CURRICULUM VITAE

PERSONAL DATA

Name:	**Eleftherios KOFIDIS**
Date and place of birth:	September 6, 1967, in Trikala, Greece
Current position:	Associate Professor, University of Piraeus, Greece
Home address:	45, Neorion str., GR-185 33 Piraeus, Greece
Work address:	Dept. of Statistics and Insurance Science, University of Piraeus, 80, Karaoli & Dimitriou str., GR-185 34 Piraeus, Greece
Phone (mobile):	(+30) 6948230498
Phone at work:	(+30) 210 414 2475
E-mail:	kofidis@unipi.gr kofidis@webmail.unipi.gr
Home page:	https://www.unipi.gr/unipi/en/kofidis.html
Marital status:	Single
Military service:	Completed

EDUCATION

Ph.D. in Signal and Image Processing (with honors)
Computer Engineering and Informatics Dept. (*CEID*), School of Engineering, University of Patras, Patras, Greece.
1996

Diploma (*MEng.)* in computer engineering (with honors)
Computer Engineering and Informatics Dept. (*CEID*), School of Engineering, University of Patras, Patras, Greece.
1990

Language skills:
English (fluent)
French (very good)

PREVIOUS POSITIONS AND MOBILITY

1. EMPLOYMENTS

- Associate Professor at the Dept. of Statistics and Insurance Science, University of Piraeus, Greece (*UNIPI*) (**2018 - present**)
- Assistant Professor (**tenured** since **2013**) (**2010 – 2018**) in the same department
- Lecturer in the same department (**2004-2010**)
- Affiliate researcher, Computer Technology Institute and Press “Diophantus” (CTI), Greece (http://www.cti.gr/en/activities-en/research-en/ru8) (**2001 -**)

- Adjunct Professor, Dept. of Communications Science and Technology, University of Peloponnese, Greece (*UoP*) (**2002-3** and **2003-4**)

- Adjunct Professor, Dept. of Digital Systems, University of Piraeus (*UNIPI*) (**2001-2** and part-time for the fall semester of **2002-3**)

- Marie-Curie research fellow, Institut National des Télécommunications (INT, now Télécom Sud Paris) (**1998-2000**)

- Affiliate researcher, University of Athens, Greece (**1998, 2000-2001, 2004-2006, 2005-2008**)

- Consulting to INTRACOM S.A., Greece, for the design of an efficient IIR transmultiplexing system (**1996**)

- Analyst/programmer (graphics department) and system administrator at the development lab of the Command, Control, and Intelligence System (C^2I), Hellenic Army Headquarters (**1997**)

- Teaching and Research Assistant, Computer Engineering and Informatics Dept. (*CEID*), School of Engineering, University of Patras, Patras, Greece (**1991-1996**)

2. INTERNATIONAL MOBILITY

Visiting the :

- Institut de Recherche en Informatique de Toulouse (IRIT), Toulouse, France (**Jan. 2023**).
- Center of Innovation in Telecommunications and Integration of service (CITI), Lyon, France (**Jan. 2023**).
- Institute for Big Data Analytics, Dept. Computer Science, Dalhousie University, Halifax, NS, Canada, for research collaboration (**Feb. 2020**) (http://www.master-project-h2020.eu/secondment-of-prof-kofidis-uprc-at-dalhousie-university/)
- Catholic University of Leuven (KU Leuven), Belgium, for research collaboration (**Jan. 2016** (Leuven), **Sep. 2016** (Kortrijk)).
- Institut d' Électronique et de Télécommunications de Rennes (IETR), CentraleSupélec, Rennes, France, for lecture and research collaboration (**Aug. 2015, Jul. 2016)**
- Centre Tecnòlogic de Telecomunications de Catalunya (CTTC), Spain, for research collaboration (sabbatical leave) and lecture (**Jun.-Jul. 2013**)
- Universidade da Coruña, Spain, for participation in the COMONSENS project meeting and lecture (**Jul. 2010**)
- Institute for Digital Communications, University of Edinburgh, UK, for lecture and research collaboration (**Jul. 2008**)
- Wireless Research Lab, Bell Labs, Lucent Technologies, Holmdel, NJ, for collaboration within the COMPETITIVENESS programme (**Jul.-Aug. 2005**)
- Postdoctoral research fellow, Dépt. Signal et Image, Institut National des Télécommunications (INT, now TélécomSud Paris), funded by the Training and Mobility of Researchers (TMR) Programme (Marie Curie Individual Research Fellowship) (**1998-2000**)

PROFESSIONAL ACTIVITIES

1. EDITORIAL WORK

- Co-editor (jointly with M. Renfors, X. Mestre, and F. Bader) of the book *Orthogonal Waveforms and Filter Banks for Future Communication Systems*, Academic Press, 2017
- Associate editor in the *IEEE Transactions on Signal Processing* (2015 - 2018)
- Associate editor in the *IET Signal Processing* journal (2013 - 2015)
- Associate editor in the *EURASIP Journal on Advances in Signal Processing* (Springer) (2012 - 2016)
  - Lead guest editor of a special issue on "Advances in flexible multicarrier waveforms for future wireless communications systems" (2013-2014) (https://si.eurasip.org/issues/2/advances-in-flexible-multicarrier-waveforms-for/)
- Guest editor in the special section on High-Dimensional Signal Processing of the Journal of Systems Engineering and Electronics (https://www.jseepub.com/EN/news/news180.shtml)
- Guest editor in three special sections of *IEICE Transactions on Communications* about "European ICT R&D Project Activities on Broadband Access Technologies"

2. EXPERT AND REVIEWER TASKS

- Reviewer in *IEEE Transactions on Signal Processing* (with Editor's appreciation).
- Reviewer in the following journals:
  1. *Journal of Machine Learning Research*
  2. *SIAM Journal on Matrix Analysis and Applications*
  3. *IEEE Transactions on Biomedical Engineering*
  4. *IEEE Transactions on Circuits and Systems*
  5. *IEEE Open Journal of the Communications Society*
  6. *IEEE Transactions on Communications*
  7. *IEEE Transactions on Mobile Computing*
  8. *IEEE Transactions on Neural Networks and Learning Systems*
  9. *IEEE Transactions on Vehicular Technology*
  10. *IEEE Transactions on Wireless Communications*
  11. *IEEE Transactions on Signal and Information Processing*
  12. *IEEE Signal Processing Letters*
  13. *IEEE Journal on Selected Areas in Communications*
  14. *IEEE Journal of Oceanic Engineering*
  15. *Proceedings of the IEEE*
  16. *IEEE Access*
  17. *IEEE Computing in Science and Engineering*
  18. *Frontiers in Neuroscience*
  19. *Patterns*
  20. *Multidimensional Systems and Signal Processing*
  21. *Medical Image Analysis*
  22. *Computational Medical Imaging and Graphics*
  23. *EURASIP Journal on Advances in Signal Processing*
  24. *Signal Processing*
  25. *Signal Processing: Image Communication*
  26. *EURASIP Journal on Wireless Communications and Networking*
  27. *AEÜ International Journal of Electronics and Communications*
  28. *Computer Speech and Language*
  29. *Research Letters in Signal Processing*
  30. *Digital Signal Processing*
  31. *Biomedical Signal Processing and Control*
  32. *Transactions on Emerging Telecommunications Technologies*

33. *IET Signal Processing*
34. *Microwave and Optical Technology Letters*
35. *International Journal of Signal and Imaging Systems Engineering*
36. *IET Electronics Letters*
37. *Physical Communication*
38. *China Communications*
39. *Information (Section on Information and Communications Technology)*
40. *Sensors*
41. *Scientific Research Publishing*

and in the past

42. *Knowledge and Information Systems*
43. *Optimization Letters*
44. *International Journal of Adaptive Control and Signal Processing*
45. *IEEE Transactions on Information Technology in Biomedicine*
46. *IEE Proceedings – Visual Communications and Signal Processing*
47. *Ultrasonic Imaging*.

