Dimitra A. Zarbouti, Dr. –Ing.

PERSONAL INFORMATION

Date of birth:	29/06/1981
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Personal webpage:	http://users.uop.gr/~dzarb
Work address:	University of Peloponnese
	Department of Informatics and Telecommunications
	Wireless and Mobile Communications Lab
	Akadimaikou G. K. Vlachou Street
	GR-221 31 Tripoli, Greece
Qualifications Summary:	PhD, MEng, Electrical and Computer Engineer

EDUCATION

2021-today   Studies in the program "Master of Business Administration - NKUA MBA" of the National and Kapodistrian University of Athens

06/2009   **PhD, Electrical and Computer Engineer** (National Technical University of Athens)

Thesis title: "Radio resource management in OFDMA systems applying multiple element antennas at both the transmitter and/or receiver end"

09/2004   **Diploma (Integrated Master), Electrical and Computer Engineer** (National Technical University of Athens)

Telecommunications Division

Diploma thesis title: "Study and analysis of MIMO systems capacity"

GPA: 8.6/10

PROFESSIONAL CAREER

2010-today   Laboratory Teaching Staff at the Wireless and Mobile Communications Lab (Department of Informatics and Telecommunications, University of Peloponnese)

Responsibilities
- Teaching (courses, lab exercises, recitations, thesis supervision)
- Scientific activities (research, publications, projects)
- Administrative duties (member of administrative boards and committees)

2019-today   Research Associate at the Special Account for Research Fund (E.L.K.E.) of the University of Peloponnese participating in EU projects

2005-2015   Research Associate at the Special Account for Research Fund (E.L.K.E.) of the National Technical University of Athens participating in EU co-funded projects

2015   Teaching Associate at the Special Account for Research Fund (E.L.K.E.) of the Technological Educational Institute of Peloponnese

2004-2009   Research Associate of the Institute of Communications and Computer Systems (ICCS) of the National Technical University of Athens participating in national projects

PROJECTS

1. **H2020-EU (GA no. 820621), " Shaping consumer-inclusive data pathwaYs towards the eNERGy transItion, through a reference Energy data Space implementation (SYNERGIES)", Innovation action, Duration: 3.5 years (01/09/2022 - 28/02/2026), Budget: € 10.180.687,50**
2. **Programme «Peloponnisos 2014-2020», Observatory of electromagnetic fields emitted from 5G networks in the Region of Peloponnese (PANDORA), European Regional Development Fund (ERDF) and the Peloponnese Region. (Duration 01/05/2021-30/04/2023). Budget: € 400.000.**
3. **H2020-EU (GA no. 820621), "BIM-based holistic tools for Energy-driven Renovation of existing Residences (BIMERR)", Research and Innovation action, Duration: 3.5 years (01/01/2019 - 30/09/2022), Budget: € 6.933.320.**
   Role: Member of the research team of the University of Peloponnese
   Responsibilities
   - ✓ User requirements for BIMERR system (methodology, design of questionnaires)
   - ✓ Methodology for BIMERR evaluation

- ✓ Presentations, participation in meetings
- ✓ Deliverables, reports
- ✓ Supporting the administrative and financial management of project for university's E.L.K.E.

4. **H2020-EU (GA no 824386), "Integrated Modular Energy Systems and Local Flexibility Trading for Neural Energy Islands (MERLON)", Innovation action, Duration: 3 years (01/01/2019 - 31/12/2021), Budget: € 7.551.058,75.**
Role: Member of the research team of the University of Peloponnese
Responsibilities
- ✓ Research on EV technology
- ✓ Leading junior researchers
- ✓ Presentations, participation in meetings
- ✓ Deliverables, reports
- ✓ Supporting the administrative and financial management of project for university's E.L.K.E.

