COSTAS A. COURCOUBETIS – Curriculum Vitae

Presidential Chair Professor School of Data Science costas@cuhk.edu.cn

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Professional Experience

- August 2021—present: **Presidential Chair Professor**, School of Data Science, Chinese University of Hong Kong at Shenzhen.
- September 2013 August 2021: Professor and Associate Head of Pillar (ESD Pillar), Singapore
 University of Technology and Design, Head of the Graduate Committee (ESD Pillar), Director of the
 Centre for Smart Systems (CS2), and Co-Director of the SUTD-LTA Center for Transportation
 Research.
- 1999 September 2013: Professor, Department of Informatics, Athens University of Economics and Business (AUEB), Director, Theory, Economics and Systems Lab at AUEB, and Head, Network Economics and Systems Group (NES).
- 1990-1999: Professor, Department of Computer Science, University of Crete, Heraklion, Greece.
- 1990-2000: Head, Telecommunications and Networks Division, Institute of Computer Science, FORTH, Greece. Director of the Network Infrastructure Team at the University of Crete, responsible for the management of the infrastructure and the networking services to over 16,000 students and faculty.
- 1982-1990: **Member of Technical Staff**, Mathematical Sciences Research Centre, AT&T Bell Laboratories, Murray Hill, USA.

Education

- 1977-1982: MS, Ph.D. in Electrical Engineering and Computer Science, University of California, Berkeley, USA.
- 1972-1977: **Diploma of Electrical and Mechanical Engineering**, National Technical University of Athens, Greece.

Current Research Interests

- Pricing of network services and network economics. Pricing is considered as an important tool for
 improving network performance by controlling congestion and incentivizing the adoption of new
 efficient technologies. Network economics and game theory define the framework for obtaining
 fairness in terms of network resource usage, defining incentive compatible pricing schemes, and
 leading to multi-service self-managed networks.
- **Economic models for the sharing economy**. Develop equilibrium models to predict the effects of asset sharing on usage and ownership, with applications to shared mobility and ride-hailing. Market mechanisms for matching supply and demand.
- Smart Grids. The use of incentives to make consumers reveal their flexibility in scheduling their
 electricity loads. Design of mechanisms for managing the energy consumption in buildings using
 preferences of the occupants. Economics of storage.
- Performance of networks and the Internet. Using applied probability models, optimization and operations research tools to develop new mechanisms for transferring low priority data over the Internet.

Other Research Interests

- **Regulation.** In telecommunications, with emphasis to network costing, auctions, network neutrality, spectrum allocation, fines for telecom operators, relevant markets and competition issues. In the energy sector, with emphasis to market design, design of fines.
- Economics of sensor networks.
- Grid/cloud computing economics and resource sharing. Economic and business issues in the new
 computing paradigm, where infrastructures are shared and software applications and hardware are
 provided as services in open markets.
- Formal methods for the specification and verification of concurrent systems with emphasis in systems with real-time and randomization. Development of efficient algorithms and tools for the verification of real-time systems such as computer communication protocols, asynchronous circuits, switching software. Real-time extensions of temporal logic and automata.

Teaching

- CUHK SZ: Design and Analysis of Algorithms, Networked Life, Algorithmic Game Theory (graduate).
- **SUTD**: Networked Life, Economics of Communication Networks (graduate), Introduction to Algorithms (CS, graduate).
- AUEB: Introduction to Computer Science, Compiler Construction, Operating Systems, Theory of
 Computation, Communication Networks, Network Management (graduate), Theory of Concurrency
 and Formal Methods for the Specification and Verification of Concurrent Systems (graduate), Topics
 in ATM networks (graduate, with emphasis on economic models and pricing), Network Economics
 (graduate), Topics in Regulation for Telecommunications (graduate), E-commerce Technologies
 (graduate), Modern Trends in Telecommunications and the Internet (Executive MBA program).

Research Projects

A. CUHK SZ: **1000 talent program**. 5M RMB over 3 years, 2023-2026. Analysis of equilibria of ride-hailing systems, optimal resource scheduling and pricing of transportations platforms, platform competition.

B. SUTD

- Strategic issues in airport connectivity, PI, funded by CAAS, \$\$590K, 1/09/2019-31/08/2021. Uses social network-based analysis for defining centrality measures for airports and studies the strategic behavior of airlines and airports in competing and allocating slots respectively.
- Peer-to-Peer Sharing Economy with Application to Shared Mobility, PI, MoE T2, S\$564K, 1/11/2017-31/10/2020. Equilibrium models for sharing assets with application to ride sharing and car sharing and the effects on congestion and ownership.
- Sustainability-aware Management of Interdependent Power and Transportation Systems, PI, SUTD-ZJU Joint Collaboration Grant, S\$450K, 1/10/2017-30/9/2020. Studies the intimate coupling of power and transportation systems through the fast-growing electric vehicle (EV) adoption. Prices the negative externality caused by large-scale EV charging so as to incentivize EV drivers for reliable and efficient power system operation.
- Singapore Berkeley Building Efficiency and Sustainability in the Tropics (SinBerBEST-2), co-PI with PI the UC Berkeley. Just awarded. Innovate integrated technologies and energy efficient operations for tropical buildings in todays' complex urban environments.
- Incentive Mechanisms for Patient Routing to Control Crowding in Emergency Departments, co-PI, IDC, S\$550K, 8/5/2015-7/5/2018. Use of data analytics to predict the effect of monetary incentives and waiting times to the decisions of patients to choose EDs vs primary care physicians in Singapore.
- Collaborative Urban Logistics, co-PI, IMDA, S\$180K, 1/1/2016-31/10/2017. Develop data-driven models to study the effect of in-mall distribution policies and off-site consolidation centers in the reduction of congestion and waiting times in the operation of malls in Singapore.

- Enhancing Urban Freight, co-PI, 4.2MS\$, The research project proposes a ground-breaking, integrated framework for data collection, modelling and decision-making in urban freight systems planning, based on next-generation sensing/surveying capabilities and innovative behavioural simulation models.
- Mechanism Design for Demand Side Management in Future Smart Grid, co-PI, IDC, S\$117K, 2/6/2014-31/10/2015. Develop efficient and implementable market mechanisms that enable the system operator to make informed decision by considering the consumers' preferences on electricity consumption, design market mechanisms that provide flexible consumers with certain quality of service guarantees.
- ASPIRE (Advancing Security of Public Infrastructure using Resilience and Economics), NRF, 5M\$, 1/1/2015-31/12/2019, co-PI, responsible for work-package about economics of cyber-security infrastructures. Developing of economic mechanisms for mitigating the effects of disruption in electricity and water networks.
- Initiative for the Sharing Economy (ISE): Research and policy issues for the economics and technology aspects of the Sharing Economy in Singapore. http://ise.sutd.edu.sg

SUTD - ST Eng. Centre for Smart Systems (2017-.)

