

**Prof. MARIA N. RANGOSSI**  
**CURRICULUM VITAE**



**I. PERSONAL DATA**

Born: April 18, 1964 / Athens, Greece  
Nationality: Greek  
Current Employment: Professor,  
Department of Electrical and Electronics Engineering,  
Faculty of Engineering, University of West Attica,  
250, Thivon str., Athens-Egaleo, GR-12241, Greece  
Marital status: Married - 2 children  
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**II. STUDIES**

- 1991-1994 PhD in Digital Signal Processing & Pattern Recognition, Information Technology Sector, Department of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece.  
PhD Thesis: “*New techniques for the detection of speech in adverse noise conditions and for the recognition of plosive sounds*”, Supervisor: Prof. George Carayannis†.
- 1988-1990 MSc in Electrical Engineering (Major: Digital Signal Processing, Minor: Automatic Control), Department of Electrical Engineering, University of Virginia, Virginia, USA, under a scholarship from The Fulbright Foundation. GPA: 4.0 / 4.0.  
MSc Thesis: “*Signal reconstruction algorithms and the use of higher order statistics*”, Supervisor: Prof. Georgios B. Giannakis.
- 1982-1987 Diploma of Electrical Engineer (5-year curriculum, specialization field: Information Technology), Department of Electrical Engineering, NTUA, Athens, Greece. Grade: 8.2 / 10.00.  
Diploma Thesis: “*Over-determined systems and Singular Value Decomposition in modern spectral analysis*”, Supervisor: Prof. George Carayannis†.

**Languages:**

- Greek (mother tongue) / English, C2 level (Cambridge Proficiency, 1980) / French, B2 level (Certificat, 1984).

**Scholarships:**

- Grant for graduate studies in the USA from the Fulbright Foundation, 1988, (2 years).
- Fellowship of the Dean, School of Engineering and Applied Science, University of Virginia, USA, 1988-89.
- Research grant, Research Institute EUROTRA, Greece, for research in speech technology, 1993 (7 months).
- Research grant, Institute of Language and Speech Processing (ILSP), Athens, Greece, for research in digital speech processing, 1990 (5 years).

**Research Interests and Specialization Areas:**

Digital signal processing (linear and non-linear methods), spectral and time-frequency/time-scale analysis, signal detection, pattern recognition / classification, linear and non-linear system modeling, noise mapping & control, biomedical signal and image processing, speech and audio analysis/processing/recognition, automatic fault detection and classification in production processes, non-linear classifiers (ANNs, fuzzy-logic, SVMs), intelligent systems and materials characterization and modeling, environmental signals monitoring and analysis, Electric Power Quality monitoring methods, E-learning and Educational Technologies, Educational data mining and visualization, Learning Analytics, Affective computing in Education.

- Publications h-index: 11 (Scopus) / 17 (Google Scholar)
- Citations: 803 (Scopus) / 1754 (Google Scholar).

**III. PROFESSIONAL and RESEARCH ACTIVITIES**

**Brief description of jobs / positions held:**

- Freelance Electrical Engineer and Research Engineer, Athens, Greece, 1990 – 1998.
- Academic Staff, Department of Electronics Eng., Piraeus University of Applied Sciences, Greece: Assistant Professor (1998-2003), Associate Professor (2003-2007), Professor (2007-2/2018).

- Academic Staff, Department of Electrical and Electronics Eng., University of West Attica, Greece: Professor (3/2018 - ...).

#### **Positions held in academic administration:**

- Project leader for the University of West Attica project “PROSVASI: Support of Social Welfare Interventions for the students of the University of West Attica”, *funding*: Greek Ministry of Education via the Greek National Strategic Reference Framework – Call 97, budget 890,000 € (2019 – 2023).
- Director, MSc by Research in Electrical and Electronics Engineering, Dept. of Electrical and Electronics Eng., University of West Attica (9/2018 - ...).
- Director, MSc in Internetworked Electronic Systems, Dept. of Electronics Eng., Piraeus University of Applied Sciences (9/2015 – 2/2018) and University of West Attica (3/2018 – ...).
- Dean, Faculty of Engineering, Piraeus University of Applied Sciences, (4-year term, 1/9/2010-31/8/2014).
- Head, Department of Electronics Eng., Piraeus University of Applied Sciences, (2006-07 to 2007-08 and 2008-09 to 2009-10).
- Head, Division A “Electronics and Computers”, Department of Electronics Eng., Piraeus University of Applied Sciences, (1999-2006).

#### **Teaching Experience:**

- Adjunct Lecturer, Institute for Electronic Systems, Aalborg University, Aalborg, Denmark, (1995-96, 1996-97):
  - “Advanced stochastic models for signal processing”, MSc course
- Adjunct assistant professor, (employed under law 407/1980), Communications Lab, Dept. of Electronics and Computer Engineering, Technical University of Crete, Chania, Greece, (1996):
  - “Computer Networks (Laboratory)”, 8<sup>th</sup> semester undergraduate
- Piraeus University of Applied Sciences academic staff (1998 – 2018), undergraduate courses taught (lectures and laboratory instruction):
  - “Electric Circuits I”, 1<sup>st</sup> semester
  - “Electric Circuits II”, 2<sup>nd</sup> semester
  - “Analog Electronics I”, 2<sup>nd</sup> semester
  - “Analog Electronics II”, 3<sup>rd</sup> semester
  - “Analog Electronics III”, 4<sup>th</sup> semester
  - “RF Electronic Circuits Design”, 4<sup>th</sup> semester
  - “Digital Signal Processing”, 5<sup>th</sup> semester
  - “Automatic Control Systems I”, 6<sup>th</sup> semester
  - “Automatic Control Systems II”, 7<sup>th</sup> semester
  - “Intelligent Control Systems”, 7<sup>th</sup> semester.
- University of West Attica academic staff (2018 - ...), undergraduate courses taught (lectures and laboratory instruction):
  - “Analog Electronics II”, 3<sup>rd</sup> semester.
  - “Computer Systems Architecture”, 4<sup>th</sup> semester
  - “Algorithms and Data Structures”, 5<sup>th</sup> semester
  - “Digital Signal Processing”, 7<sup>th</sup> semester
  - “Digital Automatic Control Systems”, 9<sup>th</sup> semester
  - “Biomedical Technology”, 9<sup>th</sup> semester
- Piraeus University of Applied Sciences / University of West Attica academic staff, graduate (MSc) courses taught:
  1. “*Biomedical Signal and Image Analysis*” in the MSc Programme “Health Informatics” run by the Department of Nursing, **National and Kapodistrian University of Athens**, (1998-2009, 11 academic years),
  2. “*E-learning Systems and Tele-education Technologies*” in the Joint MSc programme “Information and Communication Technologies in Education”, **National and Kapodistrian University of Athens**, University of Thessaly, Piraeus University of Applied Sciences (as of 3/2018, University of West Attica) (9/2005-...).
  3. “*Green and Energy-aware Electronic Systems*”, in the MSc programme “Internetworked Electronic Systems”, Department of Electronics Engineering, **Piraeus University of Applied Sciences**, (as of 3/2018, University of West Attica), (2015-2018, 3 academic years).

4. “*Educational Data: Mining-Analytics-Visualization*”, in the programme “MSc by Research in Electrical and Electronics Engineering”, Department of Electrical and Electronics Engineering, **University of West Attica** (9/2018 - ...)
5. “*Knowledge Representation and Big Data*”, in the Joint MSc programme “Artificial Intelligence and Deep Learning”, Department of Electrical and Electronics Engineering & Department of Industrial Design and Production, **University of West Attica** (3/2021 - ...)
6. “*Signal Processing, Pattern Recognition and Machine Learning*”, in the Joint MSc programme “Artificial Intelligence and Deep Learning”, Department of Electrical and Electronics Engineering & Department of Industrial Design and Production, **University of West Attica** (3/2021 - ...)