- Reviewer in the conferences: *EUSIPCO*, *ICASSP*, *ICC, ISIT, CAMSAP, GlobalSIP, WCNC, ISCAS*, *SPARS*, *MLSP, LVA/ICA*, *SSP, SPAWC*, *IMTC*, *DSP*, *IST Mobile & Wireless Communications Summit, GLOBECOM, SiPS, ISSPIT*, *PIMRC*, *CIP, VTC*, *ISCC*, *IJCNN*, *ISIEA*, *ISWCS*, *SSCI*, *SIGMAP*, etc.
- Proofreading of
  - N. Kalouptsidis, *Signal Processing Systems: Theory and Design*, Wiley Interscience, 1997

  and parts of the books:
  - N. Kalouptsidis and S. Theodoridis (Eds.), *Adaptive System Identification and Signal Processing Algorithms*, Prentice-Hall, 1993.
  - S. Theodoridis and K. Koutroumbas, *Pattern Recognition*, Academic Press, 1999 (2nd edition, 2003, 3rd edition, 2006, 4th edition, 2008).
  - S. Theodoridis, *Machine Learning: A Bayesian and Optimization Approach*, Academic Press, 2015.
- Reviewer of
  - P. Symeonidis, "Matrix and tensor factorization with recommender system applications" in *Graph-Based Social Media Analysis*, I. Pitas (ed.), CRC Press, 2015.
  - S. Ma *et al.*, "Tensor models: Solution methods and applications" in *Big Data Over Networks*, S. Cui *et al.* (eds.), Cambridge University Press, 2016.
  - K. Berberidis, D. Ampeliotis, and C. Mavrokefalidis, *Statistical Signal Processing and Machine Learning* (2016) (http://repository.kallipos.gr/handle/11419/2195)
- Evaluator of the SWINCOM project (THALES programme) (http://excellence.minedu.gov.gr/thales/el/thalesprojects/380202) (2015)
- Evaluator / reviewer of research proposals in the Académie Universitaire de Louvaine (AUL) and Flanders Research Foundation (FWO).
- Evaluator of research proposals in the Research and Innovation Foundation of Cyprus (https://www.research.org.cy/).

3. PUBLIC EXAMINER/OPPONENT TASKS

- Reviewer in four (4) Ph.D. theses and opponent in another twelve (12) Ph.D. theses, Universities of Athens, Patras, and Thessaloniki, Greece.
- Member of the evaluation committee for a Ph.D. thesis at the Dept. of Signal Theory and Communications, University of Vigo, Spain.

- Opponent for a Ph.D. thesis at the Communications Engineering Dept., Tampere University of Technology, Tampere, Finland.
- External reviewer for two (2) PhD theses, at the Dept. of Signal Theory and Communications, University of Vigo, Spain, and the Dept. of Electrical and Mechanical Engineering, University of Udine, Italy.
- Member of examination committee for a number of MSc theses at the University of Piraeus.

4. THESIS SUPERVISION

- Supervision of four (4) diploma (Dipl. Ing.) and Bachelor (BSc) theses:
  (a) *Adaptive techniques for image processing* (CEID
  (b) *Subband adaptive filtering for acoustic echo cancellation* (CEID)
  (c) *IIR transmultiplexer design* (UoA)
  (d) *MIMO-OFDM receiver algorithms* (UoA)

- Supervision of two (2) Masters' theses in the Erasmus programme:
  (a) *Experimental study of ultrasound image processing techniques* (CEID)
  (b) *Multi-layer neural networks for de-noising of image signals* (CEID)

- Supervision of four (4) Masters' theses at the Dept. of Informatics and Telecommunications, University of Athens (UoA):
  (a) *Design and development of a graphical environment for the implementation and evaluation of space-time signal processing algorithms* (emphasis on direction of arrival techniques)
  (b) *Design and development of a graphical environment for the implementation and evaluation of equalizers for linear and nonlinear channels*
  (c) *Study of linear and nonlinear structures and algorithms for electronic equalization of single-mode optical fibers*.
  (d) *Tensor methods in time series analysis*

- Co-supervision of four (4) Ph.D. theses (UoA):
  (a) *Efficient algorithms for supervised and (semi-) blind equalization of MIMO channels* (completed, by Dr. C. Rizogiannis, now at the Institute of Informatics and Telecommunications, NCSR Democritus (https://www.iit.demokritos.gr/el/people/constantinos-rizogiannis/)
  (b) *Efficient space-time processing algorithms for multiuser networks* (completed, by Dr. D. Katselis (http://katselis.web.engr.illinois.edu/), now at the Coordinated Science Lab, ECE dept., University of Illinois at Urbana-Champaign, USA)
  (c) *Tensor decomposition techniques for fMRI unmixing* (completed, by Dr. C. Chatzichristos (https://www.kuleuven.be/wieiswie/en/person/00126237), now at the Electrical Engineering Department, Catholic University of Leuven (KULeuven), Belgium, and Janssen Inc. Dr. Chatzichristos and his team in KULeuven were recently recognized as the leading winner of the Neureka 2020 Epilepsy Challenge for seizure prediction via electroencephalography (EEG) data mining (https://neureka-challenge.com/results/))
  (d) Blind source separation of functional dynamic MRI signals via dictionary learning (completed, by Dr. M. M. Morante, now a postdoctoral researcher at the University of Aalborg, Denmark (https://vbn.aau.dk/en/persons/152013)).

5. MEMBERSHIPS

- IEEE (since 1991)
- SIAM and SIAM Activity group on Linear Algebra (SIAG LA)
- IEEE Technical Committee on Cognitive Networks (TCCN) (since 2017)

- IEEE Signal Processing and Communications Electronics Technical Committee (SPCE-TC) (since 2016)
- EURASIP (2012-.)
- IET (2013-2016)
- Technical Chamber of Greece (since 1990)
- Data Science lab, University of Piraeus, Greece (http://www.datastories.org/)

6. COOPERATION WITH INDUSTRY

- Consulting to INTRACOM S.A., Greece, for the design of an efficient IIR transmultiplexing system (1996)
- Cooperation with local companies within national research projects (PENED-99 and PENED-2003)
- Cooperation with industrial partners (e.g., THALES, AIRBUS) within EU projects

7. PARTICIPATION IN ORGANIZATION OF CONFERENCES, SPECIAL SESSIONS, etc.

(a) Co-organizer of the *Data Science and Learning Workshop: Unraveling the Brain*, satellite workshop, International Conference on Acoustics, Speech, and Signal Processing (ICASSP-2023), Rhodes, Greece, Jun. 2023.

(b) Publicity chair, 19th Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2018), Jun. 2018.

(c) Area chair (*Signal Processing for Communications*), 25th European Signal Processing Conference (EUSIPCO-2017), Aug.-Sep. 2017

(d) Track co-chair (*Signal Processing and Multimedia*), International Telecommunications Symposium (ITS-2014), Aug. 2014.

(e) Technical program co-chair in the:
- 16th International Conference on Digital Signal Processing (DSP-2009), Jul. 2009.
- 1st IAPR Workshop on Cognitive Information Processing (CIP-2008), Jun. 2008.

(f) Workshop co-organizer:
- Workshop on "Advanced Multi-Carrier Techniques for Next Generation Commercial and Professional Mobile Systems," ISWCS-2014, Barcelona, Spain, Aug. 2014
- Workshop on "Advanced Multicarrier Waveforms and Mechanisms for Future Ad-Hoc and Cell-Based Systems," ISWCS-2013, Ilmenau, Germany, Aug. 2013

(g) Special session (co-)organizer:
- "5G Waveforms," 16th IEEE Int'l Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2015)
- "Filter Bank Techniques in Future Wireless Communications," 20th European Wireless Conference (EW-2014)
- "Advanced Multicarrier Techniques for Wireless Communications," 9th Int'l Symposium on Wireless Communication Systems (ISWCS-2012).