5. **GR/EU-PEGA (MIS 505700), "Wireless Broadband and Optical Networks, Information Systems and Control Systems in the framework of the Agricultural Activities of the Prefecture of Peloponnese", Education Project co-financed by the E.U. and Greek national funds, Duration: 5 months.**
Role: External teaching associate of the Technological Educational Institute of Peloponnese
Responsibilities
- ✓ Designing lab exercises
- ✓ Training students to use standard laboratory equipment

6. **GR/EU-THALIS-NTUA (MIS 379489), "Novel Transmit and Design Techniques for Broadband Wireless Networks (INTENTION)", Research Project co-financed by E.U. and Greek national funds, Duration: 45 months (03/2012 - 11/2015), Budget: € 512.000.**
Role: Member of the research team of the University of Peloponnese
Responsibilities
- ✓ Research on 4G systems
- ✓ Implementing technical solutions by designing simulation environments
- ✓ Participating in technical meetings
- ✓ Writing/editing technical deliverables
- ✓ Administrative duties

7. **PENED2003, "Study of smart antennas systems applied at both the transmitter and receiver ends", Research Project co-financed by E.U. – European Social Funds and by the Greek Ministry of Development General Secretariat for Research and Technology, Duration: 36 months (11/2005 – 06/2009), Budget: € 225.456.**
Role: PhD candidate at the National Technical University of Athens
Responsibilities:
- ✓ Study and analysis of PHY layer techniques for OFDM/OFDMA systems
- ✓ Development of simulation platform (MATLAB) for evaluating the performance of multicellular OFDMA system
- ✓ Writing/editing articles for research results publication
- ✓ Writing/editing deliverables for the General Secretariat for Research and Technology
- ✓ Submitting PhD thesis

8. **"Technical support to the Greek Ministry of Transport and Communications for the project of DVB-T network planning", Consulting Project, Duration: 14 months (12/2004 – 03/2006), Budget: € 182.360.**
Role: External research associate of the Institute of Communications and Computer Systems (ICCS)
Responsibilities:
- ✓ Planning the Greek DVB-T network.
- ✓ Designing the Greek DVB-T frequency plan in order to be officially submitted to the International Telecommunication Union (ITU).
- ✓ Participation in ITU meetings.
- ✓ Writing/editing of deliverables and technical reports for the Greek Ministry of Transport and Communications.

9. **"Technical support to the Greek Ministry of Transport and Communications for the project of DVB-T plan coordination with the DVB-T plans of neighboring ITU Member States", Consulting Project, Duration: 18 months (05/2005 – 12/2006), Budget: € 177.310.**
Role: External research associate of the Institute of Communications and Computer Systems (ICCS)

Responsibilities:

- ✓ Participation in bilateral/multilateral meetings (Bulgaria, Italy, Albania, F.Y.R.O.M., Turkey) as a technical consultant of the Greek Ministry of Transport and Communications. During these coordination meetings negotiations took place and intergovernmental Agreements were signed concerning the usage of spectrum.
- ✓ Checking/analyzing the ITU official documents that concerned the proper coordination procedures among neighboring countries.
- ✓ Member of the Greek delegation with responsibilities:
    - ▪ Participation in the RPG (Regulatory/Procedural Group) meetings held in Geneva by ITU. These meetings concerned all Member States (part of Region 1 and Region 3) of ITU and they provided the Administrations with regular updates on the official procedures that they should follow in order to establish their DVB-T plan in accordance with ITU regulations.
    - ▪ Participation in the second Regional Radiocommunication Conference (RRC 06) held in Geneva, 22 May- 16 June. The Conference ended with the GE06 Agreement, which was signed by all the participating Member States. The Greek DVB-T plan is defined in the Annex of this Agreement.
- ✓ Writing/editing of deliverables and technical reports to the Greek Ministry of Transport and Communications.

10. **"Technical support to the Greek Ministry of Transport and Communications for planning the transition strategy from analogue TV broadcasting to DVB-T", Consulting Project, Duration: 14 months (09/2005 – 12/2006), Budget: € 158.270.**
    Role: External research associate of the Institute of Communications and Computer Systems (ICCS)
    Responsibilities:
    - ✓ Study and analysis of the digital TV transition problem taking under consideration the current status and the particularities of the Greek analogue TV network.
    - ✓ Liaising with the official Greek authorities (National Council for Radio and Television, Hellenic Telecommunications & Post Commission, Hellenic Broadcasting Corporation) for the Greek DVB-T plan progress and the necessary actions that must be taken during the transition period. The final goal of this effort was the consensus between the aforementioned parties with respect to the transition strategy that should be followed.
    - ✓ Proposing a realistic transition plan to the supervising division of Ministry of Transport and Communications.
    - ✓ Writing/editing of deliverables and technical reports to Ministry of Transport and Communications.

