

## Brief CV

**Dr. Anargyros J. Roumeliotis** was born in Athens, Greece. He received the Diploma in Electrical and Computer Engineering from the National Technical University of Athens (NTUA), Greece, ranked in top 6.5%, in 2014, and the M.Sc. degree, with distinction (first of his class), in data science from the Athens University of Economics and Business, Greece, in 2020. His research interests include the optimization of performance and resource allocation of cognitive and device-to-device networks and high-throughput satellite networks and timeseries prediction using artificial intelligence. He has 20 publications in peer-reviewed international journals, conference proceedings and book chapters. Dr. Roumeliotis is a member of the Technical Chamber of Greece since 2015.

## List of Publications

Journals:

[J1] **Roumeliotis, A. J.**, Efrem, C. N. and Panagopoulos, A. D.: "Minimization of nth Order Rate Matching in Satellite Networks with One to Many Pairings," *Future Internet*. 2022; 14(10):286. <https://doi.org/10.3390/fi14100286>.

[J2] **Roumeliotis, A. J.**, Efrem, C. N., Kourogiorgas C. I. and Panagopoulos, A. D.: "Capacity Allocation Mechanisms in High-Throughput Satellite Systems: One-to-Many Pairings," in *IEEE Systems Journal*, doi: 10.1109/JSYST.2021.3128211.

[J3] **Roumeliotis, A. J.**, Efrem, C. N., Kourogiorgas, C. I. and Panagopoulos, A. D.: "Minimization of Losses and Rate Matching in Satellite Networks With One to Many Pairings," *IEEE Wireless Communications Letters*, vol. 10, no. 11, pp. 2455-2458, Nov. 2021, doi: 10.1109/LWC.2021.3103828.

[J4] **Roumeliotis, A. J.**, Kourogiorgas C. I. and Panagopoulos, A. D.: "An Optimized Simple Strategy for Capacity Allocation in Satellite Systems With Smart Gateway Diversity," *IEEE Systems Journal*, vol. 15, no. 3, pp. 4668-4674, Sept. 2021, doi: 10.1109/JSYST.2020.3016965.

[J5] **Roumeliotis, A. J.**, Kourogiorgas, C. I. and Panagopoulos, A. D.: "Optimal Dynamic Capacity Allocation for High Throughput Satellite Communications Systems", *IEEE Wireless Communications Letters*, vol. 8, pp. 596-599, April 2019.

[J6] **Roumeliotis, A. J.**, Kourogiorgas, C. I. and Panagopoulos, A. D.: "Optimal Capacity Allocation Strategies in Smart Gateway Satellite Systems", *IEEE Communications Letters*, vol. 23, pp. 56-59, Jan. 2019.

[J7] **Roumeliotis, A. J.**, Kourogiorgas, C. I., and Panagopoulos, A. D.: "Dynamic Capacity Allocation in Smart Gateway High Throughput Satellite Systems using Matching Theory", *IEEE Systems Journal*, vol. 99, pp. 1-9, July 2018.

[J8] **Roumeliotis, A. J.**, Vassaki, S. and Panagopoulos, A. D.: “QoS-driven power and time allocation scheme for spectrum leasing in overlay cognitive radio networks”, IET Communications, vol. 12, no. 6, pp. 688-695, April 2018.

[J9] **Roumeliotis, A. J.**, Sagkriotis, S. E., Papafragkakis, A. Z. and Panagopoulos, A. D.: “D2D Communication for Adaptive Streaming exploiting White Spaces in Transmissions of the Cellular Network”, IEEE Wireless Communications Letters, vol. 7, no. 1, pp. 58-61, Feb. 2018.

[J10] **Roumeliotis, A. J.**, Vassaki, S. and Panagopoulos, A. D.: “Joint Power and Time Allocation Scheme with QoS Constraints in Overlay Multi-user Cognitive Radio Networks”, Wireless Personal Communications, vol. 98, no. 1, pp. 337-362, Jan. 2018.

[J11] Sagkriotis, S. E., **Roumeliotis, A. J.**, Papafragkakis, A. Z. and Panagopoulos, A. D.: “The impact of the system state on energy-efficient transmission of multiple users' flows on the uplink”, Transactions on Emerging Telecommunications Technologies, vol. 8, no. 12, Dec. 2017.

#### Conferences:

[C1] Panagiotou, M., Zlatintsi, A., Filntisis, P. P., **Roumeliotis, A. J.**, Efthymiou, N., Maragos, P.: “A comparative study of autoencoder architectures for mental health analysis using wearable sensors data”, in 30th European Signal Processing Conference (EUSIPCO), 29 Aug. - 2 Sept., 2022, Belgrade, Serbia.

[C2] **Roumeliotis, A. J.**, Papafragkakis, A. Z., Kourogiorgas, C. I. and Panagopoulos, A. D.: “Cellular Networks Backhauling Through Satellite: Performance Evaluation Using Alphasat Site Diversity Experiment in Greece”, in 12th European Conference on Antennas and Propagation (EuCAP), 9-13 April, 2018, London, United Kingdom.

[C3] **Roumeliotis, A. J.**, Kourogiorgas, C. I., Kyrgiazos, A. and Panagopoulos, A. D.: “Flexible Capacity Allocation in Smart Gateway Diversity Satellite Systems using Matching Theory”, in 9th EAI International Conference on Wireless and Satellite Systems (WiSATS), 24-25 July, 2017, Oxford, Great Britain.

[C4] **Roumeliotis, A. J.** and Panagopoulos, A. D.: “QoS-Based Allocation Cooperative Mechanism for Spectrum Leasing in Overlay Cognitive Radio Networks”, in Proceedings of the 20th Pan-Hellenic Conference on Informatics (PCI'16), ACM, p. 49, 10-12 November, 2016, Patras, Greece.

[C5] **Roumeliotis, A. J.** and Panagopoulos, A. D.: “QoS-Driven Allocation Schemes in spectrum leasing cognitive radio networks”, in 11th International Conference on Communications, Electromagnetics and Medical Applications (CEMA'16), pp. 9-12, 13-15 October, Athens, Greece.

[C6] **Roumeliotis, A. J.**, Vassaki, S. and Panagopoulos, A. D.: “Time Allocation Mechanism with QoS Constraints in a Spectrum Leasing Environment”, in 23rd International Conference on Telecommunications (ICT), IEEE, pp. 1-5, 16-18 May, 2016, Thessaloniki, Greece.

[C7] **Roumeliotis, A. J.**, Vassaki, S. and Panagopoulos, A. D.: "Overlay cognitive radio networks: A distributed matching scheme for user pairing", in International Wireless Communications and Mobile Computing Conference (IWCMC), IEEE, pp. 172-177, 24-28 August, 2015, Dubrovnik, Croatia.

Book chapters:

[CH1] **Roumeliotis, A. J.** and Panagopoulos, A. D. «Device-to-device communications in 5G networks: Technical Challenges and Security Issues», In Advances in Communications and Media Research (Volume 12), pp. 57-100, Nova Science Publishers, 2017.

[CH2] **Roumeliotis, A. J.**, Poulakis, M. I., Vassaki, S. and Panagopoulos, A. D. «Radio Resources Management Optimization in Cognitive Radio Networks», In New Directions in Wireless Communications Systems: From Mobile to 5G, CRC Press, USA, 2017