(h) Technical program committee (TPC) member in numerous international events including:
- IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP-2024), Seoul, Korea, Apr. 2024
- 58th IEEE International Conference on Communications (ICC-2024), Signal Processing for Communications Symposium, Jun. 2024

- IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP-2023), Los Sueños, Costa Rica, Dec. 2023
- 55th IEEE International Conference on Communications (ICC-2021), Signal Processing for Communications Symposium, Jun. 2021
- 5G World Forum (WF-5G-2020), Sep. 2020
- 2nd 6G Wireless Summit (6G SUMMIT), Mar. 2020
- 54th IEEE International Conference on Communications (ICC-2020), Signal Processing for Communications Symposium, Jun. 2020
- IEEE Wireless Communications and Networking Conference (WCNC-2020), Apr. 2020
- IEEE Global Conference on Signal and Information Processing (GlobalSIP-2019) – Tensor Methods for Signal Processing and Machine Learning Symposium, Nov. 2019
- IEEE Global Communications Conference – Signal Processing for Communications Symposium (GLOBECOM-2019), Dec. 2019
- 2nd IEEE 5G World Forum (5GWF-19), 30 Sep.-2 Oct. 2019
- 3rd International Balkan Conference on Communications and Networking (BalkanCom-2019), Jun. 2019
- 53rd IEEE International Conference on Communications (ICC-2019), Signal Processing for Communications Symposium, May 2019
- 15th International Symposium on Wireless Communication Systems (ISWCS-2018), Aug. 2018
- 14th International Conference on Latent Variable Analysis and Signal Separation (LVA/ICA-2018), Jul. 2018
- IEEE 1st 5G World Forum (WF-5G'18), Jul. 2018
- IEEE Wireless Communications and Networking Conference (WCNC-2018), Apr. 2018
- 52nd IEEE International Conference on Communications (ICC-2018), Signal Processing for Communications Symposium, May 2018
- 25th International Conference on Telecommunications (ICT-2018), Jun. 2018.
- IEEE Global Communications Conference, Exhibition and Industry Forum (GLOBECOM-2017), Dec. 2017
- 7th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP-2017), Dec. 2017
- 5th IEEE Global Conference on Signal and Information Processing (GlobalSIP), Nov. 2017
- 22nd International Conference on Digital Signal Processing (DSP-2017), Aug. 2017
- Workshop on Signal Processing with Adaptive Sparse Structured Representations (SPARS-2017), Jun. 2017
- IEEE Wireless Communications and Networking Conference (WCNC-2017), Mar. 2017
- 21st International Conference on Digital Signal Processing (DSP-2016), Oct. 2016
- 24th European Signal Processing Conference (EUSIPCO-2016), Aug.-Sep. 2016
- 9th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2016), Jul. 2016
- IEEE Global Communications Conference, Exhibition and Industry Forum (GLOBECOM-2016), Signal Processing for Communications Symposium, Dec. 2016

- IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2016), Sep. 2016
- IEEE Wireless Communications and Networking Conference (WCNC-2016), Apr. 2016
- IEEE Global Communications Conference, Exhibition and Industry Forum (GLOBECOM-2015), Signal Processing for Communications Symposium, Dec. 2015
- 12th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2015), Aug. 2015
- IEEE Int'l Conference on Communications (ICC-2015), Jun. 2015
- 20th International Conference on Digital Signal Processing (DSP-2015), 21-24 Jul. 2015.
- 22nd European Signal Processing Conference (EUSIPCO-2014), Sep. 2014.
- 8th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2014), Jun. 2014.
- 11th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2014), Aug. 2014.
- 13th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT-2013), Dec. 2013.
- 10th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2013): Workshop on "Advanced Multicarrier Waveforms and Mechanisms for Future Ad-Hoc and Cell-Based Systems," Aug. 2013.
- 21st European Signal Processing Conference (EUSIPCO-2013), Sep. 2013
- 2013 IEICE Information and Communication Technology Forum (ICTF-2013), May 2013.
- 18th Int'l Conf. on Digital Signal Processing (DSP-2013), Jul. 2013.
- 16th Panhellenic Conference on Informatics (PCI-2012), Oct. 2012.
- 2012 IEEE Symposium on Industrial Electronics and Applications (ISIEA-2012), Sep. 2012.
- 20th European Signal Processing Conference (EUSIPCO-2012), Aug. 2012.
- 2012 Sarajevo Technology Forum (STF-2012), May 2012.
- 19th European Signal Processing Conference (EUSIPCO-2011), Sep. 2011.
- 17th Int'l Conf. on Digital Signal Processing (DSP-2011), Jul. 2011.
- International Telecommunications Symposium (ITS-2010), Sep. 2010.
- 18th European Signal Processing Conference (EUSIPCO-2010), Aug. 2010.
- 17th European Signal Processing Conference (EUSIPCO-2009), Aug. 2009.
- 8th International Conference on Independent Component Analysis and Signal Separation (ICA-2009), Mar. 2009.
- International Telecommunications Symposium (ITS-2006), Sep. 2006.

8. ADMINISTRATIVE ASSIGNMENTS

(a) Member of administrative committees at the University of Piraeus (UNIPI), including committees on undergraduate curriculum, student matters, department evaluation, hiring personnel (technical and teaching), and technical reports.
(b) Managing payments of group members in two FP7 projects plus technical and financial reports
(c) Representing the University of Patras at the meeting of the ERASMUS programme coordinators (Summer of 1994, Bordeaux, France)

9. TUTORIALS, TALKS

- Several lectures (during the Ph.D. studies and in the framework of the department's seminar series) on topics including multi-rate filtering, wavelet theory, and vector quantization theory and algorithms

- Lectures on tensor methods and applications at the Institut de Recherche en Informatique de Toulouse (IRIT), Toulouse, France (https://www.irit.fr/en/home/) and at the Centre of Innovation in Telecommunications and Integration of service (CITI), Lyon, France (https://www.citi-lab.fr/), Jan. 2023.

- Invited lecture on tensor methods and applications at the University of Patras, Patras, Greece, Apr. 2022, *Electrical and Computer Engineering Students Conf. (ECESCON)* (https://sfhmmy.gr/)

- Lecture on tensor methods and applications in the Dept. Computer Science, Dalhousie University, Halifax, NS, Canada, Feb. 2020 (http://www.master-project-h2020.eu/secondment-of-prof-kofidis-uprc-at-dalhousie-university/)

- **Tutorial** on "Blind source separation: Fundamentals and recent advances," *invited lecture in the 19th Brazilian Telecommunications Symposium (SBrT-2001)*, Sep. 2001.

- Lecture on "Training design for estimating correlated channels in multi-user MIMO networks: The flat fading case," Institute for Digital Communications, University of Edinburgh, UK, Jul. 2008.

- Lecture on "Channel estimation and tracking for MIMO-FBMC systems," PHYDYAS Workshop (within SPAWC-2009), Perugia, Italy, Jun. 2009.

- Lectures on Filter Bank-based Multi-Carrier (FBMC) communications in:

  - COMONSENS project meeting, Universidade da Coruña, Spain, Jul. 2010.

  - Seminar of the network of research and applications in Wireless Communications and Sensor Networks (WCSN), University of Patras, Greece, Apr. 2011.

  - Sarajevo Technology Forum (STF-2012), Sarajevo, Bosnia and Herzegovina, May 2012.

  - Technical seminar, Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Castelldefels, Barcelona, Spain, Jul. 2013.

  - Institut d' Électronique et de Télécommunications de Rennes (IETR), CentraleSupélec, Rennes, France, Aug. 2015 and Jul. 2016.