### **Research Experience:**

- Research Engineer, “Development of an integrated platform for text to speech conversion”, *tender*: DSP Lab, Dept. of Electrical Engineering, NTUA, *funding*: E.U. ESPRIT-I Project 64 “SPIN: Speech Automation in Office Workstation”, (1988).
- Research Engineer, “Fast algorithms and Multi-Processing in Pattern recognition and signal processing”, *tender*: Dept. of Electrical Engineering, NTUA, *funding*: General Secretariat for Research and Technology (GSRT), Min. of Development, PENED 89/201, (1991-1993).
- Research engineer, “NIKA: An integrated system for processing and management of medical images”, *tender*: Dept. of Electrical Engineering, NTUA, *funding*: GSRT, Min. of Development, EPET-II, (1996).
- Research Engineer, “Design, Implementation and Deployment of the Univ. of Piraeus Computer Network”, *tender*: University of Piraeus, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-I, (1996-98).
- Research Engineer, “EUDOXUS: Tele-training of secondary education teachers on East Aegean Islands”, *tender*: Univ. of Piraeus & Univ. Aegean, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-I, (1999).
- Project leader for PUAS, “Digital System for Automatic Surveillance of TV and radio content”, *tender*: Image, Video and Multimedia Lab, NTUA and Dept. of Electronics, PUAS, *funding*: GSRT, Min. of Development & MDM S.A., Greece, PABE’99, (1999-2000).
- Project leader “Electrically conductive fabrics”, *tender*: Dept. of Electronics Eng., PUAS, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-II “Archimedes-I” (1/2004 – 12/2006).
- Research engineer, “Data analysis for the NA49/SPS experiment and development of electronic sub-systems for the TPC/TRD detectors of the ALICE/LHC Experiment,” *tender*: Dept. of Physics, Univ. of Athens, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-II “Pythagoras-II” (1/2005 – 12/2006).
- Research engineer, “Telecontrolled intelligent robot in a mixed reality environment,” *tender*: Dept. of Electrical and Computer Eng., Aristotle Univ. of Thessaloniki, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-II “Pythagoras-II” (2005 – 2006).
- Research engineer, “Noise pollution suppression in work/public environments using a digital active noise control system,” *tender*: Dept. of Electronics Eng., PUAS, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-II “Archimedes-II-Environment” (1/2005 – 8/2008).
- Research engineer, “Development of novel technologies for the spectrum control of Organic Light Emitting Diodes and applications in advanced optoelectronic devices,” *tender*: Dept. of Electronics Eng., PUAS, *funding*: Min. of Education and E.E./ESF, O.P. EPEAEK-II “Archimedes-II” (1/2005 – 8/2008).
- Research engineer, “PIMACTex: Applications of textile products based on smart materials on the monitoring, display and control of physiological parameters”, *coordinator*: Dept. of Electronics Eng., PUAS, *funding*: GSRT, Min. of Development and E.U./ERDF, O.P. «Competitiveness and Entrepreneurship» (OPCE II). Total budget 600,000 €, (2011-2015).
- Project leader for (partner) PUAS, “SENS-ERA: Strengthening sensor research links between the Georgian Technical University and the European Research Area,” *coordinator*: Georgian Technical University (GTU), *funding*: E.U., FP7-INCO-2011-6.1, ERA WIDE. Total budget 693,000 €, (2011-2013).
- Research engineer, “SAVELEC: Safe control of non cooperative vehicles through electromagnetic means”, *coordinator*: Institute of the Technological Applications through Advanced Communications (ITACA), Polytechnic University of Valencia, partners: Deutsches Zentrum Fuer Luft - und raumfahrtev, MBDA France S.A, IMST GmbH, PUAS, BCB Informática y Control S.L, Statens Vag-Och Transportforskningsinstitut, Otoo-Vov-Guericke-Universitat Magdeburg, Akadémia ozbrojených síl gen. M.R. Štefánika, Hellenic Aerospace Industry SA, *funding*: EU FP7-SEC-2011.1.4-2: Innovative techniques for safe external control of non cooperative vehicles. Total budget: 3.395.416 €, (2011- 2016).

- Research team member, “FLARETEX: Sustainable flame retardancy for textiles and related materials based on nanoparticles substituting conventional chemicals” Cost Action MP-1105. Coordinator: University of Ghent, partners: Universities from 22 countries, (2011-2014).
- Project Leader, “ESOUNDMAPS: A distributed microelectronic system for environmental monitoring with emphasis on sound mapping,” coordinator: Dept. of Electronics Eng., PUAS, partners: National and Kapodistrian University of Athens, Department of Informatics and Telecommunications, University of Patras, Department of Electrical and Computer Engineering, *funding*: greek Ministry of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “Archimedes-III” Budget: 100,000 €, (2012-2015).
- Research engineer, “NPQFM: Model Development for Power Quality assessment in Electric Networks using Fuzzy Logic and Analytic Measurements,” coordinator: Dept. of Electronics Eng., PUAS, partners: National Technical University of Athens, Center for Renewable Energy Sources (CRES), *funding*: greek Ministry of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “Archimedes-III”, Budget: 100,000 €. (2012-2015).
- Research engineer, “BRITE-GREEN: Energy autonomous smart greenhouse”, coordinator: KlimaLeviTechniki S.A., partners: Brite Hellas S.A., BlueDev S.A., FORTH-ICEHT, NAGREF, Dept. of Electronics Eng., PUAS, TEI of Patras, *funding*: greek Min. of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “COOPERATION 2011”. Total budget: 2,454,401 €, (2012-2015).
- Research engineer, “CT-AudioLink: Improving aural cultural links between different lingual communities in Thrace”, European Economic Area Financial Mechanism (EEA FM) 2009-2014, Priority sector “Diversity, inequalities and social inclusion”, Programme Area: GR07 – Academic Research, Coordinator: University of Patras, partner: Dept of Electronics Eng., PUAS. *Funding*: EU/GSRT, Total budget 200,000 €, (2015-2016).
- Research engineer, “TRILLION: TRusted, Citizen -LEA coILaboratIon over sOcial Networks”, H2020 – Security, Research and Innovation Actions, partner: Dept of Electronics Eng., PUAS. *Funding*: EU through the GSRT, Total budget 4,263,408 €, (2015-2018).
- Research engineer, “STORM: Safeguarding Cultural Heritage through Technical and Organisational Resources Management”, HORIZON 2020, DRS-11-2015, no 700191. Partner: Dept of Electronics Eng., PUAS. *Funding*: EU through the GSRT, Total Budget: 7,297,875 €, (2015-2018).
- Research engineer, “ETexWeld: Welding of E-Textiles for Interactive Clothing”, *funding*: H2020 MARIE CURIE - Research and Innovation Staff Exchange (RISE), Coordinator: Istanbul Technical University, Turkey, partner: Dept of Electronics Eng., PUAS. Total budget: 913,500 €, (2015-2018).
- Research engineer, “T-CREPE: Textile Engineering for Co-creation Paradigms in Education”, *funding*: EU / ERASMUS+, Project Leader: Prof. Lieva Van Langenhove, Ghent University, Belgium. Partners: UNIWA/Greece, NKUA/Greece, LUT/Finland, and a group of six EU companies (11/2019-10/2022).
- Academic co-advisor, “EMPEDU: Deep Learning techniques applied in partially tagged sensor data for gesture recognition,” *funding*: greek Min. of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “EDULLL-103”, Total budget: 45,545.50 € (2018-2021).
- Project coordinator for partner UNIWA, “EDUSEISMARTTEC: Educational Seismology for school and society: A multidisciplinary approach through innovative theatre education methods and digital technologies”, *funding*: H.F.R.I. (Hellenic Foundation for Research and Innovation), Project Leader: Dr. Ioannis Kalogeras, National Observatory of Athens – Institute of Geodynamics. Partners: UNIWA, University of Peloponnese (12/2019-11/2022).

***Member of technical and scientific organizations committees:***

- Technical Chamber of Greece, (1988),
- Greek Chapter of Mechanical and Electrical engineers, (1988),
- IEEE Signal Processing Society (1988),
- International Speech Communication Association (ISCA) (1993),
- Audio Engineering Society (2015),
- Greek Institute of Acoustics (ELINA, 2015).

***Reviewer for the journals:***

IEEE Transactions on Signal Processing, Signal Processing (EURASIP), IEEE Transactions on Circuits and Systems, International Journal of Adaptive Control and Signal Processing, IEEE Signal Processing Letters, IEEE Trans. on Biomedical Engineering, etc.