11. **"Measurements and Evaluation of Electromagnetic Fields in the prefecture of Arta", Technical/Scientific Project, Duration: 3 months (02/2008 – 05/2008), Budget: € 50.000**
    Role: External research associate of the Institute of Communications and Computer Systems (ICCS)
    Responsibilities:
    - ✓ EM field measurements (RF).
    - ✓ Results evaluation and comparison with the legislated exposure limits.
    - ✓ Writing/editing of deliverables and technical reports to Arta Prefecture.

12. **"Measurements and Evaluation of Electromagnetic Fields in the prefecture of Lefkada", Technical/Scientific Project, Duration: 3 months (11/2007 – 02/2008), Budget: € 50.000.**
    Role: External research associate of the Institute of Communications and Computer Systems (ICCS)
    Responsibilities:
    - ✓ EM field measurements (RF).
    - ✓ Results evaluation and comparison with the legislated exposure limits.
    - ✓ Writing/editing of deliverables and technical reports to Lefkada Prefecture.

ADMINISTRATIVE DUTIES

11/2022-today	Member of the Assembly of the Department of Informatics and Telecommunications of the University of Peloponnese as elected representative of the Laboratory Teaching Staff of the department
04/2022-today	Department Representative at the Committee on Gender and Equality Issues of the University of Peloponnese
2017-2021	Member of the Faculty of Economics, Management and Informatics of the University of Peloponnese (elected representative of the Laboratory Teaching Staff)
2014-2016	Member of the Quality Assurance Unit of the University of Peloponnese as a representative of the Laboratory Teaching Staff of the University of Peloponnese
2012-2014	Member of the University Senate (elected representative of the Laboratory Teaching Staff of the University of Peloponnese)

09/2013-02/2014	Member of the Assembly of the Department of Informatics and Telecommunications of the University of Peloponnese as elected representative of the Laboratory Teaching Staff of the department
2014-today	Member of several committees for

- Procurements (services and/or equipment)
- Evaluation of job candidates

TEACHING

COURSES

2017-today	Telecommunication System Measurements (6th semester undergraduate course, Dept. of Informatics and Telecommunications)
2016-today	Principles of Telecommunication Systems (4th semester undergraduate course, Dept. of Informatics and Telecommunications)
2014-2019	Modern Cellular Communication Systems (7th semester undergraduate course, Dept. of Informatics and Telecommunications)
2010-2011	Electromagnetic Fields (3rd semester undergraduate course, Dept. of Telecommunications Science and Technology)
2010-2011	Communications I (4th semester undergraduate course, Dept. of Telecommunications Science and Technology)

RECITATIONS

2014-today	Electromagnetic Fields (3rd semester undergraduate course, Dept. of Informatics and Telecommunications)
2014-today	Wireless and Mobile Communications I (5th semester undergraduate course, Dept. of Informatics and Telecommunications)
2017-2018	Physics (1st semester undergraduate course, Dept. of Informatics and Telecommunications)
2017-2019	Principles of Telecommunication Systems (4th semester undergraduate course, Dept. of Informatics and Telecommunications)

LABORATORY COURSES

2010-today	Wireless Links (6th semester undergraduate course, Dept. of Informatics and Telecommunications)
2018-today	Wireless Communications (2nd semester postgraduate course, MSc Modern Wireless Communications, Dept. of Informatics and Telecommunications)
2010-2018	Wireless and Mobile Communications (2nd semester postgraduate course, MSc Advanced Telecommunications Systems and Networks, Dept. of Informatics and Telecommunications)
2014-2017	Principles of Telecommunication Systems (2nd semester undergraduate course, Dept. of Informatics and Telecommunications)
2015-2016 **2013-2014**	Programming II (2nd semester undergraduate course, Dept. of Informatics and Telecommunications)
2010-2019	Antenna Theory (5th semester undergraduate course, Dept. of Informatics and Telecommunications)