10. RESEARCH FUNDING (projects in reverse chronological order)

a. H2020-MSCA-RISE-2017 (http://www.master-project-h2020.eu/) "Multiple ASpect TrajEctoRy management and analysis (MASTER)" (EU funded, University of Piraeus, 2020)

b. Marie Sklodowska-Curie Actions — Innovative Training Networks (ITN) (http://www.macsenet.eu/#0) "Machine Sensing training Network (MacSeNet)" (EU funded, Computer Technology Institute & Press "Diophantus" (CTI), 2015-2018)

c. FP7-STREP (EMPhAtiC project, http://www.ict-emphatic.eu/): "Enhanced Multicarrier techniques for Professional Ad-hoc and cell-based Communications"

(EU funded – FP7-ICT, Computer Technology Institute & Press "Diophantus" (CTI), 2012-2015)

d. THALES programme (EU-National programme, UNIPI and UoP, 2013-2015):

- ✓INTENTION : Novel transmit and design techniques for broadband wireless networks
  http://excellence.minedu.gov.gr/thales/en/thalesprojects/379489
- ✓MIMOSA: MIMO techniques for satellite and stratospheric communication systems
  http://excellence.minedu.gov.gr/thales/en/thalesprojects/380041
- ✓PROTOMI: Adaptive technology in optical transmission
  http://excellence.minedu.gov.gr/thales/en/thalesprojects/377322

e. FP7-STREP (PHYDYAS project; http://www.ict-phydyas.org): "PHYsical layer for DYnamic AccesS and cognitive radio" (EU funded – FP7-ICT, Computer Technology Institute & Press "Diophantus" (CTI), 2008-2010)

f. PENED-2003: "Design and performance evaluation of efficient space-time processing techniques for wireless MIMO systems" (National project, UoA, 2005-2008)

g. COMPETITIVENESS: "Efficient algorithms for space-time equalization of wireless channels" (National project, UoA - Global Wireless Systems Research Dept., Bell Labs, Lucent Technologies, 2004-2006)

h. PENED-99: "Development and efficient realization of novel channel equalization techniques for advanced wireless communication networks" (National project, UoA, 2000-2001)

i. Training and Mobility of Researchers (TMR) Programme (Marie Curie Individual Research Fellowship): "Robust adaptive algorithms for blind equalization" (EU funded, Institut National des Télécommunications (INT), 1998-2000)

j. EUROMED: Telemedicine ("Signal processing aspects of received data images and signals") (EU funded, UoA, 1998)

11. RESEARCH INTERESTS

- Signal processing
- Machine learning
- Applied linear and multilinear algebra
- Communication systems
- Biomedical applications

12. NUMBER OF PUBLICATIONS

Journal papers:	**28**
Conference papers:	**49**
Book chapters:	**7**
Edited volumes:	**1**
Textbooks:	**2**
Technical reports:	**20**

13. CITATION STATISTICS

Number of citations (Google Scholar): **2200**
h-index (Google Scholar): **23**

APPENDIX A: PUBLICATIONS

Theses

T.1 PhD thesis: *Filter Banks for Signal and Image Processing* (in Greek) (University of Patras, 1996, with honors, Advisor: Prof. Sergios Theodoridis)

T.2 Diploma (Dipl.Ing.) thesis: *Adaptive QRD-LS Algorithms for System Identification* (in Greek) (University of Patras, 1990, with honors, Advisor: Prof. Sergios Theodoridis)

Textbooks/Course Notes

N.1 **E. Kofidis**, *Audio and Image Processing – A Non-mathematical Introduction*, Kallipos, Open Academic Editions, 2023 https://dx.doi.org/10.57713/kallipos-214 (in Greek)

N.2 S. Theodoridis, K. Berberidis, and **E. Kofidis**, *Introduction to Signal and System Theory*, Typotheto, 2nd ed., 2003 (in Greek) (adopted in more than 25 depts.)

N.3 Course notes for "Audio and Image Processing" (University of Piraeus, Dec. 2001, in Greek)

N.4 Course notes for a tutorial on blind source separation (19th Brazilian Telecommunications Symposium, Sept. 2001)

N.5 Course notes on random signal theory (University of Piraeus, May 2002, in Greek)

N.6 Course notes on C and R programming (University of Piraeus, in Greek)

N.7 Course notes on numerical methods (University of Piraeus, in Greek).

Journal papers

J.28 A. A. Rontogiannis, **E. Kofidis**, and P. V. Giampouras, "Online rank-revealing block-term tensor decomposition," *Signal Processing*, vol. 212, article 109126, 2023.

J.27 M. Besseghier, A. B. Djebbar, and **E. Kofidis**, "Joint CFO and highly frequency selective channel estimation in FBMC/OQAM systems," *Digital Signal Processing*, vol. 128, article 103629, 2022.

J.26 P. V. Giampouras, A. A. Rontogiannis, and **E. Kofidis**, "Block-term tensor decomposition model selection and computation: The Bayesian way," *IEEE Transactions on Signal Processing*, vol. 70, pp. 1707-1717, Mar. 2022.

J.25 C. Chatzichristos, **E. Kofidis**, W. Van Paesschen, L. De Lathauwer, S. Theodoridis, and S. Van Huffel, "Early soft and flexible fusion of EEG and fMRI via Double CMTF for multi-subject group analysis," *Human Brain Mapping*, vol. 43, no. 4, pp. 1231–1255, 2022. https://doi.org/10.1002/hbm.25717

J.24 A. A. Rontogiannis, **E. Kofidis**, and P. V. Giampouras, "Block-term tensor decomposition: Model selection and computation," *IEEE Journal of Selected Topics in Signal Processing*, special issue on Tensor Decomposition for Signal Processing and Machine Learning, vol. 15, no. 3, pp. 464-475, Apr. 2021.

J.23 **E. Kofidis**, "A tensor-based approach to joint channel estimation/data detection in flexible multicarrier MIMO systems," *IEEE Transactions on Signal Processing*, vol. 68, pp. 3179-3193, May 2020.

J.22 C. Chatzichristos, M. Morante, N. Andreadis, **E. Kofidis**, Y. Kopsinis, and S. Theodoridis, "Emojis influence autobiographical memory retrieval from reading words: An fMRI-based study," *PLoS ONE*, vol. 15, no. 7, e0234104, 2020. https://doi.org/10.1371/journal.pone.0234104

J.21 V. Dalakas and **E. Kofidis**, "Filter bank-based multiple access in next-generation satellite uplinks: A DVB-RCS2-based experimental study," *International Journal of Satellite Communications and Networking*, pp. 1-13, Jan. 2020.

J.20 C. Chatzichristos, **E. Kofidis**, M. Morante, and S. Theodoridis, "Blind fMRI source unmixing via higher-order tensor decompositions," *Journal of Neuroscience Methods*, vol. 315, pp. 17-47, Mar. 2019.

J.19 **E. Kofidis**, "Preamble-based estimation of highly frequency selective channels in FBMC/OQAM systems," *IEEE Transactions on Signal Processing*, vol. 65, no. 7, pp. 1855-1868, Apr. 2017.

J.18 A. I. Pérez-Neira, M. Caus, R. Zakaria, D. Le Ruyet, **E. Kofidis**, X. Mestre, M. Haardt, and Y. Cheng, "MIMO signal processing in offset-QAM based filter bank multicarrier systems," *IEEE Transactions on Signal Processing*, vol. 64, no. 21, pp. 5733-5762, Nov. 2016.

J.17 C. Mavrokefalidis, **E. Kofidis**, A. Rontogiannis, and S. Theodoridis, "Preamble-based channel estimation in single-relay networks using FBMC/OQAM," *EURASIP Journal on Advances in Signal Processing*, 2014:66 (doi: 10.1186/1687-6180-2014-66).