- Established the processes and procedures for the smooth day-to-day operations of CS2. Led the successful organization of the Centre for Smart Systems (CS2) Official Opening ceremony on 21 Nov 2017, and the associated events including the research exhibition and collaboration session for SUTD faculty members and ST Engineering technical leaders.
- Secured research funding of \$2.2M to date, consisting of \$973K from ST Engineering business units and \$1.23M from external agencies.
- Built a research portfolio consisting of three research programmes: Smart Cities Technologies and Solutions, Smart Automation, and Smart Digital Manufacturing. There are 10 research projects in these programmes to date.
- Engaged and recruited 9 SUTD faculty members as PIs and Co-PIs for the CS2 projects.
- A research project in CS2 produced the SWIRL (Surveyor with Intelligent Rotating Lens), a prototype UAV platform for inspection of the Deep Tunnel Sewerage System (DTSS), which has been award the Singapore Good Design Mark (SG Mark) 2018. The project is funded by the Public Utilities Board (PUB).

C. AUEB

EU-funded Research Projects (selected) http://nes.aueb.gr

As principle investigator (PI) leading the AUEB NES research team in the following projects (I indicate the AUEB budget in each project):

- ASCETIC: Novel methods and tools for optimising energy efficiency and minimising the carbon footprint resulting from designing, developing, deploying, and running software in Clouds, 288,000€ (1/10/13-30/9/16).
- **OPTET**: Increase the trust and confidence in Internet-based systems, applications and services, 440,000€ (1/11/2012-31/10/2015).
- **INCEPTION:** Investigates the socioeconomic incentives of the community-sensing environment where multiple users and communities interact, in order to induce growth and sustainability, 180,000€ (2010-2013).
- WATTALYST: Modelling and analyzing demand response systems, 425,000€ (1/10/2011-30/9/2014).
- SESERV: Socioeconomic services for European research projects, 178,000€ (1/9/2010-31/8/2012).
- TRILOGY: Developing a new control architecture for the Internet, 706,000€ (1/1/2008-31/3/2011).
- ETICS: Economics and Technologies for Inter-Carrier Services, 614,000€ (1/1/2010 31/12/2012).
- GRIDECON: Grid Economics and Business Models, 385,000€ (1/7/2006 30/4/2009).
- BEINGRID: Business Experiments in GRID, 228,000 € (1/6/2006-30/11/2009).

- MMAPS: Market-Managed Peer-to-Peer Services, 480,000€ (1/4/2002-30/9/2004).
- M3I: A market-managed multiservice Internet, 407,000€ (1/1/2000-31/12/2001).

D. National Committee of Telecommunications (Greek Telecom Regulator)

- Responsible for the initial study for the Unbundling of the Local Loop in Greece.
- Collaborated in the design of the LMDS spectrum auction.
- A methodology for assigning fines to telecom operators.

E. Regulatory Authority for Energy RAE (Greek Energy Regulator)

- A methodology for assigning fines to energy market participants, 2013.
- The Optimal Design of a NOME-type Regulation in Greece, 2013.
- Regulating access to the low-cost power generating units of the National Greek Energy Operator, 2012.
- Detailed specification of the auction process for the award by the Greek TSO of contracts guaranteeing revenue to producers that are to supply power in the daily market, 2003.

F. Greek ministry of telecommunications

 Study of auction mechanisms for the allocation of channels for digital TV broadcasting with national coverage (2016)

G. ICS FORTH

• Initiator of FORTHnet, the first Greek national ISP, a spinoff of the IP network of ICS FORTH.

Awards and Titles

- 2023 Presidential Exemplary Teaching Award (CUHKSZ).
- 2022 MSOM Best OM Paper in Management Science Award for the paper "Peer-to-Peer Product Sharing: Implications for Ownership, Usage, and Social Welfare in the Sharing Economy".
- 2021 MSOM Service Management SIG Best Paper Award.
- Listed as one of the top 336 most influential Greek scientist in all fields of science (bibliometric research using Google Scholar, listed in the book "Variations on the Art of the Fugue and a Desperate Ricercar" (Kedros 2014)) by Prof. John Ioannidis, Stanford University).
- Listed in the Stanford University's 2020 list of the top 2% scientists in the world.
- Honorary Professor, AUEB, Dec. 2016.
- Trilogy project won the Future Internet Award, 2011.
- LICS (IEEE Symposium on Logic in Computer Science) Test-of-Time award for LICS 1990 paper "Model checking for real-time systems," 2010 (with Rajeev Alur and David Dill).
- Best Teaching Award, Executive MBA (AUEB), 2002, 2004.

Professional Activities (selected)

- Member of the MOE Academic Research Fund (AcRF) Tier 2 Expert Panel EP2, 2015 2016.
- Member of the Committee on the Future Economy (CFE) in Singapore, (participates in the CFE's Sub-Committee on Future Corporate Capabilities and Innovation, with a specific focus on disruptive technologies)
- Elected Member of the University Governing Counsel, Athens University of Economics and Business (2013).
- Member of Expert Evaluation Panel for INRIA (2007), member of EIFFEL think tank for the Future Internet Architecture.
- Member of the Greek National Research Council (2005).
- Journal Reviewer (selected): Mathematics of the Operations Research, Operations Research, JACM,
 Queuing Systems, Journal of Applied Probability, SIAM Journal of Algorithms, Distributed Computing,
 Acta Informatica, IEEE/ACM Transactions on Networking, IEEE JSAC, IEEE Transactions on Knowledge
 and Data Engineering, Stochastic Models, IEEE Transactions on Automatic Control, IEEE Transactions
 on Software Engineering, IEEE Transactions on Software Engineering, IEEE Transactions on
 Communications, IEEE Transactions on Information Theory, Telecommunication Systems, Bell

- Laboratories Technical Journal.
- Guest Editor: IEEE Journal on Selected Areas in Communications of the Special Issue "Price Based Access Control and Economics for Communication Networks".

Selected recent presentations/keynotes:

- Platform Competition in Ridehailing, with Saif Benjaafar and Michalis Kanankis, POMS HK 2023.
- Models, Performance and Optimization of Ride-Hailing Platforms (USC, UC Berkeley, 2018)
- Drivers, Riders and Service Providers: The Impact of the Sharing Economy on Mobility (Stanford, UC Berkeley, USC, NetEcon MIT 2017)
- Peer-to-Peer Product Sharing: Implications for Ownership, Usage and Social Welfare in the Sharing Economy (3d Workshop on Market Place Innovation, Stanford, 2017)
- Drivers, riders and service providers: The impact of ridesharing (Institute of Policy Studies, NUS, 2017)
- Sharing Economy in Singapore (AUS 2017)
- Shared Mobility: an Economic Perspective (OAP 2017)
- Shared Mobility: what affects congestion and ownership (Workshop on Science, Technology and Policy Issues in Singapore, 2017)
- Sharing Economy in Retrospective: Economic Benefits (NEA Singapore, April 2016)
- Ride-sharing, Car-pooling and the future of congestion (Sharing Economy Workshop, Univ. of Minnesota, 2016)
- Peer-to-Peer Product Sharing: Implications for Ownership, Usage, and Social Welfare (Sharing Economy Workshop, Univ. of Minnesota, 2016)
- Optimal Scheduling and Pricing in a Sensor System (SUTD seminar, 2015)
- Social and Economic Policy Issues for Net Neutrality (SMU, 2015)
- Designing incentive compatible protocols for background data transfers (ICCS 2014)
- Volume pricing revisited (SUTD, 2013)
- Load shifting in smart grids (Comsnets 2013)
- Interconnection Economics: issues and models (Telefonica 2012)
- Fair Background Data Transfers of Minimal Delay Impact (UC Berkeley 2011)

Other

- Languages: Fluent in English, French, German.
- **Sports**: tennis, serious swimming.
- **Hobbies**: classical piano (Professional Piano Diploma, Philippos Nakas Conservatory), cooking sous vide.