**Member of International Conference organizing committees:**

- 8<sup>th</sup> IEEE Global Engineering Education Conference (**IEEE-EDUCON 2017**), Athens, Greece, April 25-28, 2017 (<http://www.educon-conference.org/educon2017/>) / Local Organizing Committee.
- Intl. Conf. “Science in Technology” (**SCINTE-2015**), National Research Center, Athens, Greece, Nov. 5-7, 2015, Intl. Scientific Committee, Electrical Engineering, Computer Science and Telecommunications.
- 9<sup>th</sup> Mediterranean Conf. on Power Generation, Transmission, Distribution and Energy Conversion (**MedPower 2014**), co-organized by the IET (Cyprus, Hellas, Israel), NTUA/Greece and TEI Piraeus, November 5-7, 2014, TEI Piraeus, Athens-Egaleo, Greece / International Advisory Committee, (<http://medpower2014.ntua.gr/#> )
- 25<sup>th</sup> Intl. Conf. **EUROSENSORS XXV** - 2011, organized by NCSR "Demokritos" in Athens, Greece, 4-7 Sept. 2011, (<http://www.euroensors2011.org/content.php>) / Local Program Committee.
- 7<sup>th</sup> Mediterranean Conf. on Power Generation, Transmission, Distribution and Energy Conversion (**MedPower 2010**), co-organized by the IET (Cyprus, Hellas, Israel), NTUA/Greece and the University of Nicosia / Cyprus, November 7-10, 2010, Agia Napa, Cyprus / International Advisory Committee, (<http://cyprusconferences.org/medpower2010> )
- 6<sup>th</sup> Mediterranean Conf. on Power Generation, Transmission and Distribution (**MedPower 2008**), co-organized by the IET (Cyprus, Hellas, Israel), NTUA/Greece and the Aristotle University of Thessaloniki / Greece, November 5-8, 2008, Thessaloniki, Greece / Intl Advisory Comm., (<http://www.medpower08.com> )
- 12<sup>th</sup> Intl. Workshop on Systems, Signals and Image Processing 2005 (**IWSSIP'05**) organised by the Technological Education Institute of Chalkida, Greece, in cooperation with IEEE, IEEE Region 8, IEE, IEEE Greece Section Chapters of Signal Processing and Computer and EURASIP, in Chalkida, Greece, 22-24 Sept. 2005 (<http://www.teihal.gr/iwssip05/index.htm>)/ Organizing Committee (Proceedings chair).
- 8<sup>th</sup> IEEE Signal Processing Workshop on Statistical Signal and Array Processing, (**IEEE-SSAP'96**), Corfu, Greece, June 24-26, 1996 (<http://www.computer.org/portal/web/csdl/proceedings/s#4>)/Organizing Committee (Local Arrangements).

**PhD Theses - Supervising committee member:**

1. PhD thesis: “Automated analysis of digitized mammograms for the recognition of pathologies,” Digital Image Processing Lab., Department of Nursing, **National and Kapodistrian University of Athens**, Greece (2000-2003), candidate: Halkiotis, Stylianos – PhD conferred: 2003.
2. PhD thesis: “Investigation of the usage of I.C.T. by greek museums in relation to school population”, Faculty of Early Childhood Education, **National and Kapodistrian University of Athens**, Athens, Greece, (2011 – 2020), candidate: Manoli, Vaya – PhD conferred: 2020.
3. PhD thesis: “Fuzzy cognitive maps in distance and collaborative learning and evaluation: the case of technological education”, Department of Production and Management Engineering, **Democritus University of Thrace**, Xanthi, Greece, (2011 - today), candidate: Charitopoulos, Angelos.
4. PhD thesis: “Web 2.0 tools usage in educational action research: Design of a school website, management and content development in Joomla for the classroom,” Faculty of Early Childhood Education, **National and Kapodistrian University of Athens**, Athens, Greece, (2016 - today), candidate: Vardalahou, Evangelia – PhD conferred: 2021.
5. PhD thesis: “Class management at the greek public primary school level: design, development implementation and evaluation of an integrated electronic environment for teachers, pupils and parents,” Faculty of Early Childhood Education, **National and Kapodistrian University of Athens**, Athens, Greece, (2016 - ...), candidate: Kintsakis, Diamantis.
6. PhD thesis: “Federated learning techniques over sensor data, ensuring privacy protection”, Department of Electrical and Electronics Engineering, **University of West Attica**, (2018 - ...), candidate: Chatzigeorgiou, Christos, PHD18387053.
7. PhD thesis: “Contribution to the training of Electrical and Electronic Engineers using innovative Virtual Reality and Augmented Reality”, Department of Electrical and Electronics Engineering, **University of West Attica**, (2020 - ...), candidate: Zontou, Evangelia, PHD18387061.
8. PhD thesis: “Intelligent monitoring, processing and earthquake alert systems”, Department of Electrical and Electronics Engineering, **University of West Attica**, (2020 - ...), candidate: Liadopoulos, Efstratios, PHD18387053.

**PhD Theses - Supervisor:**

1. PhD thesis "Affective Computing and the use of Pedagogical Agents in E-learning", Department of Electrical and Electronics Engineering, **University of West Attica**, (2019 - ...), candidate: Papoutsi, Fani, PHD18387030.
2. PhD thesis "Innovative and green methods in Electrical and Electronics Engineering education: Recyclo-structivistic instruction" Department of Electrical and Electronics Engineering, **University of West Attica**, (2019 - ...), candidate: Nikoloudakis, Nikolaos, PHD18387017.
3. PhD thesis "Augmented/Virtual Reality Environments for psychological and cognitive tests using neurofeedback" Department of Electrical and Electronics Engineering, **University of West Attica**, (2019 - ...), candidate: Maragkou, Vaia, PHD18387026.
4. PhD thesis "Recommendation Systems in E-learning platforms", Department of Electrical and Electronics Engineering, **University of West Attica**, (2021 - ...), candidate: Siafis, Vissarion.

## IV. PUBLICATIONS

### Journal papers (refereed)

- [P1] **M.Rangoussi**, G.B.Giannakis, "FIR Modeling using Log-Bispectra: Weighted Least-Squares Algorithms and Performance Analysis," *IEEE Trans. on Circuits and Systems*, vol. 38, pp. 281-296, March 1991.
- [P2] **M.Rangoussi**, S.Bakamidis, G.Carayannis, "On the use of SVD and high-order statistics for robust endpoint detection of speech," in *Levels in Speech Communication: relations and interactions*, Ed. C.Sorin et al., pp. 267-279, Elsevier, Brussels, 1995.
- [P3] **M.Rangoussi**, G.Carayannis, "Adaptive detection of speech using third-order statistics," *Intl. Journal of Adaptive Control and Signal Processing*, Special Issue on Adaptive Signal Processing and Higher Order Statistics, Wiley, vol. 10, no. 2/3, pp. 113-136, March-June 1996.
- [P4] M.Poulos, **M.Rangoussi**, N.Alexandris, A.Evangelou, "On the use of EEG features towards person identification via Neural Networks," *Medical Informatics & the Internet in Medicine*, (now: "Informatics for Health and Social Care"), vol. 26, No 1, pp. 35-48, January 2001.
- [P5] M.Poulos, **M.Rangoussi**, N.Alexandris, A.Evangelou, "Person Identification from the Electroencephalogram using non-linear signal classification," *Methods of Information in Medicine*, vol. 41, No. 1, pp. 64-75, January 2002.
- [P6] M.Poulos, **M.Rangoussi**, V.Chrissikopoulos, A.Evangelou, F.Georgiacodis, "Comparative analysis of the Computational Geometry and Neural Network Classification Methods for person identification purposes via the EEG, Part I," *Journal of Discrete Mathematical Sciences and Cryptography*, vol. 7, No. 3, Dec. 2004, pp. 319-347.
- [P7] A.Çay, S.Vassiliadis, **M.Rangoussi**, I.Tarakçioğlu, "On the Use of Image Processing Techniques for the Estimation of the Porosity of Textile Fabrics," *International Journal of Signal Processing*, vol. 1, No. 1, pp. 51-54, 2005.
- [P8] G.Karkavitsas, M.Rangoussi, "Object localization in medical images using genetic algorithms," *International Journal of Signal Processing*, vol. 1, No. 4, pp. 204-207, 2005.
- [P9] K.Prekas, **M.Rangoussi**, S.Vassiliadis, G.Prekas, "Performance of laboratory experiments over the Internet: towards an Intelligent Tutoring System on Automatic Control," *International Journal of Signal Processing*, vol. 1, No. 4, pp. 208-211, 2005.
- [P10] M.Poulos, E.Kafetzopoulos, **M.Rangoussi**, F.Georgiacodis, "Statistical evaluation of Computational Geometry and Neural Network Classification Methods for person identification purposes via the EEG," *Journal of Discrete Mathematical Sciences and Cryptography*, vol. 8, No. 1, Apr. 2005, pp. 27-47.
- [P11] N.Stathopoulos, S.Savvaiddis, M.Rangoussi, "Propagation characteristics of nonlinear waveguides with complex refractive index using a transmission line model", *Optical and Quantum Electronics*, vol. 38, no. 8, pp. 683-699, June 2006.
- [P12] A.Çay, S.Vassiliadis, **M.Rangoussi**, I.Tarakçioğlu, "Prediction of the air permeability of woven fabrics using neural networks", *International Journal of Clothing Science and Technology*, vol. 19, no. 1, pp. 18-35, 2007.