SUPERVISED THESES

in progress	Stavros Stamoulakatos. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese. Title: 5G and health concerns; the perspective of the Greek media

2022   Manesiotis Athanasios. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: 6G Wireless Networks

2018   Matsangos Pavlos. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Backhaul and UAVs management within the 5G ecosystem

2016   Kinigopoulou Catherine. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Carrier Aggregation for 4G Systems

2016   Banushi Sabina. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Received power at a UAV flying above a multicellular ground network: a simulation study

CO-SUPERVISED THESES

2020   Orfanos Spyridon. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Educational tools for teaching cellular systems

2019   Panagopoulos Thanassis. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese
Title: Brain-to-brain communications

2017   Chorianopoulos Panagiotis. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Mobile application for UAV control through cellular networks

2016   Stratidakis Georgios. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese
Title: Optimal location of LTE relay nodes

2015   Papageorgiou Vasilis. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese
Title: Received power coverage of 5G systems operating at 28 and 38 GHz

2014   Anastasopoulos Andreas. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Energy efficiency analysis of 4G networks with MIMO nodes

2014   Ksirogiannis Ilias. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Power consumption in single-cell LTE systems with relays

2014   Tzogka Elina. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Received power coverage in LTE systems

2013   Kouloumpinis Konstantinos. Undergraduate Thesis. Department of Informatics and Telecommunications, University of Peloponnese.
Title: Dimensioning phase of an LTE network

PUBLICATIONS

Journals

J1.   **Dimitra Zarbouti**, Elisavet Koutsi, Georgia Athanasiadou, George Tsoulos, "Minimizing the Cost of PHEV Usage with Price Sensitive Charging Strategies," *Electricity*, vol. 2, no. 4, pp. 459-470, Oct. 2021 [Online] Available: http://dx.doi.org/10.3390/electricity2040027

J2.   E. Koutsi, S. Deligiannis, G. Athanasiadou, **D. Zarbouti** and G. Tsoulos, "Analysis of EV Cost-Based Charging Load Profiles," in *MDPI Proceedings*, 65 (1), 2020, ISSN: 2504-3900. https://doi.org/10.3390/proceedings2020065002

J3.   G. Athanasiadou, P. Fytampanis, **D. Zarbouti**, G. Tsoulos, P. Gkonis and D. Kaklamani, "Radio Network Planning towards 5G mmWave Standalone Small-Cell Architectures", *Electronics*, vol. 9, no. 2, p. 339, 2020. Available: 10.3390/electronics9020339.

J4.   S. K. Goudos, G. V. Tsoulos, G. Athanasiadou, M. Batistatos, **D. Zarbouti** and K. E. Psannis, "Artificial Neural Network Optimal Modelling and Optimization of UAV Measurements for Mobile Communications Using the L-SHADE Algorithm," in *IEEE Transactions on Antennas and Propagation*, doi: 10.1109/TAP.2019.2905665

J5. G. Athanasiadou, G. Tsoulos, **D. Zarbouti** and I. Valavanis, "Optimizing Radio Network Planning Evolution Towards Microcellular Systems", *Wireless Personal Communications*, vol. 106, no. 2, pp. 521-534, 2019. Available: 10.1007/s11277-019-06177-5.

J6. G. E. Athanasiadou, M. C. Batistatos, **D. A. Zarbouti** and G. V. Tsoulos, "LTE Ground-to-Air Field Measurements in the Context of Flying Relays," in *IEEE Wireless Communications*, vol. 26, no. 1, pp. 12-17, February 2019. doi: 10.1109/MWC.2018.1800225.

J7. **D. Zarbouti**, G. Tsoulos, and G. Athanasiadou, "Effective radiation pattern concept for wireless systems analysis,"in *Electronics Letters*, vol. 53, no. 16, pp. 1160-1162, 2017, doi: 10.1049/el.2017.1368.