J.16 **E. Kofidis**, D. Katselis, A. A. Rontogiannis, and S. Theodoridis, "Preamble-based channel estimation in OFDM/OQAM systems: A review," *Signal Processing*, Jul. 2013.

J.15 C. Rizogiannis, **E. Kofidis**, A. A. Rontogiannis, and S. Theodoridis, "Adaptive BLAST-type decision-feedback equalization in DS-CDMA systems," *Signal Processing*, vol. 92, pp. 977-988, 2012.

J.14 D. Katselis, **E. Kofidis**, A. Rontogiannis, and S. Theodoridis, "Preamble-based channel estimation for CP-OFDM and OFDM/OQAM systems: A comparative study," *IEEE Transactions on Signal Processing*, vol. 58, no. 5, pp. 2911-2916, May 2010.

J.13 C. Rizogiannis, **E. Kofidis**, C. B. Papadias, and S. Theodoridis, "Semi-blind maximum-likelihood joint channel/data estimation for correlated channels in multiuser MIMO networks," *Signal Processing*, vol. 90, no. 4, pp. 1209-1224, Apr. 2010.

J.12 D. Katselis, **E. Kofidis**, and S. Theodoridis, "On training optimization for estimation of correlated MIMO channels in the presence of multiuser interference," *IEEE Transactions on Signal Processing*, vol. 56, no. 10, pp. 4892-4904, Oct. 2008.

J.11 D. Katselis, **E. Kofidis**, and S. Theodoridis, "Training-based estimation of correlated MIMO fading channels in the presence of colored interference," *Signal Processing*, vol. 87, no. 9, pp. 2177-2187, Sep. 2007.

J.10 **E. Kofidis**, V. Dalakas, Y. Kopsinis, and S. Theodoridis, "A novel efficient cluster-based MLSE equalizer for satellite channels with *M*-QAM signaling," *EURASIP Journal on Applied Signal Processing*, vol. 2006, Article ID 34343, 2006.

J.9 Y. Kopsinis, S. Theodoridis, and **E. Kofidis**, "An efficient low complexity cluster-based MLSE equalizer for frequency-selective fading channels," *IEEE Transactions on Wireless Communications*, vol. 5, no. 4, pp. 705-711, Apr. 2006.

J.8 **E. Kofidis**, Y. Kopsinis, and S. Theodoridis, "On the least-squares performance of a novel efficient center estimation method for clustering-based MLSE equalization," *IEEE Transactions on Signal Processing*, vol. 54, no. 4, pp. 1459-1471, Apr. 2006.

J.7 **E. Kofidis**, "Designing *N*-band biorthogonal FIR systems given several of the analysis and synthesis filters," *Signal Processing*, vol. 85, pp. 1335-1331, Jul. 2005.

J.6 P. A. Regalia and **E. Kofidis**, "Monotonic convergence of fixed-point algorithms for ICA," *IEEE Transactions on Neural Networks*, vol. 14, no. 4, pp. 943–949, Jul. 2003.

J.5 **E. Kofidis** and P. A. Regalia, "On the best rank-1 approximation of higher-order super-symmetric tensors," *SIAM Journal on Matrix Analysis and Applications*, vol. 23, no. 3, pp. 863–884, 2002.

J.4 **E. Kofidis**, N. Kolokotronis, A. Vassilarakou, S. Theodoridis, and D. Cavouras, "Wavelet-based medical image compression," *Future Generation Computer Systems*, vol. 15**,** no. 2, pp. 223–243, 1999.

J.3 **E. Kofidis**, S. Theodoridis, and N. Kalouptsidis, "Mirror-image symmetric perfect reconstruction FIR filter banks: Parametrization and design," *Signal Processing*, vol. 68, no. 1, pp. 1–21, 1998.

J.2 **E. Kofidis**, S. Theodoridis, C. Kotropoulos, and I. Pitas, "Nonlinear adaptive filters for speckle suppression in ultrasonic images," *Signal Processing*, vol. 52, no. 3, pp. 357–372, 1996.

J.1 **E. Kofidis***,* S. Theodoridis, and N. Kalouptsidis, "On the perfect-reconstruction problem in *N*-band maximally-decimated multirate FIR filter banks," *IEEE Transactions on Signal Processing*, vol. 44*,* no. 10, pp. 2439–2455, Oct. 1996.

Books / Book chapters

B.8 C. Chatzichristos, S. Van Eyndhoven, **E. Kofidis**, and S. Van Huffel, "Coupled tensor decompositions for data fusion," Chapter 10 in Y. Liu (Ed.), *Tensors for Data Processing: Theory, Methods and Applications*, Elsevier, 2021.

B.7 J. Yli-Kaakinen, M. Renfors, and **E. Kofidis**, "Filtered multicarrier transmission," in *Wiley 5G Ref.: The Essential 5G Reference Online*, John Wiley & Sons, May 2020.

B.6 M. Renfors, X. Mestre, **E. Kofidis**, and F. Bader (Eds.), *Orthogonal Waveforms and Filter Banks for Future Communication Systems*, Academic Press, 2017.

B.5 M. Haardt, Y. Cheng, F. Rottenberg, J. Louveaux, and **E. Kofidis**, "FBMC distributed and cooperative systems," Chapter 16 in [B.6].

B.4 **E. Kofidis** M. Renfors, J. Louveaux, X. Mestre, D. Gregoratti, D. Le Ruyet, and R. Zakaria, "MIMO-FBMC receivers," Chapter 14 in [B.6].

B.3 **E. Kofidis** L. G. Baltar, X. Mestre, F. Bader, and V. Savaux, "FBMC channel estimation techniques," Chapter 11 in [B.6].

B.2 #**E. Kofidis** and P. A. Regalia, "Tensor approximation and signal processing applications," in *Structured Matrices in Mathematics, Computer Science, and Engineering I*, V. Olshevsky (Ed.), Contemporary Mathematics Series, American Mathematical Society, 2001.

B.1 #**E. Kofidis**, N. Kolokotronis, A. Vassilarakou, S. Theodoridis, and D. Cavouras, "Medical image compression," pp. 369–406 in *Advanced Infrastructures for Future Healthcare*, A. Marsh *et al.* (Eds.), IOS Press, 2000.

Notes:

- The main results of [J.5] and [B.2] were presented (by P. A. Regalia) at the

containing original results

Minisymposium on Numerical Multilinear Algebra and its Applications of the 50th SIAM Anniversary Meeting, Philadelphia, PA, Jul. 2002. Title of the talk: "Tensor algebra and some signal processing applications."

- The main results of [J.26] were also presented at the *2023 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP-2023)*, Rhodes, Greece, Jun. 2023.

Working papers / Technical reports / Submitted papers

W.20 **E. Kofidis**, "Adaptive joint channel estimation/data detection in flexible multicarrier MIMO systems — A tensor-based approach," *TechRxiv preprint*, https://doi.org/10.36227/techrxiv.23766000.v2, Sep. 2023.

W.19 **E. Kofidis**, P. V. Giampouras, and A. A. Rontogiannis, "A projected Newton-type algorithm for rank-revealing nonnegative block-term tensor decomposition," *hal-03649851*, 2022.

W.18 J. Yuan, G. C. Alexandropoulos, **E. Kofidis**, T. L. Jensen, and E. De Carvalho, "Tensor-based channel tracking for RIS-empowered multi-user MIMO wireless systems," https://arxiv.org/abs/2202.08315, Feb. 2022.

W.17 A. A. Rontogiannis, **E. Kofidis**, and P. V. Giampouras, "Online rank-revealing block-term tensor decomposition," *arXiv:2106.10755v2 [math.NA]*, Jun. 2021.

W.16 P. V. Giampouras, A. A. Rontogiannis, and **E. Kofidis**, "A Bayesian approach to block-term tensor decomposition model selection and computation," *arXiv:2101.02931v1 [stat.ME]*, Jan. 2021.