- [P13] S.Halkiotis, T.Botsis, **M.Rangoussi**, "Automatic detection of clustered microcalcifications in digital mammograms using mathematical morphology and neural networks", *Signal Processing*, Volume 87, Issue 7, pp. 1559-1568, July 2007.
- [P14] I.Paraskevas, **M.Rangoussi**, "The Hartley phase cepstrum as a tool for signal analysis," *Lecture Notes in Computer Science* (including subseries *Lecture Notes in Artificial Intelligence* and *Lecture Notes in Bioinformatics*), vol. 4885 LNAI, pp. 204-212, 2007.
- [P15] I.Paraskevas, **M.Rangoussi**, S.M.Potirakis, S.Savvaiddis, "Phase spectral processing for improved time-domain soft microphone based noise estimation," *Acoustical Society of America, Proceedings of Meetings on Acoustics (POMA)*, electronic publication, vol. 4, 2008.
- [P16] S.Vassiliadis, **M.Rangoussi**, A.Cay and C.Provatidis, "Artificial Neural Networks and Their Applications in the Engineering of Fabrics," in *Woven Fabric Engineering*, Book edited by: Polona Dobnik Dubrovski, ISBN: 978-953-307-194-7, Publisher: SCYIO, pp. 111-134, November 2010.
- [P17] I.Paraskevas, S.M.Potirakis, I.Liaperdos, **M.Rangoussi**, "Automatically Updated Sound-maps as a tool for environmental monitoring: Research in progress," *Soundscape (The Journal of Acoustic Ecology)*, vol. 11, no. 1, Fall-Winter 2011, pp.57-58, (ISSN 1607-3304, on-line at [http://wfae.proscenia.net/journal/scape\\_16.pdf](http://wfae.proscenia.net/journal/scape_16.pdf)).
- [P18] I.Paraskevas, S.M.Potirakis, I.Liaperdos, **M.Rangoussi**, "Development of Automatically Updated Soundmaps for the Preservation of Natural Environment," *Journal of Environmental Protection*, vol. 2, pp. 1388-1391, Dec. 2011 (on-line journal).
- [P19] I.Paraskevas, **M.Rangoussi**, "Frequency domain feature extraction for audio classification using the Hartley Transform," *Open Journal of Acoustics*, vol. 2, pp. 131-142, 2012 (on-line journal).
- [P20] S.M.Potirakis, N.-A.Tatlas, N.Zafeiropoulos, T.Ganchev, **M.Rangoussi**, "Assessment of military intercom headsets for maximum voice reproduction level in high noise conditions," *Applied Acoustics*, Elsevier, vol. 74, issue 6, pp.870-881, June 2013.
- [P21] K.Prekas, T.Shah, N.Soin, **M.Rangoussi**, S.Vassiliadis, E.Siores, "Sedimentation behaviour in electrorheological fluids based on suspensions of zeolite particles in silicone oil," *Journal of Colloid and Interface Science*, vol. 401, July 2013, pp. 58-64.
- [P22] N.A.Stathopoulos, S.P.Savaiddis, H.Simos, **M.Rangoussi**, P.Kervalishvili, "Simulation and Properties of Erbium-Doped Distributed Bragg Reflectors (ED-DBR) and Fiber Bragg Gratings (ED-FBG)", *Optical Fiber Technology*, vol. 19, issue 5, pp.369-377, October 2013.
- [P23] S.M.Potirakis, B.Nefzi, N.-A.Tatlas, G.Tuna, **M.Rangoussi**, "A wireless network of acoustic sensors for environmental monitoring", *Key Engineering Materials*, 605, pp. 43-46, 2014, doi: 10.4028/www.scientific.net/KEM.605.43.
- [P24] S.M.Potirakis, B.Nefzi, N.-A.Tatlas, G.Tuna, **M.Rangoussi**, "Design Considerations for an Environmental Monitoring Wireless Acoustic Sensor Network", *Sensor Letters*, vol. 12, pp.1-7, 2014.
- [P25] Melike Yigit, V. Cagri Gungor, Gurkan Tuna, **Maria Rangoussi**, Etimad Fadel, "Power line communication technologies for smart grid applications: A review of advances and challenges", *Computer Networks*, Elsevier, vol. 70, pp. 366-383, 9 Sept. 2014.
- [P26] N.-A.Tatlas, S.M.Potirakis, S.A.Mitilineos, **M.Rangoussi**, "On the effect of compression on the complexity characteristics of wireless acoustic sensor network signals", *Signal Processing*, Elsevier, vol. 107, no. 2 pp.153-163, 2/2015.
- [P27] S.A.Mitilineos, S.M.Potirakis, N.-A.Tatlas, **M.Rangoussi**, "High-Level Sound Classification in the ESOUNDMAPS Project", *Key Engineering Materials*, 644, pp. 83-86, 2015, doi:10.4028/www.scientific.net/KEM.644.83.
- [P28] N.-A.Tatlas, D.Ballios, S.M.Potirakis, C.Charitou, S.Koutroubinas, **M.Rangoussi**, "A smart sensor platform for Greenhouse applications", *Key Engineering Materials*, 644, pp. 92-95, 2015, doi:10.4028/[www.scientific.net/KEM.644.92](http://www.scientific.net/KEM.644.92).
- [P29] S.Vassiliadis, P.Papadopoulos, **M.Rangoussi**, T.Konieczny, J.Gralewski, "Bitcoin Value Analysis Based on Cross-Correlations," *Journal of Internet Banking and Commerce*, Special issue "Special Issue: Global Strategies in Banking and

Finance", vol. 22, no. S7, Jan. 2017 (available on-line at <http://www.icommercecentral.com/open-access/bitcoin-value-analysis-based-on-crosscorrelations.php?aid=85536> ).

- [P30] S.Mitilineos, S.Potirakis, N.-A.Tatlas and **M.Rangoussi**, "A Two-Level Sound Classification Platform for Environmental Monitoring," *Journal of Sensors*, Hindawi Publ. (Open Access), Article ID 5828074, Volume 2018.
- [P31] M. Feidakis, **M. Rangoussi**, P. Kasnesis, Ch. Patrikakis, D. G. Kogias, A. Charitopoulos, "Affective Assessment in Distance Learning: a semi-explicit approach," *The International Journal of Technologies in Learning*, vol. 26, no. 1, pp. 19-34, 2019.
- [P32] S.A. Mitilineos, N.-A. Tatlas, S.M. Potirakis, **M. Rangoussi**, "Neural network fusion and selection techniques for noise-efficient sound classification," *AES: Journal of the Audio Engineering Society*, vol. 67, pp. 27-37, 2019.
- [P33] A. Charitopoulos, **M. Rangoussi**, D. Koulouriotis, "On the Use of Soft Computing Methods in Educational Data Mining and Learning Analytics Research: a Review of Years 2010-2018," *International Journal of Artificial Intelligence in Education*, 30(3), pp. 371-430, 2020. (<https://doi.org/10.1007/s40593-020-00200-8>).
- [P34] P. Kasnesis, C. Chatzigeorgiou, C. Patrikakis, **M. Rangoussi**, "Modality-wise relational reasoning for one-shot sensor-based activity recognition," *Pattern Recognition Letters*, 146, pp. 90-99, 2021.

## Book chapters

- [B1] **M. Rangoussi**, A. Cay, "Non-linear approaches in Textiles: The Artificial Neural Networks example", in S.Vassiliadis (Ed.) "Electronics and Computing in Textiles", Ventus Publishing ApS, ISBN 978-87-403-082-0 (open access in <http://bookboon.com/en/textbooks>).

## Conference Proceedings (refereed)

- [C1] M.Dendrinis, **M.Rangoussi**, G.Carayannis, "Overdetermined Spectral Analysis of short data records," *IEEE Proc. International Symposium on Circuits and Systems 1988*, pp. 1585-1588, Espoo, Finland, September 1988.
- [C2] **M.Rangoussi**, G.B.Giannakis, "On the use of second- and higher-order inverse statistics," *Proc. of Higher-Order Statistics Analysis Workshop*, pp. 7-12, Vail, Colorado, USA, June 1989.
- [C3] **M.Rangoussi**, G.B.Giannakis, "FIR Modeling using Log-Bispectra: Weighted Least-Squares Algorithms and performance analysis," *IEEE Proc. Intl. Conference on Acoustics, Speech and Signal Processing (ICASSP'90)*, pp. 2399-2402, Albuquerque, New Mexico, USA, 1990.
- [C4] S.Salamouris, **M.Rangoussi**, "Cepstral Domain Post-Processing leads to better evaluation of the Loudspeaker Impulse Response measured in reverberant rooms," *Proc. Intl. Conf. Audio Engineering Society (AES'93)*, Berlin, March 1993.
- [C5] **M.Rangoussi**, A.Delopoulos, M.K.Tsatsanis, "On the use of higher order statistics for robust endpoint detection of speech," *IEEE Proc. Workshop on HOS*, pp. 56-60, Cal., USA, June 1993.
- [C6] **M.Rangoussi**, S.Bakamidis, G.Carayannis, "Robust endpoint detection in the presence of noise," *ESCA Proc. Intl. Conf. EUROSPEECH'93*, pp. 649-652, Berlin, Germany, September 1993.
- [C7] **M.Rangoussi**, G.Carayannis, "Higher-order statistics-based Gaussianity test applied to on-line speech processing," *Proc. 28th Asilomar Conference on Signals, Systems and Computers*, Monterey, California, USA, October 1994.
- [C8] **M.Rangoussi**, A.Delopoulos, "Recognition of unvoiced stops from their time-frequency representation," *IEEE Proc. Intl. Conf ICASSP'95*, pp. 792-795, Detroit, USA, May 1995.
- [C9] **M.Rangoussi**, A.Delopoulos, "Classification of consonants using Wigner distribution features," *Proc. Intl. Conf. on Digital Signal Processing (DSP'95)*, pp. 78-83, Limassol, Cyprus, June 1995.
- [C10] **M.Rangoussi**, F.Pedersen, "Second- and third-order Wigner distributions in hierarchical recognition of speech phonemes," *ESCA Proc. Intl. Conf. EUROSPEECH'95*, pp. 259-262, Madrid, Spain, September 1995.