J8. G. Tsoulos, Ö. Bulakci, **D. Zarbouti**, G. Athanasiadou, and A. Kaloxylos, "Dynamic wireless network shaping via moving cells: The nomadic nodes case," *Trans. Emerg. Telecommun. Technol*., p. e3145, 2017, DOI:10.1002/ett.3145.

J9. **D. Zarbouti**, G. Tsoulos, G. Athanasiadou, Effects of antenna array characteristics on in-band full-duplex relays for broadband cellular communications, *ICT Express*, Volume 1, Issue 3, December 2015, Pages 121-126, ISSN 2405-9595. http://dx.doi.org/10.1016/j.icte.2015.11.002.

J10. **D. Zarbouti**, G. Tsoulos, G. Athanasiadou, and C. Valagiannopoulos, "The Effective Radiation Pattern Concept for Realistic Performance Estimation of LTE Wireless Systems," *International Journal of Antennas and Propagation*, vol. 2013, Article ID 746831, 8 pages, 2013. doi:10.1155/2013/746831

J11. **D. Zarbouti**, D.Tsilimantos, G.V.Tsoulos, G.Athanasiadou, and D.Kaklamani, "Performance of OFDMA multicell systems with Opportunistic Beamforming", Springer, *Wireless Personal Communications Journal*, 2011. doi: 10.1007/s11277-011-0315-6

J12. D. Tsilimantos, **D. Zarbouti**, G. Tsoulos, G. Athanasiadou, and D. Kaklamani, "Fairness and throughput trade-off analysis for UMTS WCDMA network planning", Springer *Journal of Wireless Personal Communications*, October 2009. [Online] Available: http://dx.doi.org/10.1007/s11277-009-9840-y

J13. D. A. Kateros, **D. A. Zarbouti**, D. C. Tsilimantos, C. I. Katsigiannis, P. K. Gkonis, I. E. Foukarakis, D. I. Kaklamani and I. S. Venieris, "DVB-T network planning: A case study for Greece," *IEEE Antennas & Propagation Magazine*, vol. 51, no. 1, pp. 91-101, Feb 2009.

J14. **D. Zarbouti**, I. Stiakogiannakis, G. Tsoulos, G. Athanasiadou and D. Kaklamani, "OFDMA techniques in multicellular networks with total frequency reuse," *Computer Communications* (Elsevier), vol. 32, pp. 522-530, Feb 2009.

J15. **D. Zarbouti**, G. Tsoulos and D. Kaklamani, "Impact of Fading Correlation and Calibration Distortion on MIMO Capacity Performance", WSEAS *Transactions on Communications*, vol.4, pp. 1040-1047, July 2005.

Book Chapters

B1. G. V. Tsoulos, G. E. Athanasiadou, D. A. Zarbouti, and I. K. Valavanis, "RF Planning for next generation systems," in New Directions in Wireless Communications Systems: From Mobile to 5G, A. Kanatas, K. Nikita, and P. (Takis) Mathiopoulos, Eds. CRC Press, 2017

B2. **D. Zarbouti**, G.V.Tsoulos, D.Kaklamani, "Theory and practice of MIMO wireless communication systems", Chapter 2 in MIMO System Technology for Wireless Communications, Ed. G.V. Tsoulos, pp. 29-56, CRC Press, 2006, ISBN: 9780849341908. (invited)

B3. **D. A. Zarbouti**, D. A. Kateros, D. I. Kaklamani and G.N. Prezerakos, "Antenna diversity schemes suitable for Orthogonal Frequency Division Multiplexing (OFDM) based standards", Chapter 12 in Handbook of Mobile Broadcasting: DVB-H, DMB, ISDB-T and MediaFLO, Eds. Borko Furht and Syed Ahson, pp. 319-339, CRC Press, 2008, ISBN: 9781420053869. (invited)