W.15 **E. Kofidis**, "Preamble-based FBMC/OQAM channel estimation without guard symbols," *<hal-02889973>*, Jul. 2020.

W.14 **E. Kofidis**, "Tensor methods for multi-aspect trajectory data mining," *〈hal-02639989〉*, May 2020.

W.13 C. Chatzichristos, **E. Kofidis**, L. De Lathauwer, S. Theodoridis, and S. Van Huffel, "Early soft and flexible fusion of EEG and fMRI via tensor decomposition," *arXiv:2005.07134v1 [eess.SP]*, May 2020.

W.12 A. A. Rontogiannis, **E. Kofidis**, and. P. V. Giampouras, "Block-term tensor decomposition: Model selection and computation," *arXiv:2002.09759v1 [cs.NA]*, Feb. 2020.

W.11 **E. Kofidis**, "A tensor-based approach to joint channel estimation/data detection in flexible multicarrier MIMO systems," *arXiv:1907.10822v1 [eess.SP]*, Jul. 2019.

W.10 **E. Kofidis**, "A note on flexible multicarrier modulation," *〈hal-01970127〉* (2019).

W.9 **E. Kofidis**, "Blind source separation: Fundamentals and recent advances," (tutorial overview presented at SBrT'01), *arXiv: 1603.03089v1 [stat.ML]* (2016).

W.8 V. Dalakas and **E. Kofidis**, "Filter bank-based multicarrier modulation for multiple access in satellite uplinks: A DVB-RCS2 based experimental study," Oct. 2016 (*<hal-01381072>*).

W.7 M. Morante Moreno, Y. Kopsinis, **E. Kofidis**, C. Chatzichristos, and S. Theodoridis, "Assisted dictionary learning for fMRI data analysis" *arXiv: 1610.03276v1 [stat.ML]*, Oct. 2016.

W.6 **E. Kofidis**, C. Chatzichristos, and A. L. F. de Almeida, "Joint channel estimation/data

detection in MIMO-FBMC/OQAM systems – A tensor-based approach," *arXiv:1609.09661v1 [cs.IT]*, Sep. 2016.

W.5 C. Chatzichristos, **E. Kofidis**, Y. Kopsinis, and S. Theodoridis, "Higher-order block term decomposition for spatially folded fMRI data," *arXiv:1607.05073v1 [cs.NA]*, Jul. 2016.

W.4 K. Maliatsos, **E. Kofidis**, and A. Kanatas, "A unified multicarrier modulation framework," *arXiv:1607.03737v1 [cs.IT]*, Jul. 2016

W.3 **E. Kofidis**, "Preamble-based channel estimation in OFDM/OQAM systems: A time-domain approach," *arXiv: 1306.2581v2 [cs.IT]* (2014)

W.2 M. Bellanger *et al.*, "FBMC physical layer: A primer," Jun. 2010. Available [Online]. http://www.ict-phydyas.org/teamspace/internal-folder/FBMC-Primer_06-2010.pdf

W.1 D. Katselis, **E. Kofidis**, A. Rontogiannis, and S. Theodoridis, "Preamble-based channel estimation for CP-OFDM and OFDM/OQAM systems: A comparative study," *arXiv: 0910.3928v1 [cs.IT]* (2009).

Conference papers

C.49 ♠**E. Kofidis**, P. V. Giampouras, and A. A. Rontogiannis, "A projected Newton-type algorithm for rank-revealing nonnegative block-term tensor decomposition," *30th European Signal Processing Conf. (EUSIPCO-2022)*, Belgrade, Serbia, 29 Aug.-2 Sep. 2022.

C.48 ♠J. Yuan, G. Alexandropoulos, **E. Kofidis**, T. L. Jensen, and E. De Carvalho, "Channel tracking for RIS-enabled multi-user SIMO systems in time-varying wireless channels," *IEEE Int'l Conf. Communications (ICC-2022)*, WS-8: Workshop on Emerging Topics in 6G Communications, Jun. 2022.

C.47 ♠**E. Kofidis**, "On preamble-based FBMC/OQAM highly frequency selective channel estimation without guard symbols," *IEEE Global Communications Conf. (GLOBECOM-2021)*, Madrid, Spain, Dec. 2021.

C.46 ♠A. A. Rontogiannis, **E. Kofidis**, and P. V. Giampouras, "Online rank-revealing block-term tensor decomposition," **invited** (special session on "Tensor signal processing"), *55th Asilomar Conference on Signals, Systems, and Computers (ACSSC-2021)*, Asilomar Conference Grounds, Pacific Grove, CA, 31 Oct. – 3 Nov. 2021.

C.45 C. Chatzichristos, **E. Kofidis**, and S. Van Huffel, "Soft and flexible coupling approaches to EEG-fMRI fusion," **invited** in the Mini-Symposium on Multi-Modal Data Mining Methods and Applications based on Coupled Matrix/Tensor Factorizations, *SIAM Conf. Applied Linear Algebra (SIAM LA21)*, May 2021.

C.44 P. V. Giampouras, A. A. Rontogiannis, and **E. Kofidis**, "A Bayesian approach to block-term tensor decomposition model selection and computation," *29th European Signal Process. Conf. (EUSIPCO-2021)*, Dublin, Ireland, Aug. 2021.

C.43 ♠A. A. Rontogiannis, P. V. Giampouras, and **E. Kofidis**, "Rank-revealing block-term decomposition for tensor completion," *IEEE Int'l Conf. Acoustics, Speech and Signal Processing (ICASSP-2021)*, Toronto, Canada, Jun. 2021.

C.42 A. A. Rontogiannis, **E. Kofidis**, and. P. V. Giampouras, "Block-term tensor decomposition: Model selection and computation," *28th European Signal Process.*

Conf. (EUSIPCO-2020), Aug. 2020 (deferred to Jan. 2021), Amsterdam, The Netherlands.

C.41 ♠C. Chatzichristos, M. Vandecapelle, **E. Kofidis**, S. Theodoridis, L. De Lathauwer, and S. Van Huffel, "Tensor-based blind fMRI source separation without Gaussian noise assumption - A *β*-divergence approach," Symposium on tensor methods for signal processing and machine learning, *IEEE Global Conference on Signal and Information Processing (GlobalSIP-2019)*, Ottawa, Canada, Nov. 2019.

C.40 **E. Kofidis** and V. Dalakas, "Filter bank-based multiple access in next-generation satellite uplinks: A DVB-RCS2-based experimental study," Workshop on satellite and non-terrestrial networks for 5G, *IEEE 5G World Forum (5GWF-2019)*, Dresden, Germany, 30 Sept.-2 Oct. 2019.

C.39 C. Chatzichristos, S. Van Eyndhoven, **E. Kofidis**, L. De Lathauwer, S. Van Huffel, and S. Theodoridis, "Flexible double coupled factorization for EEG and fMRI fusion," **invited** (special session on "Biomedical data fusion using tensor methods"), *41st Annual Int'l Conf. of the IEEE Engineering in Medicine and Biology Society (EMBC-2019)*, Berlin, Germany, Jul. 2019.

C.38 C. Chatzichristos, M. Davies, J. Escudero, **E. Kofidis**, and S. Theodoridis, "Fusion of EEG and fMRI via soft coupled tensor decompositions," *26th European Signal Processing Conf. (EUSIPCO-2018)*, Rome, Italy, Sep. 2018.

C.37 ♠L. De Lathauwer and **E. Kofidis**, "Coupled matrix-tensor factorizations - The case of partially shared factors," **invited** (special session on "Tensor methods"), *51st Asilomar Conference on Signals, Systems, and Computers (ACSSC-2017)*, Asilomar Conference Grounds, Pacific Grove, CA, 29 Oct. – 1 Nov. 2017.