- [C11] B.Upshaw, **M.Rangoussi**, T.Sinkjaer, "Detection of human nerve signals using higher-order statistics," IEEE Proc. Workshop on Statistical Signal and Array Processing (SSAP'96), pp. 186-189, Corfu, Greece, June 1996.
- [C12] A.Delopoulos, **M.Rangoussi**, J.Andersen, "Recognition of voiced speech from the bispectrum," Proc. Intl. Conf. EUSIPCO'96, pp. 117-120, Trieste, Italy, September 1996.
- [C13] A.Delopoulos, **M.Rangoussi**, "Cumulants of a multidimensional process observed at rationally related resolutions," Proc. Intl. Conf. on Sampling Theory and Applications (SAMPTA'97), pp. 205-210, Aveiro, Portugal, June 1997.
- [C14] A.Delopoulos, **M.Rangoussi**, D.Kalogeras, "Fractional sampling rate conversion in the third-order cumulant domain and applications," Proc. Intl. Conf. on Digital Signal Processing (DSP'97), pp. 157-160, Santorini, Greece, July 1997.
- [C15] A.Delopoulos, **M.Rangoussi**, "The fractal behaviour of unvoiced plosives: a means for classification," ESCA Proc. Intl. Conf. EUROSPEECH'97, pp. 457-460, Rhodes, Greece, September 1997.
- [C16] M.Poulos, **M.Rangoussi**, E.Kafetzopoulos, "Person Identification via the Electroencephalogram using Computational Geometry Algorithms," Proc. ESCA Intl. Conf. IX European Signal Processing Conference (EUSIPCO'98), vol. 4, pp. 2125-2128, Rhodes, Greece, September 1998.
- [C17] M.Poulos, **M.Rangoussi**, N.Alexandris, "Neural Network based Person Identification using Electroencephalogram features," Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing (ICASSP'99), vol. 2, pp. 2089-2091, Phoenix, Arizona, USA, March 1999.
- [C18] M.Poulos, **M.Rangoussi**, V.Chrissikopoulos, A.Evangelou, "Parametric Person Identification from the EEG using Computational Geometry," Proc. 6th IEEE International Conference on Electronics, Circuits and Systems (ICECS'99), vol. 2, pp. 1005-1012, Pafos, Cyprus, 1999.
- [C19] M.Poulos, **M.Rangoussi**, V.Chrissikopoulos, A.Evangelou, "Person Identification based on Parametric Processing of the EEG," Proc. 6th IEEE International Conference on Electronics, Circuits and Systems (ICECS'99), vol. 1, pp. 283-286, Pafos, Cyprus, September 1999.
- [C20] A.Delopoulos, **M.Rangoussi**, I.Xirouhakis, A.Drosopoulos, "Audio pattern recognition and localization in continuous playout," Proc. 2001 IEEE-EURASIP Workshop on Non-linear Signal and Image Processing (NSIP'01), Baltimore, Maryland, USA, June 3-6, 2001.
- [C21] M.Poulos, **M.Rangoussi**, V.Chrissikopoulos, A.Evangelou, "EEG spectrum analysis for extraction of approximately stationary features," Proc. 5th International Workshop on Mathematical Methods in Scattering Theory and Biomedical Technology (BIOTECH 2001), Corfu, Greece, October 2001, pp.382-394. (in "Scattering and Biomedical Engineering, Modelling and Applications", Eds. D. Fotiadis, Ch. Massalas, World Scientific)
- [C22] S.Vassiliadis, **M.Rangoussi**, M.deAraujo, "Feature extraction and classification of faults in circular knitting machines based on time-frequency techniques," Proc. 2nd AUTEX World Textile Conference, pp. 203-213, Bruges, Belgium, July 2002.
- [C23] C.Provatidis, S.Vassiliadis, **M.Rangoussi**, K.Prekas, "Retrieval of structural parameters of textile fabrics from surface roughness data obtained from KES-F measurements," Proc. 4th Intl. Conf. IMCEP'2003, pp. 149-156, Maribor, Slovenia, October 2003.
- [C24] K.Prekas, S.Vassiliadis, **M.Rangoussi**, "A Flexible System for Remote Acquisition and Processing of Environmental Measurement Data," Proc. 7th Panhellenic (International) Conference of Meteorology, Climatology & Atmospheric Physics, Cyprus, October 2004.
- [C25] S.Vassiliadis, C.Provatidis, K.Prekas, **M.Rangoussi**, "Electrically Conductive Spun Yarns," Proc. Xth Intl. Izmir Symposium on Textile and Apparel, pp 37-49, Izmir, Turkey, October 2004.
- [C26] K.Prekas, **M.Rangoussi**, S.Vassiliadis, G.Prekas, "Performance of laboratory experiments over the Internet: towards an Intelligent Tutoring System on Automatic Control," Proc. Intl. Conf. on Signal Processing, ICSP'2004, Istanbul, Turkey, Dec. 2004.
- [C27] G.Karkavitsas, **M.Rangoussi**, "Object localization in medical images using genetic algorithms," Proc. Intl. Conf. on Signal Processing, ICSP'2004, Istanbul, Turkey, Dec. 2004.

- [C28] A.Çay, S.Vassiliadis, **M.Rangoussi**, I.Tarakçioğlu, "On the Use of Image Processing Techniques for the Estimation of the Porosity of Textile Fabrics," Proc. Intl. Conf. on Signal Processing, ICSP'2004, Istanbul, Turkey, Dec. 2004.
- [C29] A.Çay, S.Vassiliadis, **M.Rangoussi**, I.Tarakçioğlu, "Prediction of Air Permeability of Textile Fabrics Using Artificial Neural Network," Proc. 5th Autex World Textile Conference, Portorož, Slovenia, June 2005.
- [C30] S.Potirakis, **M.Rangoussi**, G.Alexakis, "Exploiting multimedia for the instruction of Analog Electronics, Applied Acoustics and Electro-Acoustics undergraduate courses," Proc. 2005 WSEAS International Conference on Engineering Education, Athens, Greece, July 2005.
- [C31] K.Prekas, **M.Rangoussi**, S.Vassiliadis, G.Prekas, "Automatic Control Lab: A Pilot System for Simulation and Remote Performance of Experiments," Proc. 2005 WSEAS International Conference on Engineering Education, Athens, Greece, July 2005.
- [C32] S.M.Potirakis, **M.Rangoussi**, "A system development method for global active noise control", 12th International Workshop on Systems, Signals and Image Processing (IWSSIP 2005), Chalkida, Greece, September 2005.
- [C33] G.Karkavitsas, **M.Rangoussi**, "Fuzzy-genetic cell boundary extraction in medical images", 12th International Workshop on Systems, Signals and Image Processing (IWSSIP 2005), Chalkida, Greece, September 2005.
- [C34] S.M.Potirakis, **M.Rangoussi**, D.Lolos, "Noise Mapping in Textile Machine Noise Analysis and Reduction", 6th European Conference on Noise Control (EURONOISE 2006), Tampere, Finland, June 2006.
- [C35] **M.Rangoussi**, S.M.Potirakis, D.Lolos, "Single Microphone Noise Mapping", 6th European Conference on Noise Control (EURONOISE 2006), Tampere, Finland, June 2006.
- [C36] S.Sarpal, I. Paraskevas, E.Chilton, **M.Rangoussi**, "Root cepstral filtering for improved system identification," 2<sup>nd</sup> Intl. Conf. on Intelligent Environments (IE'06), IET Conference Publications (issue 518), pp. 167-170, Athens, Greece, July 2006.
- [C37] M.Vasilopoulou, G.Pistolis, A.Botsialas, N.Stathopoulos, **M.Rangoussi**, P.Argitis, "Patterning scheme based on photoacid induced spectral changes for single layer, patterned full color light emitting diodes," Materials Research Society Symposium Proceedings vol. 965, pp. 165-170, 2006.
- [C38] I.Paraskevas, E.Chilton, **M.Rangoussi**, "Audio Classification Using Features Derived From The Hartley Transform", 13th International Workshop on Systems, Signals and Image Processing (IWSSIP 2006), Budapest, Hungary, September 2006.
- [C39] I.Paraskevas, E.Chilton, **M.Rangoussi**, "The Hartley Phase Cepstrum as a Tool for Signal Analysis," ISCA ITRW on Non Linear Speech Processing (NOLISP'2007), pp. 204-212, Paris, France, May 2007.
- [C40] I.Paraskevas, **M.Rangoussi**, S.M.Potirakis, S.Savvaiddis, "Phase spectral processing for improved time-domain soft microphone based noise estimation," Proc. Intl. Conf. ACOUSTICS'2008, Paris, France, June 2008.
- [C41] S.M.Potirakis, **M.Rangoussi**, S.Savvaiddis, N.Zafeiropoulos, "Real time evaluation of soft microphones on a local active noise control system," Proc. Intl. Conf. ACOUSTICS'2008, Paris, France, June 2008.
- [C42] I.Paraskevas, **M.Rangoussi**, "The Hartley Phase Spectrum as a noise-robust feature in speech analysis," ISCA ITRW on Speech Analysis and Processing for Knowledge Discovery, Aalborg, Denmark, June 2008.
- [C43] I.Paraskevas, **M.Rangoussi**, "Phase Spectral Processing of Speech Signals," 2<sup>nd</sup> ISCA ITRW on Experimental Linguistics 2008 (ExLing2008), Athens, Greece, Aug. 2008.
- [C44] K.Prekas, **M.Rangoussi**, S.Vassiliadis, G.Prekas, "Power quality monitoring and analysis in a paper mill plant," Proc. Intl. Conf. MEDPOWER'2008, Thessaloniki, Greece, Nov. 2008.
- [C45] S.Vassiliadis, K.Prekas, A.Kallivretaki, **M.Rangoussi** and Ch.Provatidis, "Electrically Conductive Yarns: A Technological Overview", International Conference of Applied Research in Textiles, Proceedings p. 1, November 2008, Sousse, Tunisia.
- [C46] S.M.Potirakis, J. Deli, **M.Rangoussi**, "Steady-State and Transient Evaluation of FPAA Implemented Analog Filters Using a MLS System Analyzer", 16th International Workshop on Systems, Signals and Image Processing (IWSSIP 2009), Chalkida, Greece, June 2009.