Publications

Over 17,373 citations, h-index = 45, according to Google Scholar.

A. Books

"Pricing Communication Networks: Economics, Technology and Modelling", Wiley 2003, with R.R. Weber (Cambridge University).

"Computer Aided Verification 93", LNCS 697, Springer Verlag, Editor of Proceeding of CAV'93.

Book chapters

"Grid Business Models", Book Chapter 5, Grid and Cloud Computing: A Business Perspective on Technology and Applications, ISBN: 978-3-642-05192-0, Springer, November 2009 (with G. Thanos, E. Agiatzidou, G. D. Stamoulis).

"GridEcon – The Economic-Enhanced Next-Generation Internet", Grid Economics and Business Models, Volume 4685 of the series Lecture Notes in Computer Science, pp. 188-193, 2007 (with Jörn Altmann, John Darlington, Jeremy Cohen).

"Sharing Economics", in: Shen X., Lin X., Zhang K. (eds) Encyclopedia of Wireless Networks (2018), Springer, Cham (with R. Weber).

"Peer-to-Peer Product Sharing", in Ming Hu (ed) Sharing Economy: Making Supply Meet Demand, Springer, 2019 (with Saif Benjaafar, Guangwen Kong, Xiang Li).

B. Journal articles

- (j1) "Invariance in Resource Sharing Problems", Journal of Applied Probability, 21, p. 777-785, 1984 (with J. Walrand and P. Varaiya).
- (j2) "A Game-Theoretic View of two Processes Using a Single Resource", IEEE Transactions On Automatic Control, Vol. AC-28, No. 11, November 1983, p. 1059-1061 (with P. Varaiya).
- (j3) "Servicing Processes with Least Thinking Time Maximizes Resource Utilization", IEEE Transactions on Automatic Control, Vol. AC-29, No. 11, November 1984, p. 1005-1008 (with P. Varaiya).
- (j4) "Optimal Resolution of Conflict for two Processes", BLTJ, January 1981, part 1 (with P. Varaiya).
- (j5) "Stability of a Queuing System with Concurrent Service and Locking", SIAM Journal on Computing, Vol. 16, No. 1, February 1987, p. 169-178 (with M. Reiman and B. Simon).
- (j6) "The Optimal Control of a Queuing System with N Servers and Customers with Simultaneous Service Requirements", IEEE Transactions on Automatic Control AC-32(8), August 1987 (with M. Reiman).
- (j7) "Necessary and Sufficient Conditions for Stability of a Bin Packing System", Journal of Applied Probability, 23, p. 989-999, 1986 (with R. Weber).
- (j8) "Construction of the Stationary Regime of Queues with Locking", Stochastic Processes and their Applications 26 (1987), p. 257-265 (with F. Baccelli and M. Reiman).
- (j9) "The Move-to-Front Rule for Multiple Lists", Probability in Engineering and Information Sciences, Vol. 4, p. 19-26, 1990 (with R. Weber).
- (j10) "Stabilizing an Uncertain Production System", Queuing Systems: Theory and Applications, Vol. 5, p. 39-54, 1989, (with T. Konstantopoulos, J. Walrand and R. Weber).
- (j11) "On Optimal Bin-Packing of Randomly Arriving Objects", in Mathematics of Operations Research, Vol. 16, No. 1, February 1991, (with U. Rothblum).
- (j12) "Adding Liveness Properties to Coupled Finite-State Machines", ACM TOPLAS, April 1990 (with S. Aggarwal and P. Wolper).
- (j13) "Stability of On-Line Bin-Packing with Random Arrivals and Long-Run-Average Constraints", in Probability in Engineering and Information Sciences, Vol. 4, p. 447-460, 1990 (with R. Weber).
- (j14) "Weighted Round-Robin Packet Multiplexing in a General-Purpose ATM Switch Chip", IEEE Journal on Selected Areas in Communications, Vol. 9, No. 8, October 1991 (with M. Katevenis and S. Sidiropoulos).
- (j15) "Memory-Efficient Algorithms for Automatic Verification", in Formal Methods in System Design (Kluwer), Vol. 1, p. 275-288, 1992 (with P. Wolper, M. Yannakakis and M. Vardi).
- (j16) "Minimum and Maximum Delay Problems in Real Time Systems", in Formal Methods in System Design (Kluwer), Vol. 1, p. 385-415, 1992 (with M. Yannakakis).
- (j17) "Model Checking in Dense Real-Time", in Information and Computation, Vol. 104, No. 1, 1993 (with R. Alur and D. Dill).