C.36 **E. Kofidis**, C. Chatzichristos, and A. L. F. de Almeida, "Joint channel estimation/data detection in MIMO-FBMC/OQAM systems – A tensor-based approach," *25th European Signal Processing Conf. (EUSIPCO-2017)*, Kos, Greece, 28 Aug. - 2 Sep. 2017.

C.35 C. Chatzichristos, **E. Kofidis**, and S. Theodoridis, "PARAFAC2 and its block term decomposition analog for blind fMRI source unmixing," *25th European Signal Processing Conf. (EUSIPCO-2017)*, Kos, Greece, 28 Aug. - 2 Sep. 2017.

C.34 M. Morante Moreno, Y. Kopsinis, **E. Kofidis**, C. Chatzichristos, and S. Theodoridis, "Assisted dictionary learning for fMRI data analysis," *IEEE Int'l Conf. Acoustics, Speech and Signal Processing (ICASSP-2017)*, New Orleans, LA, Mar. 2017.

C.33 C. Chatzichristos, **E. Kofidis**, Y. Kopsinis, M. Morante Moreno, and S. Theodoridis, "Higher-order block term decomposition for spatially folded fMRI data," *13th Int'l Conf. Latent Variable Analysis and Signal Separation (LVA/ICA-2017)*, Grenoble, France, Feb. 2017.

C.32 ♠F. Rottenberg, F. Horlin, **E. Kofidis**, and J. Louveaux, "Generalized optimal pilot allocation for channel estimation in multicarrier systems," *17th IEEE Int'l Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2016)*, Edinburgh, UK, Jul. 2016.

C.31 ♠X. Mestre and **E. Kofidis**, "Pilot-based FBMC/OQAM channel estimation under strong frequency selectivity," *IEEE Int'l Conf. Acoustics, Speech and Signal Processing (ICASSP-2016)*, Shanghai, China, Mar. 2016.

♠ These works have not appeared in journal papers yet.

C.30 **E. Kofidis**, C. Chatzichristos, and A. L. F. de Almeida, "Tensor-based processing of filter bank-based multicarrier signals," poster in *Workshop on Tensor Decompositions and Applications (TDA-2016)*, Leuven, Belgium, Jan. 2016.

C.29 ♠**E. Kofidis**, "On optimal multi-symbol preambles for highly frequency selective FBMC/OQAM channel estimation," *12th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2015)*, Brussels, Belgium, Aug. 2015.

C.28 ♠F. Rottenberg, Y. Medjahdi, **E. Kofidis**, and J. Louveaux, "Preamble-based channel estimation in asynchronous FBMC-OQAM distributed MIMO systems," *12th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2015)*, Brussels, Belgium, Aug. 2015.

C.27 **E. Kofidis**, "Preamble-based estimation of highly frequency selective channels in MIMO-FBMC/OQAM systems," *21st European Wireless Conf. (EW-2015)*, Budapest, Hungary, May 2015.

C.26 ♠C. Mavrokefalidis, A. Rontogiannis, **E. Kofidis**, A. Beikos, and S. Theodoridis, "Efficient adaptive equalization of doubly dispersive channels in MIMO-FBMC/OQAM systems," *11th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2014)*, Barcelona, Spain, Aug. 2014.

C.25 **E. Kofidis**, "Channel estimation in filter bank-based multicarrier systems: Challenges and solutions," *6th IEEE Int'l Symp. Communications, Control, and Signal Processing (ISCCSP-2014)*, **invited** (special session on "Signal processing techniques for future mobile networks"), Athens, Greece, May 2014.

C.24 **E. Kofidis**, "Short preamble-based estimation of highly frequency selective channels in FBMC/OQAM," *39th IEEE Int'l Conf. Acoustics, Speech, and Signal Processing (ICASSP-2014)*, Florence, Italy, May 2014.

C.23 C. Mavrokefalidis, **E. Kofidis**, A. Rontogiannis, and S. Theodoridis, "Preamble design for channel estimation in OFDM/OQAM cooperative systems," *10th IEEE Int'l Symposium on Wireless Communication Systems (ISWCS-2013)*, Ilmenau, Germany, Aug. 2013.

C.22 C. Mavrokefalidis, **E. Kofidis**, A. Rontogiannis, and S. Theodoridis, "Optimal training design for channel estimation in OFDM/OQAM cooperative systems," *14th IEEE Int'l Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2013)*, Darmstadt, Germany, Jun. 2013.

C.21 ♠D. Katselis, **E. Kofidis**, and S. Theodoridis, "On OFDM/OQAM receivers," *20th European Signal Processing Conf. (EUSIPCO-2012)*, Bucharest, Romania, Aug. 2012.

C.20 **E. Kofidis** and D. Katselis, "Preamble-based channel estimation in MIMO-OFDM/OQAM systems," *IEEE Int'l Conf. on Signal and Image Processing Applications (ICSIPA-2011)*, Kuala Lumpur, Malaysia, Nov. 2011.

C.19 ♠D. Katselis, M. Bengtsson, C. Rojas, H. Hjalmarsson, and **E. Kofidis**, "On preamble-based channel estimation in OFDM/OQAM systems," *19th European Signal Processing Conf. (EUSIPCO-2011)*, Barcelona, Spain, Sep. 2011.

C.18 **E. Kofidis** and D. Katselis, "Improved interference approximation method for preamble-based channel estimation in FBMC/OQAM," *19th European Signal Processing Conf. (EUSIPCO-2011)*, Barcelona, Spain, Sep. 2011.

C.17 C. Rizogiannis, **E. Kofidis**, A. A. Rontogiannis, and S. Theodoridis, "Adaptive BLAST-type decision-feedback equalizers for DS-CDMA systems," *IEEE Int'l Conf. on Communication Systems (ICCS-2010)*, Singapore, Nov. 2010.

C.16 ♠**E. Kofidis** and A. A. Rontogiannis, "Adaptive BLAST decision feedback equalizer for MIMO-FBMC/OQAM systems," *21st Personal, Indoor, and Mobile Radio Communications Conf. (PIMRC-2010)*, Istanbul, Turkey, Sep. 2010.

C.15 D. Katselis, **E. Kofidis**, and S. Theodoridis, "A low-cost approach to training-based MIMO channel estimation in interference-limited environments," *8th IEEE Int'l Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2007)*, Helsinki, Finland, Jun. 2007.

C.14 D. Katselis, **E. Kofidis**, and S. Theodoridis, "Training-based estimation of correlated MIMO fading channels in the presence of colored interference," *IEEE Int'l Symposium on Circuits and Systems (ISCAS-2007)*, New Orleans, LA, USA, May 2007.

C.13 K. Rizogiannis, **E. Kofidis**, C. B. Papadias, and S. Theodoridis, "Semi-blind maximum likelihood joint channel estimation/data detection for MIMO fading channels," *7th IEEE Int'l Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2006)*, Cannes, France, Jul. 2006.

C.12 Y. Kopsinis, S. Theodoridis, and **E. Kofidis**, "An efficient low complexity cluster-based MLSE equalizer for frequency-selective fading channels," *Signal Processing VIII: Theories and Applications (EUSIPCO-2004)***,** Vienna, Austria, Sep. 2004.

C.11 **E. Kofidis**, Y. Kopsinis, and S. Theodoridis, "On the least-squares performance of a novel efficient center estimation method for clustering-based MLSE equalization," *Signal Processing VIII: Theories and Applications (EUSIPCO-2004)***,** Vienna, Austria, Sep. 2004.

C.10 S. Theodoridis, V. Dalakas, **E. Kofidis**, and Y. Kopsinis, "A novel efficient cluster-based maximum-likelihood sequence equalizer for satellite channels," *1st Int'l Conf. Advanced Satellite Mobile Systems (ASMS-2003)*, Frascati, Italy, Jul. 2003.

C.9 ♠**E. Kofidis** and P. A. Regalia, "Spreading sequence design via perfect reconstruction filter banks," *19th Brazilian Telecommunications Symposium (SBrT-2001)*, Fortaleza, Brazil, Sep. 2001.