- [C47] I.Paraskevas, **M.Rangoussi**, "The Hartley Phase Cepstrum as a tool for improved Phase Estimation", 16th International Workshop on Systems, Signals and Image Processing (IWSSIP 2009), Chalkida, Greece, June 2009.
- [C48] I.Paraskevas, S.M.Potirakis, **M.Rangoussi**, "Natural Soundscapes and Identification Of Environmental Sounds: A Pattern Recognition Approach," Proc. Intl. Conf. on Digital Signal Processing (DSP'09), Santorini, Greece, July 2009.
- [C49] I.Paraskevas, **M.Rangoussi**, "Phoneme Classification using features extracted from the Hartley Phase Spectrum," ISCA ITRW on Non Linear Speech Processing (NOLISP'09), Vic-Barcelona, Spain, July 2009.
- [C50] S.Vassiliadis, **M.Rangoussi**, D.Meimaris, K.Prekas and Ch.Provatidis, "Electrically Conductive Spun Yarns and their Contact Behaviour", Proceedings of the International Conference on Intelligent Textiles and Mass Customisation, Casablanca, Morocco, 11-14 November 2009.
- [C51] S.Potirakis, N.-A.Tatlas, **M.Rangoussi**, "Electroacoustic Measurements for High Noise Environment Intercom Headsets," (paper 8077), 128<sup>th</sup> Audio Engineering Society Convention (AES'2010), London, UK, May 22-25, 2010.
- [C52] **M.Rangoussi**, S.M.Potirakis, I.Paraskevas, "On the Development and Use of Sound Maps for Environmental Monitoring," (paper 8113), 128<sup>th</sup> Audio Engineering Society Convention (AES'2010), London, UK, May 22-25, 2010.
- [C53] S.Vassiliadis, K.Prekas, **M.Rangoussi**, K.Absalon and J.Maillard, "The Conductive Spun Yarns as Electrical Components", Proceedings of the XIIth International Izmir Textile and Apparel Symposium, pp. 333-338, Izmir, Turkey, 28-30 October 2010.
- [C54] K.Prekas, S.Vassiliadis, **M.Rangoussi**, E.Siores and T.Shah, "Electrorheological Fluids and Applications: Current Technology and Trends", Proceedings of the XIIth International Izmir Textile and Apparel Symposium, pp. 412- 415, Izmir, Turkey, 28-30 October 2010.
- [C55] I.Liaperdos, I.Paraskevas, S.M.Potirakis, **M.Rangoussi**, "Building a low-cost network for power-quality monitoring with open-source-hardware nodes," (Paper No. MED10/162), IET Intl. Conf. MEDPOWER'2010, Cyprus, Nov. 7-10, 2010.
- [C56] I.Paraskevas, K.Prekas, S.Potirakis, **M.Rangoussi**, "On the use of time-frequency distributions for the power quality problem of harmonics (Paper No. MED10/122), IET Intl. Conf. MEDPOWER'2010, Cyprus, Nov. 7-10, 2010.
- [C57] I.Paraskevas, A.Kokkosis, I.Liaperdos, **M.Rangoussi**, "Detection of transient events using the Hartley Phase Cepstrum for improved power quality (Paper No. MED10/121), IET Intl. Conf. MEDPOWER'2010, Cyprus, Nov. 7-10, 2010.
- [C58] S.Vassiliadis, **M.Rangoussi**, D.Kremenakova, M.Belkhir, M.A.Boukhris, O.Louda, "Prediction of Bursting Strength of Fabrics using Neural Networks," International Conference of Applied Research in Textile (CIRAT-4), Monastir, Tunisia, Dec. 2-5, 2010.
- [C59] K.Prekas, **M.Rangoussi**, S.Vassiliadis, E.Siores, T.Shah, A.Tenniche, I.Lamssieh, "Electro-rheological materials and potential applications in Textiles," International Conference of Applied Research in Textile (CIRAT-4), Monastir, Tunisia, Dec. 2-5, 2010.
- [C60] S.Vassiliadis, S.Potirakis, **M.Rangoussi** and Ch.Provatidis, "Design of a Wearable Digital System for the Gait Monitoring", Proceedings of the SMARTEX 2011, Egypt, 22-24 Nov. 2011.
- [C61] G.A.Vokas, S.D.Kaminaris, P.A.Kontaxis, **M.Rangoussi**, G.Ch.Ioannidis, S.A.Papathanassiou, P.V.Malatestas and F.V.Topalis "Electric Network Power Quality assessment using Fuzzy Expert System Methodology," Proc. 8th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MEDPOWER 2012), Cagliari, Italy, 1-4 Oct. 2012.
- [C62] I.Kokkaliaris, S.Potirakis, **M.Rangoussi**, "Remote electronic laboratory experiment development and evaluation in higher technological education", Proc. 2013 IEEE Global Engineering Education Conference (EDUCON), Berlin, Germany, 13-15 March 2013.
- [C63] S.M.Potirakis, B.Nefzi, N.-A.Tatlas, G.Tuna, **M.Rangoussi**, "A wireless network of acoustic sensors for environmental monitoring", 3<sup>rd</sup> International Conference on Materials and Applications for Sensors and Transducers, (IC-MAST 2013), Prague, Czech Republic, September 13-17, 2013.
- [C64] S.A.Mitilineos, S.M.Potirakis, N.-A.Tatlas, **M.Rangoussi**, "High-Level Sound Classification in the ESOUNDMAPS Project", 4<sup>th</sup> International Conference on