- (j18) "Stability of Flexible Manufacturing Systems", in Operations Research, Vol. 42, p. 947-957, 1994 (with R. Weber).
- (j19) "The Algorithmic Analysis of Hybrid Systems", in Theoretical Computer Science, Vol. 157, January 1995 (with R. Alur, N. Halbwachs, T. Henzinger, P. Ho, X. Nicollin, A. Olivero, J. Sifakis and S. Yovine).
- (j20) "Admission Control and Routing in ATM Networks using Inferences from Measured Buffer Occupancy", in IEEE Transactions in Communications, Vol. 43, p. 1778-1784, 1995 (with G. Kesidis, A. Ridder, J. Walrand and R. Weber).
- (j21) "Effective Bandwidths for Stationary Sources", in Probability in Engineering and Information Sciences (PEIS), Vol. 9, 1995, p. 285-296 (with R. Weber).
- (j22) "The Complexity of Probabilistic Verification", JACM, Vol. 42, No. 4, July 1995, p. 857-907 (with M. Yannakakis).
- (j23) "Buffer Overflow Asymptotics for a Switch Handling Many Traffic Sources", Journal of Applied Probability, Vol. 33, 1996 (with R. Weber).
- (j24) "Computing Accumulated Delays in Real-Time Systems", Formal Methods in System Design, Vol.11, No. 2, p. 137—155, 1977 (with R. Alur and T. Henzinger).
- (j25) "Markov Decision Processes and Regular Events", IEEE Transaction on Automatic Control, Vol.43, No. 10, October 1998, p. 1399-1418 (with M. Yannakakis).
- (j26) "Application of the many sources asymptotic and effective bandwidths for traffic engineering", Telecommunication Systems, 12(2-3): 167--191, 1999 (with V. A. Siris and G. D. Stamoulis).
- (j27) "Measurement-based usage charging in communication networks", Operations Research, 48(4): 535-548, 2000 (with F. P. Kelly and R. Weber).
- (j28) "An Intelligent Agent for Optimizing QoS-for-Money in Priced ABR Connections", in Telecommunication Systems, Special Issue on Network Economics, 1998 (with G. D. Stamoulis, C. Manolakis and F. P. Kelly).
- (j29) "A study of simple usage-based charging schemes for broadband networks Telecommunication Systems, 15(3-4): 323-343, 2000 (with F. P. Kelly, V. A. Siris, and R. Weber).
- (j30) "Procedures and tools for analysis of network traffic measurements", *Performance Evaluation*, 48(1-2), 5-23, May 2002, Elsevier Science (with V.A. Siris).
- (j31) "Bin Packing with Discrete Item Sizes, Part I: Perfect Packing Theorems and the Average Case Behaviour of Optimal Packings", SIAM Journal on Discrete Mathematics, volume 13 (2000) (with D. Johnson, R. Weber, M. Yannakakis, E. Coffman, et al.).
- (j32) "Multiple Incentive Internet Pricing for NRNs: a Case Study", Telecommunications Policy, Vol. 24, No. 6-7, July-August 2000 (with T. Apostolopoulos, X. Psiakki and S. Kohen).
- (j33) "Procedures and tools for analysis of network traffic measurements", Performance Evaluation, Volume 48, Issues 1-4, May 2002, p. 5-23 (with V. A. Siris).
- (j34) "Traffic Equivalence and Substitution in a Multiplexer with Applications to Dynamic Call Admission Control", IEEE/ACM Transactions on Networking, April 2002, Vol. 10, No.2, p. 217-231 (with A. Dimakis, G.D. Stamoulis).
- (j35) "Simple Tariffs Based on Price Multipliers for ATM VBR Services", European Transactions on Telecommunications, 2002 (with V. Siris, G.D. Stamoulis).
- (j36) "Pricing Differentiated Services in the GPRS Environment", ACM Wireless Networks journal (WINET), WMI Special Issue, Vol. 9, No. 4, July 2003 (with S. Soursos and G.C. Polyzos).
- (j37) "Service differentiation and performance of weighted window-based congestion control and packet marking algorithms in ECN networks", Computer Communications. Volume 26, Issue 4, 1 March 2003, P. 314-326 (with V.A. Siris and George Margetis).
- (j38) "Auction-based Resource Reservation in 2.5/3G Networks", Kluwer/ACM Mobile Networks and Applications [MONET] special issue, accepted 2003, Vol. 10, No. 2, April 2005 (with M. Dramitinos and G. D. Stamoulis).
- (j39) "Comparing Economic Incentives in Peer-to-Peer Networks", Special Issue on Network Economics, Computer Networks, Elsevier, 45(1): 133-146, 2004 (with P. Antoniadis, and R. Mason).
- (j40) "Incentives for Content Availability in Memory-less Peer-to-Peer File Sharing Systems", ACM SIGecom Exchanges, 5(4): 11-20, July 2005 (with P. Antoniadis, and B. Strulo).
- (j41) "Incentives for large peer-to-peer systems", in IEEE JSAC Special Issue on Price-Based Access Control and Economics of Networking, 2006 (with R.R. Weber).
- (j42) "An Auction Mechanism for Allocating the Bandwidth of Networks to their Users", Elsevier IEEE Computer Networks, 51:18, p. 4979-4996, December 2007 (with M. Dramitinos and G. D. Stamoulis).

- (j43) "Dynamic Bandwidth Pricing: Provision Cost, Market Size, Effective Bandwidths and Price Games", Journal of Universal Computer Science, Vol. 14, No. 5 (2008), 766-785 (with S. Soursos and R.R. Weber).
- (j44) "Economic aspects of building software for service-oriented architectures", Concurrency and Computation: Practice and Experience, 2009 (with D. Antos and G. Stamoulis).
- (j45) "Economic Issues in Shared Infrastructures", IEEE/ACM Transactions on Networking, Vol. 20, issue 2, 2011 (with R.R. Weber).
- (j46) "Negotiating premium peering prices: A quantitative model with applications", in ACM Transactions on Internet Technologies, Volume 16 Issue 2, April 2016 (with K. Sdrolias, L. Gyarmati, N. Laoutaris, P. Rodriguez).
- (j47) "Paid Peering: Pricing and Adoption Incentives", Journal of Communications and Networks 18(6): 975-988 (2016) (with K. Sdrolias and R.R. Weber).
- (j48) "Ex-post Max-min Fairness of Generalized AGV Mechanisms", IEEE Trans. Automat. Contr. 62(10): 5275-5281 (2017) (with Tao Wang, Yunjian Xu, Selin Damla Ahipasaoglu).
- (j49) "Dynamic Routing for Social Information Sharing", IEEE Journal on Selected Areas in Communications 35(3): 571-585 (2017) (with Yunpeng Li and Lingjie Duan).
- (j50) "Congestion Control for Background Data Transfers with Minimal Delay Impact", IEEE/ACM Transactions on Networking, Volume: 25, Issue: 5, Oct. 2017 (with A. Dimakis, M. Kanakakis).
- (j51) "Market mechanisms for cooperative operation of price-maker energy storage in a power network," IEEE Transactions on Power Systems 33 (3), 3013-3028, 2018 (with Q. Huang, Y. Xu, T. Wang).
- (j52) "Peer-to-Peer Product Sharing: Implications for Ownership, Usage, and Social Welfare in the Sharing Economy", Management Science Management Science 65(2) 2018 (with Saif Benjaafar, Guangwen Kong, Xiang Li). Listed on SSRN's Top Ten download list for: Microeconomics: General Equilibrium & Disequilibrium Models eJournal (over 2400 downloads), (**Top 1% most downloaded papers at SSRN**).
- (j53) "A Fair and Budget-Balanced Incentive Mechanism for Energy Management in Buildings", IEEE Transactions on Smart Grids 9 (4), 3143-3153, July 2018, (with Tao Wang, Yunjian Xu, Chathura Withanage, Lan Lan, Selin Damla Ahipasaoglu).
- (j54) "Mobile Data Offloading with Uniform Pricing and Overlaps", IEEE Transactions on Mobile Computing 18 (2), 348-361, Feb. 1 2019 (with M Li, TQS Quek).
- (j55) "Financial Incentives for Joint Storage Planning and Operation in Energy and Regulation Markets", in IEEE Transactions on Power Systems, Volume: 34, Issue: 5, Sept. 2019 (with Q. Huang, Y. Xu).
- (j56) "A Theoretical Framework to Evaluate the Traffic Impact of Urban Freight Consolidation Centers", Transportation Research Part E (with Lynette Cheah and Rakhi Manohar Mepparambath).
- (j57) "Optimal pricing for peer-to-peer sharing with network externalities", IEEE/ACM Transactions on Networking, Volume: 29, no 1, February 2021 (with Yunpeng Li, Lingjie Duan and Richard Weber).
- (j58) "Economic Controls for Smart Water Distribution Networks Undergoing Supply Failures," IEEE Transactions on Network Science and Engineering 2021 (with Pan Lai, Lingjie Duan and Stefano Galelli).
- (j59) "Drivers, Riders and Service Providers: The Impact of the Sharing Economy on Mobility", Management Science 68(1):123-142, 2022 (with H. Bernhard and S. Benjaafar, M. Kanakakis and S. Papafragkos).
- (j60) "Stackelberg Competition Between Merchant and Regulated Storage Investment in Wholesale Electricity Markets", Applied Energy (with Qisheng Huang, Yunjian Xu).
- (j61) "Strategic Storage Operation in Wholesale Electricity Markets: A Networked Cournot Game Analysis," IEEE Transactions on Network Science and Engineering, 2021, (with Qisheng Huang, Yunjian Xu).
- (j62) "Exploring the Potential Impacts of Crowdshipping Using Public Transport in Singapore", to appear in Transportation Research Record: The Journal of the Transportation Research Board, 2022 (with Lynette. Cheah, Meijing Zhang).
- (j63) "Distributed Double Auction Mechanisms for Large-Scale Device-to-Device Resource Trading", IEEE/ACM Transactions on Networking, Volume: 31, Issue: 3, June 2023 (with Gao Shuqin and Duan Lingjie).
- (j64) "Catastrophe by Design in Population Games: A Mechanism to Destabilize Inefficient Locked-in Technologies", ACM Transactions on Economics and Computation, Volume 11 Issue 1-2, Article No.: 1, pp 1–36, June 2023 (with Stefanos Leonardos, Iosif Sakos, and Georgios Piliouras).
- (j65) "Strategic Production and Trading in Renewable Energy Certificate Markets: Existence, Uniqueness, and Efficiency of Market Equilibria", IEEE Transactions on Network Science and Engineering, April 2023 (with Qisheng Huang, Yunjian Xu).