C.8 **E. Kofidis** and P. A. Regalia, "Design of biorthogonal multi-band FIR filter banks given several of the analysis and synthesis filters," *Signal Processing X: Theories and Applications (EUSIPCO-2000)*, Tampere, Finland, Sep. 2000.

C.7 ♠P. A. Regalia and **E. Kofidis**, "A "unimodal" blind equalization criterion," *Signal Processing X: Theories and Applications (EUSIPCO-2000)*, Tampere, Finland, Sep. 2000.

C.6 P. A. Regalia and **E. Kofidis**, "The higher-order power method revisited: Convergence proofs and effective initialization," *IEEE Int'l Conference on Acoustics, Speech and Signal Processing (ICASSP-2000)*, Istanbul, Turkey, Jun. 2000.

C.5 **E. Kofidis**, S. Theodoridis, and N. Kalouptsidis**,** "Designing FIR perfect-reconstruction systems given several of the analysis and synthesis filters," *13th Int'l Conference on Digital Signal Processing (DSP-97)*, Santorini, Greece, Jul. 1997.

C.4 **E. Kofidis**, S. Theodoridis, C. Kotropoulos, and I. Pitas, "Application of neural networks and order statistics filters to speckle noise reduction in remote sensing imaging," pp. 45–57 in *Neurocomputation in Remote Sensing Data Analysis*, I. Kanellopoulos, D. G. Wilkinson, F. Roli, and J. Austin (Eds.), Springer-Verlag, 1997.

C.3 **E. Kofidis**, S. Theodoridis, and N. Kalouptsidis, "Perfect-reconstruction FIR filter banks with mirror-image symmetry," *IEEE Int'l Conference on Electronics, Circuits, and Systems (ICECS'96)*, Rhodes, Greece, Oct. 1996.

C.2 **E. Kofidis**, S. Theodoridis, and N. Kalouptsidis, "On perfect-reconstruction FIR filter banks," *Signal Processing VIII: Theories and Applications (EUSIPCO-96)***,** Trieste, Italy, Sep. 1996.

C.1 **E. Kofidis**, S. Theodoridis, C. Kotropoulos, and I. Pitas, "Segmentation-based L-filtering of speckle noise in ultrasonic images," *Nonlinear Image Processing V, SPIE'94*, San Diego, CA, USA, Feb. 1994.

Other publications

Articles about using principles and concepts of information and systems sciences to better understand the creation of paintings and their artistic effects. Published in the electronic magazine http://www.prefigurations.com, which is edited by a group of artists in France. Some of the titles (early issues, not available online anymore):

- "La convention invente l'objet" (http://revue.prefigurations.com/numero2vraisemblable/htm2vraisemblable/vrai_II.3%20elefth1.htm),
- "Séries, séquences: convergence, prédiction, et implications pour les arts figuratifs" (Part I: http://revue.prefigurations.com/numero3/htm3serie/serie_I.5eleftherios01.htm, Part II: http://revue.prefigurations.com/numero3/htm3serie/serie_III.3eleftherios2.htm).

APPENDIX B: TEACHING

Teaching Assistantship (at the Computer Engineering and Informatics Dept. (CEID), University of Patras, Greece):

- Undergraduate courses (1991-6):
  1. ***Digital Communications***
  2. ***Digital Signal Processing***
  3. ***Adaptive Algorithms***
  4. ***Linear Systems Theory***
  5. ***DSP lab (MATLAB)***
  6. ***Electrical Instrumentation and Measurement Lab***
- Postgraduate courses (1990-1):
  Probability Theory and Stochastic Processes (seminar)

Teaching as an adjunct or appointed professor (UNIPI: University of Piraeus, UoP: University of Peloponnese, UoA: University of Athens):

- Undergraduate courses:
  - ***Programming Principles and Languages*** *(UNIPI, fall semester 2001-2):* Introduction to computer science; Windows and DOS; Principles of structured programming; C programming; Introduction to object-oriented programming and C++.
  - ***Audio and Image Signal Processing*** *(UNIPI, fall semester 2001-2 and 2002-3):* Image and audio perception; 1-D and 2-D signals (digitization, frequency domain analysis, linear filtering); Enhancement techniques (noise suppression, histogram modification, dithering, halftoning, etc.); Restoration techniques ((pseudo-) inverse filtering, Wiener filtering); Image segmentation; Edge detection and sharpening; Signal representation in the time-frequency domain; Compression techniques; Practice in Matlab.
  - ***Digital Signal Analysis*** *(UNIPI, spring semester 2001-2):* Frequency domain representation of continuous- and discrete-time signals; Fourier transformations and properties; Sampling theory; Discrete-time linear time-invariant systems; Z

transformation; Stability; Introduction to digital filter design and realization; Discrete Fourier Transformation – computation and applications; Introduction to random signal theory; Practice in Matlab.

- ***Calculus I: Functions of one variable*** *(UoP, fall semester 2002-3):* Limit and continuity; Derivatives and their applications; Riemann integrals and their applications; Transcendental functions; Planar analytic geometry; Hyperbolic functions; Polar coordinates.
- ***Signals and Systems*** *(UoP, fall semester 2003-4):* Introduction to signal and system theory; Categorization of signals and systems; Linear time-invariant systems; Convolution; Stability; Fourier series and transformation; Laplace transformation; State space (continuous time); Introduction to discrete-time signals and systems.
- ***Digital Signal Processing*** *(UoP, spring semester 2003-4):* Z transform; Sampling theory; Discrete Fourier Transform (DFT); Fast Fourier Transform; Frequency selective filters; FIR filter design; Finite precision effects.
- ***Computer Lab*** *(UNIPI, fall semester, 2004-2014):* Introduction to Windows; Word and Internet Explorer; Data analysis (descriptive statistics) with Excel.
- ***Numerical Analysis*** *(UNIPI, fall semester, since 2004-5):* Finite precision arithmetic and error analysis; Systems of linear equations – direct and iterative methods; Computing eigenvalues and eigenvectors; Interpolation and polynomial approximation; Nonlinear (systems of) equations – Bisection, fixed-point method, Newton-Raphson; Numerical differentiation and integration; Applications with Mathematica, C, R, and Excel.
- ***Introduction to Computer Programming*** *(UNIPI, spring semester, since 2004):* Introduction to computer architecture and operating systems; Algorithms and their description; Programming principles; The C and R programming languages; C and R programming lab.
- ***Operations Research*** *(UNIPI, spring semester, since 2010-11):* Linear programming (graphical method, simplex method and variants); Duality and sensitivity analysis; Transportation and assignment problems; Network analysis (shortest path, minimum spanning tree, max flow); Applications with Excel/Solver.
- ***Topics in Data Science*** *(UNIPI, Co-teaching, fall semester, since 2020-21):* Machine learning and data mining ideas and methods (classification, clustering, association rule mining, dimensionality reduction, matrix and tensor factorization, deep learning); Parallel and distributed very large database systems; Data privacy; Applications (including in social networks); Lab (Weka, Python).

- Postgraduate courses:
  - ***Pattern Recognition*** *(UoA, Co-teaching, spring semester 2001-2):* Bayes estimation theory; Optimal and suboptimal classifiers; Feature generation; Linear orthogonal transforms; Feature selection; Clustering techniques; Matlab project.
  - ***Statistical Software*** *(UNIPI, Co-teaching, fall semester 2005-6 to 2009-10):* Statistical data analysis with the aid of Excel, SPSS, R.
  - ***Special Topics in Data Analysis*** *(UNIPI, Co-teaching, fall semester 2005-6):* Statistical methods for data mining; Applications with XLMiner.
  - ***Time Series Analysis and Applications*** *(UoA, spring semester 2019-20)*: Theory, algorithms and applications of time series analysis; Applications with R.