- Materials and Applications for Sensors and Transducers (IC-MAST 2014), Bilbao, Spain, June 8-11, 2014.
- [C65] N.-A.Tatlas, D.Ballios, S.M.Potirakis, C.Charitou, S.Koutroubinas, **M.Rangoussi**, "A smart sensor platform for Greenhouse applications", 4<sup>th</sup> International Conference on Materials and Applications for Sensors and Transducers (IC-MAST 2014), Bilbao, Spain, June 8-11, 2014.
- [C66] E.T.Michailidis, J.Liaperdos, N.-A.Tatlas, S.M.Potirakis, and **M.Rangoussi**, "Sound-maps of environmentally sensitive areas constructed from Wireless Acoustic Sensors Network data," in Proc. International Workshop on Sensor Interfacing, Networking and Data Handling of 5<sup>th</sup> International Conference on Materials and Applications for Sensors and Transducers (IC-MAST) 2015, Mykonos, Greece, Sep. 27-30, 2015.
- [C67] S.M.Potirakis, S.Mitilineos, P.Chatzistamatis, S.Vassiliadis, A.Primentas, D.Kogias, E.T.Michailidis, **M.Rangoussi**, S.K.Bahadır, Ö.Atalay, F.Kalaoğlu, and Y.Sağlam, "Physiological parameters monitoring of fire-fighters by means of a wearable wireless sensor system," in Proc. International Workshop on Sensor Interfacing, Networking and Data Handling of 5<sup>th</sup> International Conference on Materials and Applications for Sensors and Transducers (IC-MAST) 2015, Mykonos, Greece, Sep. 27-30, 2015.
- [C68] N.-A.Tatlas, S.M.Potirakis, S.A.Mitilineos, S.Despotopoulos, D.Nicolaidis, **M.Rangoussi**, "A Wireless Acoustic Sensor Network for environmental monitoring based on flexible hardware nodes," in Proc. AUDIO MOSTLY 2015 International Conference, Aristotle University of Thessaloniki, Greece, Oct. 8-10, 2015.
- [C69] C.Georgopoulou-Theodosiou and **M.Rangoussi**, "Content and Language Integrated Learning (CLIL): an experimental study on CLIL compatibility with the modern Greek educational system," International Conference "Science in Technology" (SCINTE-2015), Athens, Greece, Nov. 5-7, 2015.
- [C70] F.Peraki and **M.Rangoussi**, "'Pirates' Web Adventures": The design and development of a digitally enhanced e-book for teaching English in Greek primary schools," International Conference "Science in Technology" (SCINTE-2015), Athens, Greece, Nov. 5-7, 2015.
- [C71] P.Tsolakos and **M.Rangoussi**, "A pervasive, location-sensitive educational game for 5th grade pupils: Design, Implementation, Evaluation," 8<sup>th</sup> Intl. Conf. on Education and New Learning Technologies (EDULEARN 2016), Barcelona, Spain, July 4-6, 2016.
- [C72] V.Aloizou and **M.Rangoussi**, "Mobile devices and e-learning in preschool education: design, development and evaluation of an educational intervention," 9<sup>th</sup> Intl. Conf. of Education, Research and Innovation (ICERI 2016), Seville, Spain, Nov. 14-16, 2016.
- [C73] A.Charitopoulos, **M.Rangoussi**, and D.Koulouriotis, "E-learning platform access and usage statistics through data mining: an experimental study in moodle," 9<sup>th</sup> Intl. Conf. of Education, Research and Innovation (ICERI 2016), Seville, Spain, Nov. 14-16, 2016.
- [C74] A.Charitopoulos, **M.Rangoussi**, and D.Koulouriotis, "Educational data mining and data analysis for optimal learning content management: Applied in moodle for undergraduate engineering studies," 8<sup>th</sup> IEEE Global Engineering Education Conference (EDUCON 2017), Athens, Greece, Apr. 25-28, 2017.
- [C75] G.Sykamiotis, A.Charitopoulos, **M.Rangoussi**, and D.Koulouriotis, "Extraction and presentation of access and usage data from an e-learning platform (moodle): Design and development of a software application," 8<sup>th</sup> IEEE Global Engineering Education Conference (EDUCON 2017), Athens, Greece, Apr. 25-28, 2017.
- [C76] D.Kintsakis and **M.Rangoussi**, "An early introduction to STEM education: teaching Computer Programming Principles to 5<sup>th</sup> graders through an e-learning platform: A game-based approach," 8<sup>th</sup> IEEE Global Engineering Education Conference (EDUCON 2017), Athens, Greece, Apr. 25-28, 2017.
- [C77] A.Charitopoulos, S.Vassiliadis, **M.Rangoussi** and D.Koulouriotis, "E-learning and blended learning in textile engineering education: a closed feedback loop approach," 17<sup>th</sup> World Textile Conference (AUTEX 2017), Corfu, Greece, May 29-31, 2017 [Proceedings Published in IOP Conf. Series: Materials Science and Engineering 254 (2017) 222002, doi:10.1088/1757-899X/254/22/222002].
- [C78] A.Charitopoulos, **M.Rangoussi**, S.Vassiliadis, D.Koulouriotis, "Vocational and Higher Education in Textile Engineering using the Moodle E-Learning Platform,"

- 14<sup>th</sup> International Izmir Textile and Apparel Symposium (IITAS 2017), Izmir, Turkey, October 25-28, 2017.
- [C79] V. Maragkou and **M. Rangoussi**, "French as a Foreign Language: Design, Development and Evaluation of an Immersive Virtual Reality Learning Environment," 12<sup>th</sup> Intl. Technology, Education and Development Conf. (INTED 2018), Valencia, Spain, March 5-7, 2018.
- [C80] E. Misailidis, A. Charitopoulos, **M. Rangoussi**, "Visualization of educational data mined from the moodle e-learning platform," 22<sup>nd</sup> Pan-Hellenic Conference on Informatics (PCI 2018), Athens, Greece, 29 Nov - 1 Dec, 2018.
- [C81] K. Maragou, **M. Rangoussi**, "Design, implementation and evaluation of a WebQuest for teaching Literature to teenagers: a collaborative learning approach," 11<sup>th</sup> International Conference on Computer Supported Education (CSEDU'2019), Heraklion, Crete, Greece, May 2-4, 2019.
- [C82] G. Preka, **M. Rangoussi**, "Augmented Reality and QR codes for teaching Music in Preschoolers and Kindergarten: educational intervention and evaluation," 11<sup>th</sup> International Conference on Computer Supported Education (CSEDU'2019), Heraklion, Crete, Greece, May 2-4, 2019 - **BEST PAPER AWARD**.
- [C83] E. Roussou, **M. Rangoussi**, "On the use of robotics for the development of computational thinking in kindergarten: educational intervention and evaluation," Robotics in Education (RIE'2019), Vienna, Austria, Apr. 10-12, 2019. Proceedings published in Advances in Intelligent Systems and Computing, SPRINGER AISC 1023, pp. 31-44, 2020.
- [C84] N. Nikoloudakis, **M. Rangoussi**, "On the role of (vocational) education in the adoption of green and recycling practices: a case study on WEEE," International Conference on Technologies and Materials for Renewable Energy, Environment and Sustainability (TMREES 2019), Beirut, Lebanon, Apr. 10-12, 2019.
- [C85] K. Yiasemides, K. Zachariadou, **M. Rangoussi**, "Active learning in a hands-on Physics lab: A pilot study to fine-tune instruction and student assessment methodology," IEEE Global Engineering Education Conference, (IEEE EDUCON 2020), pp. 1594-1603.
- [C86] G. Charkoftakis, **M. Rangoussi**, "A single-stage, Deep Neural Network detector for the detection and tracking of moving objects in real time," 24<sup>th</sup> Panhellenic Conference on Informatics (PCI'2020), ACM International Conference Proceeding Series, pp. 311-315, Nov. 20-22, 2020.
- [C87] F. Papoutsi, **M. Rangoussi**, "Pedagogical Agents in E-learning: a review of recent (2009-2019) research results," 24<sup>th</sup> Panhellenic Conference on Informatics (PCI'2020), ACM International Conference Proceeding Series, pp. 316-321, Nov. 20-22, 2020.
- [C88] Kasnesis P., Chatzigeorgiou C., Patrikakis C.Z., Rangoussi M. (2021) Introducing and Benchmarking a One-Shot Learning Gesture Recognition Dataset. In: Deze Z., Huang H., Hou R., Rho S., Chilamkurti N. (eds) Big Data Technologies and Applications. BDTA 2020, WiCON 2020. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 371. Springer, Cham. [https://doi.org/10.1007/978-3-030-72802-1\\_8](https://doi.org/10.1007/978-3-030-72802-1_8)
- [C89] N. Nikoloudakis, **M. Rangoussi**, "On the use of Cloud Computing tools and the development of metacognitive skills in Vocational Education: an educational intervention," XVIth International Conference EUTIC 2020/2021, Brussels, Belgium, 25-26 Oct. 2021.
- [C90] V. Siafis, **M. Rangoussi**, "Visualization of educational data mined from E-Learning platforms: A comparative evaluation of tools," 14<sup>th</sup> Intl. Conf. of Education, Research and Innovation (ICERI 2021), Seville, Spain, Nov. 8-9, 2021.
- [C91] V. Maragkou, **M. Rangoussi**, "Virtual Reality and Event-Related Potentials used in Computerized Speech Language Therapy for post-stroke aphasic patients," the 1st Intl. Conf. of the Greece ACM SIGCHI Chapter "CHIGREECE 2021: Connecting the Community" - Young Researchers Track, Online Event, 25-26 Nov. 2021.
- [C92] K. Yiasemides, K. Zachariadou, N. Moschonas, M. Rangoussi and A. Charitopoulos, "Development and Assessment of a Web-based Platform for an Active Learning Physics Lab Session on the linear regression technique," IEEE Global Engineering Education Conference (EDUCON 2022), submitted, under review.