B4. **D. A. Zarbouti**, D. A. Kateros, D. I. Kaklamani and G. N. Prezerakos, "Overview of transmit diversity techniques for multiple antenna systems", Chapter 31 in Digital Signal Processing Handbook 2nd Edition, Wireless, Networking, Radar, Sensor Array Processing, and Nonlinear Signal Processing, Ed. Vijay Madisetti, pp. 31(1-19), CRC Press, 2009, ISBN: 9781420046045. (invited)

Conferences

C1. E. Koutsi, S. Deligiannis, G. Athanasiadou, **D. Zarbouti**, G. Tsoulos, "Analysis of Electric Vehicle (EV) cost-based charging load profiles. *Sustainable Places 2020 (SP2020)*, https://www.sustainableplaces.eu/, Digital Event, 2020

C2. S. Deligiannis, E. Koutsi, G. Athanasiadou, **D. Zarbouti** and G. Tsoulos, "Forecasting Electric Energy Demand for V2G and G2V Systems Under Different Charging Profiles", in *7th International Conference on Energy, Sustainability and Climate Change (ESCC 2020)*, Skiathos, Greece, 2020.

C3. E. Koutsi, S. Deligiannis, I. Sarantopoulos, D. Zarbouti, G. Athanasiadou, G. Tsoulos, "Radiation measurements in office environment with Wi-Fi, 3G and 4G users," *International Conference on Modern Circuits and Systems Technologies* (*MOCAST*), Thessaloniki, Greece, 13-15 May 2019.

C4. M. Batistatos, G. Tsoulos, **D. Zarbouti**, G. Athanasiadou and S. Goudos, " LTE Measurements for Flying Relays," *International Conference on Modern Circuits and Systems Technologies (MOCAST)*, Thessaloniki, Greece, 7-9 May, 2018.

C5. M. C. Batistatos, G. E. Athanasiadou, **D. A. Zarbouti**, G. V. Tsoulos, N. C. Sagias, "LTE Ground-to-Air Measurements for UAV-assisted cellular networks," in 12th European Conference on Antennas and Propagation (EuCAP 2018), London, UK, 9-13 April 2018.

C6. G.V. Tsoulos, Ömer Bulakci, **Dimitra Zarbouti**, G. E. Athanasiadou, A. Kaloxylos, "Performance of Vehicular Nomadic Node Operation in Realistic Multicellular Wireless Networks," in IEEE 85th Vehicular Technology Conference, Sydney, Australia, 4-7 June 2017.

C7. G. N. Solidakis, F. M. Tsokas, M. C. Batistatos, N. C. Sagias, G. V. Tsoulos, **D. A. Zarbouti**, G. E. Athanasiadou, "An Arduino-Based Subsystem for Controlling UAVs Through GSM," International Conference on Modern Circuits and Systems Technologies (MOCAST), Thessaloniki, Greece, 4-6 May, 2017.

C8. G. V. Tsoulos, G. E. Athanasiadou, I. K. Valavanis, and **D. A. Zarbouti**, "Green 4g Radio Network Planning," in 11th European Conference on Antennas and Propagation (EuCAP 2017), Paris, France, 19-24 March 2017.

C9. P. Fytampanis, G. V. Tsoulos, G.E. Athanasiadou, **D. A. Zarbouti**, "Wireless Channel Capacity Estimation in the THz Band," in International Workshop on Antenna Technology (iWAT), Athens, Greece, 1-3 March, 2017

C10. I. K. Valavanis, **D. Zarbouti**, G. E. Athanasiadou and G. V. Tsoulos, "Base-station Antenna Pattern Reconfiguration for LTE Heterogeneous Network Planning Optimization", in 10th European Conference on Antennas and Propagation (EuCAP 2016), Davos, Switzerland, 10-15 April 2016.

C11. M. C. Batistatos, **D. Zarbouti**, G. V. Tsoulos and G. E. Athanasiadou, "Flying Relays for 4G Service-on-Demand Applications", in 10th European Conference on Antennas and Propagation (EuCAP 2016), Davos, Switzerland, 10-15 April 2016.

C12. I. K. Valavanis, G. E. Athanasiadou, **D. Zarbouti**, and G. V. Tsoulos, "Multi-Objective Optimization for Base-Station Location in Mixed-Cell LTE Networks", in 10th European Conference on Antennas and Propagation (EuCAP 2016), Davos, Switzerland, 10-15 April 2016.