C. Refereed Conference Proceedings

- (c1) "Distributed Implementation of a Model of Communication and Computation", Proceedings of the International Conference on System Sciences, January 1985 (with S. Aggarwal).
- (c2) "Real Time Coordination of Concurrent Activities", Protocol Specification, Testing, and Verification, VI, B. Sarikaya and G. V. Bochmann (editors), Elsevier Sciences Publishers B. V. (North Holland), p. 387-400 (with S. Aggarwal and D. Barbara).
- (c3) "Implementing CCA on a Broadcast LAN", Protocol Specification, Testing, and Verification, VII, H. Rudin and C. West (editors), Elsevier Sciences Publishers B. V., North Holland, 1987 (with S. Aggarwal and D. Barbara).
- (c4) "A Bin Packing System for Objects with Sizes from a Finite Set: Necessary and Sufficient Conditions for Stability and some Applications", Proceedings of 25 IEEE CDC Athens, Greece, December, 1986 (with R. Weber).
- (c5) "Reasoning About Fair Concurrent Programs", Proceedings of 18th STOC, Berkeley, 1986 (with P. Wolper and M. Vardi).
- (c6) "Verifying Temporal Properties of Finite-State Probabilistic Programs", Proceedings of 29th FOCS, 1988 (with M. Yannakakis).
- (c7) "Optimal Dynamic Allocation of Heterogeneous Servers under the Condition of Total Overload", Proceedings of 27 IEEE CDC, December 1988 (with M. Reiman).
- (c8) "Model-Checking for Real-Time Systems", in Proceedings of LICS 1990 (with R. Alur and D. Dill).
- (c9) "Markov Decision Processes and Regular Events", in Proceedings of ICALP 1990 (with M. Yannakakis).
- (c10) "Memory-Efficient Algorithms for Automatic Verification", in Proceedings of CAV 1990, LNCS, Springer Verlag (with P. Wolper, M. Yannakakis and M. Vardi).
- (c11) "Stable Policies for Petri-Nets with Fluctuating Transition Processes", in Proceedings of 29th IEEE CDC, 1990, (with R. Weber).
- (c12) "Model-Checking for Probabilistic Real-Time Systems", in Proceedings of ICALP 1991, LNCS, Springer Verlag (with R. Alur and D. Dill).
- (c13) "Continuous versus Uniform Distributions: A Bin-Packing Study", STOC 1991 (with E. Coffman, D. Johnson, et al.).
- (c14) "The Algebra of Boolean Processes", Proceedings of CAV 1991, LNCS, Springer Verlag (with S. Graf and S. Sifakis).
- (c15) "Minimum and Maximum Delay Problems in Real-Time Systems", in Proceedings of CAV 1991, LNCS, Springer Verlag (with M. Yannakakis).
- (c16) "Real-Time Issues in Call Acceptance Management for ATM Networks", Proceedings of 5th RACE TMN Conference, London, November 1991 (with G. Fouskas, V. Friesen, and S. Sartzetakis).
- (c17) "Minimization of Timed Transition Systems", in Proceedings of CONCUR 1992, LNCS, Springer Verlag, 1992 (with R. Alur, N. Halbwachs, D. Dill and H. Wong-Toi).
- (c18) "Verification with Real-Time COSPAN", in Proceedings of CAV 1992, LNCS, Springer Verlag, 1992 (with D. Dill, M. Chatzaki and P. Tzounakis).
- (c19) "An Implementation of Three Algorithms for Timing Verification Based on Automata Emptiness", in Proceedings of 1992 RTSS (with R.Alur, D. Dill, N. Halbwachs and H. Wong-Toi).
- (c20) "Hybrid Automata: An Algorithmic Approach to the Specification and Verification of Hybrid Systems", in the proceedings of the workshop on Hybrid Systems, LNCS, Springer Verlag, Lungby, Denmark, October 1992 (with R. Alur, T. Henzinger and P.H. Ho).
- (c21) "Verification of Timing Properties of VHDL", in Proceedings of CAV 1993, LNCS, Springer Verlag, 1993 (with W. Damm, B. Josko).
- (c22) "Computing Accumulated Delays in Real-Time Systems", in Proceedings of CAV 1993, LNCS, Springer Verlag, 1993 (with R. Alur and T. Henzinger).
- (c23) "On the Performance of an Effective Bandwidths Formula", in Proceedings of ITC94, North Holland (with G. Fouskas and R. Weber).
- (c24) "Decoupling Bandwidths for Networks: a Decomposition Approach to Resource Management", in Proceedings of INFOCOM 94 (with G. de Veciana and J. Walrand).
- (c25) "The Observational Power of Clocks", in Proceedings of CONCUR' 94, LNCS, Springer Verlag, August 1994 (with R. Alur and T. Henzinger).
- (c26) "Distinguishing Tests for Nondeterministic and Probabilistic Machines", in Proceedings of STOC 95 (with R.Alur and M. Yannakakis).

