagos, G. P. Papavassilopoulos, "Nash Social Distancing Games with Equity Constraints: How Inequality Aversion Affects the Spread of Epidemics", preparing for journal submission

Theses

PhD Thesis I. Kordonis "Games with a Large Number of Players: Random Entrance and Random Interconnections", PhD Thesis, National Technical University of Athens, 2015

Diploma Thesis I. Kordonis "Nonlinear Control Techniques for HIV-1 models", Diploma Thesis, National Technical University of Athens, 2009 (in Greek)

Theoretical Background

Graduate Courses on:

- Measure Theoretic Probability
- Functional Analysis
- Control Theory
- Optimization Theory and Algorithms
- Topology
- Game Theory
- Nonlinear Control

Teaching Experience

ATER Position The ATER position, gave me the opportunity to give lectures in several courses, prepare material and also get familiarized with various pedagogical methods

Teaching Assistance

During my PhD, I provided teaching assistance in several control courses such as Control System Design, Advanced Control Techniques, Nonlinear Control Techniques and Applications, Stochastic Control. The work varied involving: Preparing the material, Teaching in class, Preparing and/or correcting the final exams.
An important part of my experience comes from the teaching assistance for the course "Nonlinear Control Techniques and Applications". I was responsible for the 50% of the teaching of this course, for five years

Computer skills

Good	Windows, Office, Latex
Very Good	C, Matlab, GAMS, Julia

Languages

English	Fluent
French	Beginner's Level
Greek	Mother tongue

Membership in Professional Societies

IEEE Member