C13. I. K. Valavanis, **D. Zarbouti**, G. E. Athanasiadou and G. V. Tsoulos, "Basestation antenna pattern reconfiguration for minimum transmit power network planning," Green Communications (OnlineGreenComm), 2015 IEEE Online Conference on, Piscataway, NJ, 2015, pp. 66-71.

C14. G. Athanasiadou, G.Tsoulos, **D. Zarbouti**, "Base-station positioning for heterogeneous systems with coverage, capacity and cost criteria", in Networks and Communications (EuCNC), 2015 European Conference on, pp.91-96, June 29-July 2, 2015.

C15. **D. Zarbouti**, G. Tsoulos, G. Athanasiadou, " 4G Multicell Systems with In-Band Full Duplex Relays: Using Beamforming to Lower Self-Interference and/or Transmitted Powers", in Vehicular Technology Conference (VTC Spring), 2015 IEEE 81st , p.1-6, 11-14 May 2015.

C16. **D. Zarbouti**, G. Tsoulos, G. Athanasiadou, " The effects of antenna array size and back lobe level on self-interference and transmitted powers of 4g beamforming multicell systems with in-band full duplex relays", 9th European Conference on Antennas and Propagation (EuCAP 2015), Lisbon, Portugal, 12-17 April 2015. (*Finalist for Best Paper Award*)

C17. G.Athanasiadou, G.Tsoulos, **D. Zarbouti**, " A combinatorial algorithm for Base station location optimization for LTE mixed cell MIMO", 9th European Conference on Antennas and Propagation (EuCAP 2015), Lisbon, Portugal, 12-17 April 2015.

C18. I.K. Valavanis, G.E. Athanasiadou, **D. Zarbouti**, G.V. Tsoulos, "Base-Station Location Optimization for LTE Systems with Genetic Algorithms," 20th European Wireless Conference, Barcelona, Spain, 14-16 May 2014.

C19. G.E. Athanasiadou, **D. Zarbouti**, G.V. Tsoulos, "Automatic Location of Base-Stations for Optimum Coverage and Capacity Planning of LTE Systems", 8th European Conference on Antennas and Propagation (EuCAP 2014), Hague, The Netherlands, 6-11 Apr. 2014.

C20. **D.A. Zarbouti**, G.V. Tsoulos, G.E. Athanasiadou, "Theoretic SIR for Multicarrier MISO Beamforming Cellular Systems," Antennas and Propagation (EuCAP), 2013 7th European Conference on, Goteburg, Sweden, 8-11 Apr. 2013.

C21. **D.A. Zarbouti,** D. C. Tsilimantos, G. V. Tsoulos, G. E. Athanasiadou, D. I. Kaklamani, D.I.; , "OFDMA multicell systems with opportunistic beamforming," *Personal Indoor and Mobile Radio Communications (PIMRC), 2010 IEEE 21st International Symposium on* , Istanbul, Turkey, 26-30 Sept. 2010, pp.1407-1412. doi: 10.1109/PIMRC.2010.5671996s.

C22. **D.A. Zarbouti**, D.I. Kaklamani, G.V. Tsoulos, G.E. Athanasiadou, "Opportunistic Beamforming in OFDMA Systems", Informatics (PCI), 2010 14th Panhellenic Conference on, Tripoli, Greece, 10-12 Sept. 2010, pp.93-98. doi: 10.1109/PCI.2010.24

C23. **D. Zarbouti**, I. Stiakogiannakis, G. Tsoulos, G. Athanasiadou and D. Kaklamani, "Performance Evaluation of OFDMA Techniques in Multicellular Networks", Proceedings of the 19th IEEE Annual International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC 2008), Cannes, France, 15-18 September 2008, pp.1-5.

C24. I. Stiakogiannakis, **D. Zarbouti**, G. Tsoulos and D. Kaklamani, "Subcarrier Allocation Algorithms for multicellular OFDMA networks without Channel State Information", Proceedings of the IEEE International Symposium on Wireless Pervasive Computing (ISWPC08), Santorini, Greece, 7-9 May 2008, pp.73-77.