- (c27) "An On-Line Estimation Procedure for Cell-Loss Probabilities in ATM Links", 3rd IFIP Workshop on Performance Modelling and Evaluation of ATM Networks, July 1995 (with G. Fouskas and R. Weber).
- (c28) "Extending Promela and SPIN for Real Time", in Proceedings of TACAS 96, LNCS, Springer Verlag, March 27-29, Passau, 1996 (with S. Tripakis).
- (c29) "Integration of Pricing and Flow Control for Available Bit Rate Services in ATM Networks", in Proceedings of GLOBCOM 96 (with V.A. Siris and G.D. Stamoulis).
- (c30) "An Experimental Environment for ABR pricing experiments", in Proceedings of ICT 97, Melbourne, April 1997 (with V.A. Siris, G.D. Stamoulis, R. Weber and F. Kelly).
- (c31) "Application of large deviation techniques for performance evaluation and dimensioning of ATM networks", in the proceedings of the ATM Traffic Symposium, Myconos, Greece, September 17-18, 1997 (with V. A. Siris and G. D. Stamoulis).
- (c32) "Many sources asymptotic and effective bandwidths: Investigation with MPEG traffic", 2nd IFIP Workshop on Traffic Management and Synthesis of ATM Networks, Montreal, Canada, September 24-26, 1997 (with V. A. Siris and G. D. Stamoulis).
- (c33) "Comparing usage-based pricing schemes for broadband networks", Colloquium on "Charging for ATM-the Reality Arrives", IEE, London, UK, November 20, 1997 (with V. A. Siris and G. D. Stamoulis).
- (c34) "An evaluation of pricing schemes that are based on effective usage", IEEE International Conference on Communications (ICC'98), Atlanta, USA, 1998 (with V. Siris).
- (c35) "A study of simple usage-based charging schemes for broadband networks", in Proceedings of IFIP TC6 Broadband Communications'98, Chapman Hall, Stuttgart, Germany, 1998 (with F. P. Kelly, V. A. Siris, and R. Weber).
- (c36) "An Intelligent Agent for Optimizing QoS-for-Money in Priced ABR Connections", in Proceedings of ICT98, Chalkidiki, Greece (with G. D. Stamoulis and C. Manolakis).
- (c37) "Application and evaluation of large deviation techniques for traffic engineering in broadband networks", ACM SIGMETRICS'98, Madison, Wisconsin, USA, 1998 (with V. A. Siris, and G. D. Stamoulis).
- (c38) "An Approach to Pricing and Resource Sharing for ABR Services", in Proceedings of GLOBCOM 98, Sydney, Australia, November 1998 (with V. Siris).
- (c39) "Network Control and Usage-based Charging: Is Charging for Volume Adequate?", in Proceedings of First International Conference on Information and Computational Economies (ICE'98), Charleston, SC, USA, October 1998 (with V. A. Siris and G. D. Stamoulis).
- (c40) "Agent-based negotiations for optimal selection of telecommunication services", in Proceedings of First Internet-Based Negotiation Technologies Workshop, March 18-19, 1999, (with G. Stamoulis, D. Kalopsikakis, A. Kirikoglou).
- (c41) "Managing and pricing service level agreements for differentiated services", in Proceedings of IWQoS'99 International Workshop on Quality of Service, UCL, London, May 31 June 4, 1999 (with V. Siris).
- (c42) "Resource Allocation in Multiservice MPLS", Proceedings of IWQoS'99 International Workshop on Quality of Service, UCL, London, May 31 June 4, 1999 (with M. Chatzaki, S. Sartzetakis, N. Papadakis).
- (c43) "Charging in a large loss system", Proceedings of ITC'99, June 7-10, 1999 (with M. Reiman).
- (c44) "Traffic equivalence and substitution in multiplexer", in Proceedings of IEEE INFOCOM 1999, New York, March 1999, (with G. Stamoulis, A. Dimakis).
- (C45) "A web-based tool for advanced statistical analysis of network traffic measurements", Proceedings of8th IFIP Workshop on Performance Modelling and Analysis of ATM & IP Networks, Ilkley, West Yorkshire, UK, July 2000 (with V. Siris)
- (c46) "Efficient adaptation to dynamic pricing communicated by ECN marks: Scenarios for experimental assessment", Proceedings of SPIE International Symposium on Information Technologies 2000 (Program on Internet Performance and Control), Boston, USA, November 2000 (with P. Antoniadis, G. Margetis, V. A. Siris, and G. D. Stamoulis).
- (c47) "Providing bandwidth guarantees over a best-effort network: call-admission and pricing", In Proceedings of IEEE INFOCOM 2001 (with A. Dimakis and M.I. Reiman).
- (c48) "Information Asymmetry In the Internet Connectivity Market", in Proceedings of 4th Berlin Internet Economics Workshop, Berlin 2001 (with I. Konstantiou).
- (c49) "An auction mechanism for bandwidth allocation over paths", in Proceedings of ITC 2001 (with G. Stamoulis and M. Dramitinos).

- (c50) "Pricing Differentiated Services in the GPRS Environment", in Proceedings of The first ACM Wireless Mobile Internet Workshop Rome, Italy, July 16-21, 2001 (with S. Soursos and G.C. Polyzos).
- (c51) "Pricing for Efficient Quality of Service Support in Wireless Packet Networks", in Proceedings of 2nd Wireless World Research Forum Meeting, Helsinki, Finland, May 10 11, 2001 (with G.C. Polyzos).
- (c52) "Differentiated Services in the GPRS Wireless Access Environment", Proceedings of 2001 Tyrrhenian International Workshop on Digital Communications, Evolutionary Trends of the Internet, Taormina, Italy, September 17-20, 2001 (with S. Soursos and G.C. Polyzos).
- (c53) "Market Models for P2P Content Distribution", in Proceedings of AP2PC'02, Bologna, Italy, July 2002 (with P. Antoniadis).
- (c54) "Peer-to-Peer Wireless LAN Consortia: Economic Modelling and Architecture", in Proceedings of 3d IEEE International Conference on Peer-to-Peer Computing (P2P 2003), Linkoping, Sweden, 1-3 September 2003 (with P. Antoniadis, E. Efstathiou, G. Polyzos, B. Strulo).
- (c55) "The Case for Peer-to-Peer Wireless LAN Consortia", 12th IST Summit on Mobile and Wireless Communications, Aveiro, Portugal, June 15-18, 2003 (with P. Antoniadis, E. C. Efstathiou, G. C. Polyzos, B. Strulo).
- (c56) "Auction-based Resource Reservation in 2.5/3G Networks", In Proceedings of WiOpt'03: Modelling and Optimization in Mobile, Ad Hoc and Wireless Networks, INRIA, Sophia-Antipolis, France, March 3-5, 2003 (with M. Dramitinos, G. D. Stamoulis).
- (c57) "Asymptotics for Provisioning Problems of Peering Wireless LANs with a Large Number of Participants", in Proceedings of WiOpt' 04: Modelling and Optimization in Mobile, Ad Hoc and Wireless Networks, Cambridge (with R. Weber).
- (c58) "Resource Control for Loss-Sensitive Traffic in CDMA Networks", in Proceedings of 23rd IEEE INFOCOM, Hong Kong, March 7-11, 2004 (with V.A. Siris).
- (c59) "An Asymptotically Optimal Scheme for P2P File Sharing", in Proceedings of the Second Workshop on the Economics of Peer-to-Peer Systems, Harvard University, June 4-5 2004 (with P. Antoniadis, and R. Weber). (c60) "An Efficient Auction Mechanism for Hierarchically Structured Bandwidth Markets", In Proceedings of QofIS 2004, ICQT Workshop, Barcelona, Spain, September 2004 (with M. Bitsaki and G. D. Stamoulis).
- (c61) "An Innovative Decision Support System for Bidding in Simultaneous Ascending Auctions", in Proceedings of 7th IEEE Conference on E-Commerce Technology (IEEE CEC 2005), Munich, Germany, July 19-22, 2005 (with M. Dramitinos and G. D. Stamoulis).
- (c62) "Auction-based Resource Reservation in 3G Networks Serving Multicast", in Proceedings of the 15th IST Mobile Summit, Myconos, Greece, June 2006 (with M. Dramitinos, G. D. Stamoulis).
- (c63) "A Random Walk Model for Studying Allocation Patterns in Auction-based Resource Allocation", in Proceedings of the 5th International Workshop on Advanced Internet Charging and QoS Technologies (ICQT 2006), Springer LNCS 4033, p. 26-37, St Malo, France, June 27, 2006 (with M. Dramitinos, G. D. Stamoulis)
- (c64) "Pricing Resources on Demand", Proc. of the 1st IEEE International Workshop on Bandwidth on Demand, San Francisco, California, November 2006 (with S. Soursos and R. Weber).
- (c65) "GridEcon: A Market Place for Computing Resources", in Proceedings of 5th International Workshop on Grid Economics and Business Models, p. 185-196, Las Palmas, Spain, August 2008 (with J. Altman, G. D. Stamoulis, M. Dramitinos, T. Rayna, M. Risch and C. Bannick).
- (c66) "Market Mechanisms for Trading Grid Resources", in Proceedings of 5th International Workshop on Grid Economics and Business Models, p. 58-72, Las Palmas, Spain, August, 2008 (with M. Dramitinos, T. Rayna, S. Soursos and G. D. Stamoulis).
- (c67) "Tariffs, Mechanisms and Equilibria at a Single Internet Link", in Proceedings of NETCOOP 2009 (with A. Dimakis).
- (c68) "Congestion Control and Pricing of Volume Intensive Applications", in Proceedings of ITC 21, Paris, September 2009 (with A. Dimakis).
- (c69) "Grid Economics and Business Models", in Proceedings of 6th International Workshop on Grid Economics and Business Models, Delft, The Netherlands, August 2009 (with R. Mason and N. Miliou).
- (c70) "Economic Issues in Shared Infrastructures", in Proceedings of the 1st ACM SIGCOMM Workshop on Virtualized Infrastructure Systems and Architectures, Barcelona, Spain, August 2009 (with R. Weber).
- (c71) "Optimal Call Routing in VoIP", in Proceedings of ITC 21, Paris, September 2009 (with C. Kalogiros and R. Weber).

- (c72) "WOICE: a Decentralized System for Ubiquitous VoIP Services", in Proceedings of DIGIBIZ 2009, London, June 2009 (with C. Kalogiros and P. Antoniadis).
- (c73) "Inter-carrier interconnection services: QoS, economics and business issues", Computers and Communications (ISCC), 2011 (wth M. Dramitinos, G. Stamoulis, G. Blocq, A. Miron, A. Orda).
- (c74) "Fair Background Data Transfers of Minimal Delay Impact", in Proceedings of IEEE INFOCOM, Orlando, Florida, March 2012 (with A. Dimakis).
- (c75) "Inter-domain Coordination Models", in Proceedings of International IFIP TC 6 Workshops, ETICS, HetsNets, and CompNets, Held at NETWORKING 2012, Prague, Czech Republic, May 25, 2012 (with E. Agiatzidou, O. Dugeon, Finn-Tore Johansen, G. D. Stamoulis)
- (c76) "Revenue Models, Price Differentiation and Network Neutrality Implications in the Internet", W-PIN+NetEcon 2013: The joint Workshop on Pricing and Incentives in Networks and Systems, in conjunction with ACM SIGMETRICS, Pittsburgh, USA, 2013 (with K. Sdrolias and R. Weber).
- (c77) "A Practical Iterative Price-Based Approach for Optimal Demand-Response", in Third International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies, Lisbon, Portugal, 2013 (with M. Kanakakis, M. Minou, G. D. Stamoulis, G. Thanos).
- (c78) "Fair Congestion Control for Long-Lived Background Flows, NetGCoop 2014 (with M. Kanakakis and A. Dimakis).
- (c79) "Designing Incentive Compatible Protocols for Background Data Transfers", ICCS 2014, Macau (with M. Kanakakis and A. Dimakis).
- (c80) "From advertising profits to bandwidth prices A quantitative methodology for negotiating premium peering," NetEcon'14 (with L. Gyarmati, N. Laoutaris, K. Sdrolias, P. Rodriguez).
- (c81) "Economic Incentives for Adopting Congestion Accountability Protocols", 26th International Teletraffic Congress (ITC 26), September 9th-11th, 2014, Karlskrona, Sweden (with A. Kostopoulos and Antonis Dimakis).
- (c82) "Design and Experimental Evaluation of Market Mechanisms for Participatory Sensing Environments", AMEC/TADA 2014, Paris, May 2014, (with George Thanos, Evangelos Markakis and George Stamoulis).
- (c83) "Cost-sharing Models in Participatory Sensing", Symposium on Algorithmic Game Theory (SAGT) 2015), (with Georgios Birmpas, Ioannis Giotis, and Evangelos Markakis).
- (c84) "A Fair Bayesian Incentive Compatible Mechanism", CDC 2015 (with Tao Wang, Yunjian Xu, Selin Damla Ahipasaoglu).
- (c85) "Modeling and Analysis of Collaborative Consumption in Peer-to-Peer Car Sharing", NetEcon'15 (with S. Benjaafar, G. Kong, Xiang Li).
- (c86) "A game of Supply Chains and an Urban Consolidation Center", (URBE) conference, 1-2 October 2015, University of Roma Tre, Rome, Italy (with G. Dalla Chiara, L. Cheah).
- (c87) "Pricing the fast-lanes: A qualitative study on the implications of paid peering agreements", ICC 2016 (with K. Sdrolias and R. Weber).
- (c88) "Max-min Fairness of Generalized AGV Mechanisms", in proceedings of CDC 2016 (with Tao Wang, Yunjian Xu, Selin Damla Ahipasaoglu).
- (c89) "Minimally Intrusive Server Policies for Background Data Transfers", in proceedings of Netgcoop 2016 (with Antonis Dimakis and Michalis Kanakakis).
- (c91) "Economics in Mobile Data Offloading with Uniform Pricing", to IEEE ICC 2017 Next Generation Networking and Internet Symposium (with Mingmei Li and Tony Quek).
- (c90) "Peer-to-Peer Product Sharing: Implications for Ownership, Usage and Social Welfare in the Sharing Economy", Third Workshop on Marketplace Innovation, Stanford 2017 (with Saif Benjaafar, Guangwen Kong, Xiang Li).
- (c92) "Drivers, Riders and Service Providers: The Impact of the Sharing Economy on Mobility", in NetEcon'17, MIT (with Saif Benjaafar, Harald Bernhard).
- (c93) "Market Mechanisms for Cooperative Operation of Price-maker Energy Storage in a Power Network", in Proceedings of CDC 2017 (Yunjian Xu, Huang Qisheng, Wang Tao).
- (c94) "Evaluating the Impact of Centralized Goods Receiving Stations at Urban Retail Malls, TRB 96th Annual meeting, Jan 8-12 2017, Washington, D.C. (with L. Cheah and G. Dalla Chiara).
- (c95) "Optimal pricing for a peer-to-peer sharing platform under network externalities", NetEcon 2018, (with Yunpeng Li and Duan Lingjie).
- (c96) "Throughput and Pricing of Ridesharing Systems", IEEE INFOCOM 2019 (with A. Dimakis).