C25. **D. Zarbouti**, G. Tsoulos and D. I. Kaklamani, "Performance Evaluation of OFDMA RRM Algorithms with Total Spectrum Reuse", CD-Rom Proceedings of the 2nd European Conference on Antennas and Propagation (EuCAP 2007), Edinburgh, UK, 11-16 November 2007 (5 pages).

C26. **D. Zarbouti**, G. Tsoulos and D. I. Kaklamani, "Performance Evaluation of OFDMA RRM Algorithms with Spectrum Reuse 1", Proceedings of the 10th European Conference on Wireless Technology (ECWT 2007), European Microwave Week 2007 (EuMW 2007), Munich, Germany, 8-10 October 2007, pp. 205-208

C27. **D. Zarbouti**, G. Tsoulos and D. I. Kaklamani, "Correlation and calibration effects on MIMO capacity performance", Proceedings of the 9th WSEAS International Conference on Communications, Athens, Greece, 14-16 July 2005.

C28. **D. Zarbouti**, G. Tsoulos and D. I. Kaklamani, "Performance of Multiple Input Multiple Output (MIMO) Wireless Systems", Proceedings of the 26th Symposium on Information Theory, Benelux, Belgium, 19-20 May 2005, pp. 73-80.

Greek Magazines/Conferences

G1. E. Koutsi, S. Deligiannis, **D. Zarbouti**, I. Sarantopoulos, G. Athanasiadou, G. Tsoulos, "Indoor EM mearurements",Pelopas – Interdisciplinary Journal of the University of Peloponnese, vol. 4, issue 1, pp. 18-24, June 2020, ISSN: 2529-1831. (*in greek*)

G2. P. Koutsandrias, G. Tsoulos, G. Athanasiadou, D. Zarbouti, N.Sagias, "NANOSATELLITES", Pelopas – Interdisciplinary Journal of the University of Peloponnese, vol. 2, no. 2, pag. 7, Dec. 2018, ISSN: 2529-1831

G3. M. Batistatos, G. Tsoulos, N. Sagias, **D. Zarbouti**, G. Athanasiadou, P. Matsangos, «Overview of UAV applications », Interdisciplinary Journal of the University of Peloponnese, vol. 1, issue 2, pp. 139-158, July-December 2017, ISSN: 2529-1831. (*in greek*)

G4. G. Tsoulos, G. Athanasiadou, **D. Zarbouti**, I. Valavanis, «RF Planning of 4G networks with low transmit power», Interdisciplinary Journal of the University of Peloponnese, vol. 1, issue 1, January - June 2017, pp. 62-74, ISSN 2529-1831. (*in greek*)

G5. **D. Zarbouti**, G. Tsoulos and D. Kaklamani, «Study on MIMO systems for modern wireless communications», Δελτίο ΠΣΔΗΜΥ, issue 384, February 2006, pp. 50-55. (*in greek*)

G6. **D. Zarbouti**, G. Tsoulos and D. Kaklamani, «Study on MIMO systems for modern wireless communications», 1st ΠΣΔΗΜΥ conference, April 2005. (*In greek*)

SOFTWARE TOOLS

Computational Tools:	MATLAB, Octave, Mathematica
Radio Network Planning Tools*:*	CS Telecom nG (ATDI company), EDX SignalPro (EDX Wireless company)
Collaboration:	Confluence, Asana
Office Tools:	MS Office (Word, Excel, Access, PowerPoint, Visio), LibreOffice.org, Latex

LANGUAGES

Greek (native)

English (Certification of Proficiency in English, University of Cambridge)

French (Diplôme d' études en langue française(DELF), 2nd Degré)

CERTIFICATES

Machine Learning with MATLAB, Jan-2021, MathWorks - Training Services, Self-Paced Course

MEMBERSHIPS

2007-2015	IEEE Member, Member No: 90261769
2005-present	TCC Member (Technical Chamber of Greece), Member No: 103486