- (c97) "Recommending Paths: Follow or Not Follow?", IEEE INFOCOM 2019 (with Yunpeng Li and Duan Lingjie).
- (c98) "Distributed Double Auctions for Large-Scale Device-to-Device Resource Trading", MobiHoc 2020 (with Shuqin Gao and Lingjie Duan).
- (c99) "Catastrophe by Design: Destabilizing Wasteful Technologies and The Phase Transition from Proof of Work to Proof of Stake, FOCODILE 2020 (with Stefanos Leonardos, Iosif Sakos, and Georgios Piliouras).
- (c100) "Stationary Equilibrium of Mean Field Games with Congestion-dependent Sojourn Times", AAMAS 2023 (with A. Dimakis).
- (c101) "Optimal Energy Storage Operation under Demand Uncertainty: A Prospect Theory Analysis", 2023 IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids (SmartGridComm), (with Qisheng Huang, Jin Xu, Peng Sun, Bo Liu).

Invited Publications

- (i1) "Verifying Automata Specifications of Probabilistic Real-Time Systems", in Proceedings of REX Workshop "Real-Time: Theory in Practice", LNCS 600, J.W. de Bakker, C. Huizing, W.P. de Roever, G. Rozenberg, editors, Springer-Verlag, Berlin, 1991 (with R. Alur and D. Dill)
- (i2) "Distributed Reachability Analysis for Protocol Verification environments", Discrete Event Systems: Models and Applications, P. Varaiya and A. B. Kurzhanski (Eds), Lecture Notes in Control and Information Sciences 103, Springer Verlag (with S. Aggarwal and R. Alonso)
- (i3) "Stable Policies for Petri-Nets with Fluctuating Transition Processes", in Proceedings of 29° IEEE CDC, 1990, (with R. Weber).
- (i4) "A Preliminary Model for Distributed Algorithms", 2nd IFAC Symposium on Large Scale Systems: Theory and Applications, Toulouse, France, June 24-26, 1980 (with P. Varaiya).
- (i5) "WIENER and NIKESH: the comparison of two QoS Network Management Experiments", in δεύτερο ATM Workshop, Dublin, 1990 (with G. Fouskas, S. Leventis, S. Sartzetakis and A. Lazar).
- (i6) "Using Asymptotic Techniques in Call Acceptance Management for ATM Networks", Proceedings of ERCIM Workshop on Network Management, Heraklion, 1992 (with G. Fouskas)
- (i7) "Networking in FORTH", Proceedings of ERCIM Workshop on Network Management, Heraklion, 1992 (with Y. Fragiadakis, S. Sartzetakis, V. Spitadakis, C. Strakadounas and P. Tzortzakis)
- (i8) "Experimental Evaluation of the Use of Large Deviation Asymptotics for the QoS Management of ATM Networks", 5th International Conference on Advances in Communication and Control, June 1995 (with G. Fouskas and R. Weber)
- (i9) "Estimation of Overflow Probabilities for State-Dependent Service of Traffic Streams with dedicated Buffers", Proceedings of Stochastic Networks Workshop, Edinburgh, August 1-12, 1995 (with R. Weber)
- (i10) "Charging Issues for Services in Broadband Networks", in Proceedings of the Organization for Economic Coordination and Development (OECD) Conference on The Economics of the Information Society, Istanbul, December 1995 (with V.A. Siris, G.D. Stamoulis and Y. Markopoulos).
- (i11) "Comparing usage-based pricing schemes for broadband networks", 1997 joint international meeting between EURO and INFORMS, Barcelona, Spain, July 14-17, 1997 (with V. A. Siris and G. D. Stamoulis)
- (i12) "Probabilistic model checking: formalisms and algorithms for discrete-time and real-time systems", Proceedings of the NATO school on Program Verification, LNCS, Springer Verlag, Antalya, June 1997 (with S. Tripakis)
- (i13) "Games Between Competing ISPs Employing Different Pricing Schemes", in Proceedings of Euro-NF International Workshop on Traffic and Congestion Control for the Future Internet, Volos, March 2011 (with A. Kostopoulos, A. Dimakis).
- (i14) "Inter-domain Coordination Models". ETICS Workshop Networking 2012, Prague (with Eleni Agiatzidou, O. Dugeon, F. Johansen, G. D. Stamoulis).

D. Technical Reports

(m1) "The Laplace Transform of the Distribution of the Busy Period and The Stability Condition of a Multiclass Queue with Service Dependent Arrival Rates", AT&T Bell Laboratories Technical Memo (with J. Reeds and L. Shepp)

(m2) "The Formal Specification of The Session Layer in the BX.25 Protocol", AT&T Bell Laboratories Technology (with B. Gopinath and R. Kurshan) (m3) "A Note on Effective Bandwidth", Institute of Computer Science, FORTH TR-036, 1992 (with J. Wal	
Curriculum Vitae, Costas A Courseubatis	