## Internal Technical Reports

- [1] S. M. Potirakis, **M. Rangoussi**, D. Lolos and S. Savvaidis, "Global Active Noise Control Using Adaptive Algorithms," Applied Research Review (Journal of the TEI Piraeus) – Technology and Science Edition, vol. XIII, no. 1, pp. 97-110, 2008.
- [2] S. M. Potirakis, **M. Rangoussi**, D. Lolos and S. Savvaidis, "Acoustic Room Measurements for the Deployment of Soft Microphones in Active Noise Control," Applied Research Review (Journal of the TEI Piraeus) – Technology and Science Edition, vol. XIII, no. 1, pp. 149-160, 2008.

## Miscellaneous publications

- [1] **M. Rangoussi**, K.Prekas, S.Vassiliadis, "Biometrics for person identification: The E.E.G.," Proc. 1st International Conference on Information Technology and Quality, TEI Piraeus, Greece, June 2004.
- [2] K.Prekas, **M. Rangoussi**, S.Vassiliadis, G. Prekas, "An instruction system based on remote laboratory experimentation for tele-education on Automatic Control," Proc. 2nd International Conference on Information Technology and Quality, paper nr. A.3.5, TEI Piraeus, Spetses Island, Greece, June 2005.
- [3] M.Vasilopoulou, P.Argitis, G.Pistolis, N.Stathopoulos, **M. Rangoussi**, "Photochemically Induced Emission Tuning of Conductive Polymers used in OLEDs," Proc. 2nd International Conference on Information Technology and Quality, paper nr. A.4.1, TEI Piraeus, Spetses Island, Greece, June 2005.
- [4] **M. Rangoussi**, S.Vassiliadis, K.Prekas, "A comparative study of classification algorithms in automatic speech recognition of spoken greek," Proc. 2nd International Conference on Information Technology and Quality, paper nr. A.4.2, TEI Piraeus, Spetses Island, Greece, June 2005.
- [5] G.Bafataki, **M. Rangoussi**, "An e-Learning environment for music education", eRA-3 International Scientific Conference, TEI Piraeus & Univesity of the West of Scotland, UK, Aegina Island, Greece, Sept. 19-21, 2008.
- [6] A.Satmari, **M. Rangoussi**, "Design and implementation of a collaborative e-learning environment based on moodle and wiki technologies". eRA-4 International Scientific Conference, TEI Piraeus & Univesity of the West of Scotland, UK, Spetses Island, Greece, Sept. 24-26, 2009.
- [7] K.Prekas, S.Vassiliadis, **M. Rangoussi**, E.Siores, "Electrorheological materials in smart applications," eRA-4 International Scientific Conference, TEI Piraeus & Univesity of the West of Scotland, UK, Spetses Island, Greece, Sept. 24-26, 2009.
- [8] A.Charalampidi-Kourkoumelli, K.Karatzas, **M. Rangoussi**, "Photovoltaics and Electric Power Quality", (paper B.4.3), eRA-5 International Scientific Conference, TEI Piraeus, Greece, Sept. 15 - 18, 2010.
- [9] R.Fyrogenis, K.Prekas, S.Vassiliadis, **M. Rangoussi**, "Smart digital three-phase AC line voltage controller", (paper C.2.1), eRA-5 International Scientific Conference, TEI Piraeus, Greece, Sept. 15 - 18, 2010.
- [10] G.Prekas, S.Vassiliadis, K.Prekas, **M. Rangoussi**, "Sensor network and software application for the prevention of forest fires", (paper C.2.3), eRA-5 International Scientific Conference, TEI Piraeus, Greece, Sept. 15 - 18, 2010.
- [11] **M. Rangoussi**, S.M.Potirakis, N.-A.Tatlas, E.Kyriakis-Bitzaros, I.Paraskevas, I.Liaperdos, "A Distributed Microelectronic System for Environmental Monitoring with emphasis on Sound Mapping," eRA-6 International Scientific Conference, TEI Piraeus, Greece, Sept. 19-24, 2011.
- [12] I.Kokkaliaris, S.M.Potirakis, **M. Rangoussi**, "From virtual laboratories to remote laboratories: an Analog Electronics Lab case study in Technological Education," eRA-7 International Scientific Conference, TEI Piraeus, Greece, Sept. 27-30, 2012 (B.3 *Special Session on Intelligent e-learning systems for advanced learning scenarios*).
- [13] A.Charitopoulos, **M. Rangoussi**, D.Koulouriotis, V.Tourasis, "Fuzzy cognitive maps as a tool for e-learning courses modeling, design and evaluation," eRA-7 International Scientific Conference, TEI Piraeus, Greece, Sept. 27-30, 2012 (B.3 *Special Session on Intelligent e-learning systems for advanced learning scenarios*).

- [14] A.Tziavas, **M.Rangoussi**, A.Papantoniou, "Philanagnosia: a generic web environment designed for educational collaboration," eRA-7 International Scientific Conference, TEI Piraeus, Greece, Sept. 27-30, 2012 (B.3 Special Session on Intelligent e-learning systems for advanced learning scenarios).
- [15] S.Despotopoulos, E.Kyriakis-Bitzaros, I.Liaperdos, D.Nicolaidis, I.Paraskevas, S.M.Potirakis, **M.Rangoussi**, N.-A.Tatlas, "A flexible hardware basis for sensor network nodes with wireless communication capabilities," eRA-7 International Scientific Conference, TEI Piraeus, Greece, Sept. 27-30, 2012 (B.4 Special Session on Smart electronic systems in sensing & control applications).
- [16] S.Despotopoulos, E.Kyriakis-Bitzaros, I.Liaperdos, D.Nicolaidis, I.Paraskevas, S.M.Potirakis, **M.Rangoussi**, N.-A.Tatlas, "Pattern recognition for the development of Sound Maps for environmentally sensitive areas" eRA-7 International Scientific Conference, TEI Piraeus, Greece, Sept. 27-30, 2012 (B.4 Special Session on Smart electronic systems in sensing & control applications).
- [17] Τζιάβας Αριστείδης, **Ραγκούση Μαρία**, «Η καλλιέργεια της φιλαναγνωσίας στα παιδιά μέσω των ΤΠΕ, με εφαρμογή στην τεχνολογία Ιστοτόπων Google», Πανελλήνιο Συνέδριο «Η Ποιότητα στην Εκπαίδευση: Τάσεις και Προοπτικές», ΕΚΠΑ - ΠΤΔΕ, Αθήνα, 11-13 Μαΐου 2012, Τόμος Α, σελ. 460-470. [*in greek*]
- [18] Σπαή Αγγελική, Κούτσικος Λουκάς, Ντόβα Μαρία, Μαρκοπούλου Φωτεινή, Πατρικάκης Χαράλαμπος, **Ραγκούση Μαρία**, "Προσέγγιση Εννοιών Φυσικών Επιστημών στην Προσχολική Εκπαίδευση με την αξιοποίηση Σύγχρονων Προγραμματιστικών Περιβαλλόντων και Διαδικτυακών εφαρμογών," 7<sup>ο</sup> ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΤΩΝ ΕΚΠΑΙΔΕΥΤΙΚΩΝ ΓΙΑ ΤΙΣ Τ.Π.Ε., Υπουργείο Παιδείας, Σύρος, 21-23 Μαΐου 2013. [*in greek*]
- [19] S. M. Potirakis, D. Mouzakis, D. Dimogianopoulos, S. A. Mitilineos, N.A. Tatlas, **M.Rangoussi**, K. Eftaxias, "Laboratory investigation of failure processes in heterogeneous media", (Poster no. 22), 5th Intl. Conference on Non Destructive Testing (IC-MINDT 2013), Hellenic Society for NDT (HSNT), Eugenides Foundation, Athens, Greece, May 20-22, 2013.
- [19] S.Despotopoulos, E.Kyriakis-Bitzaros, I.Liaperdos, S.Mitilineos, D.Nicolaidis, S.M.Potirakis, **M.Rangoussi**, N.-A.Tatlas, "Wireless acoustic sensor network design stages for an environmental monitoring application", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. AB.2.8)
- [20] V.Tsopanoglou, **M.Rangoussi**, "Automatic Control Systems undergraduate course: support teaching material development in the Moodle platform", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.8)
- [21] L.Toumanidis, A.Charitopoulos, D.Metafas, **M.Rangoussi**, "E-advisor and E-evaluator Module developments for the Moodle E-learning platform based on ID3 classification algorithms", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.9)
- [22] E.Lignou, D.Metafas, **M.Rangoussi**, "Teaching Mathematics in high school: Content development in the Open Source E-Learning Platform Moodle", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.1)
- [23] A.Liapi, D.Metafas, **M.Rangoussi**, "A walk in Space: A case study for Early Age Education content developed in Moodle", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.2)
- [24] N.Gemistou, D.Metafas, **M.Rangoussi**, "An elementary school history course developed in Moodle: Alexander the Great and the development of Macedonian State", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.3)
- [25] N.Mpalatsouka, D.Metafas, **M.Rangoussi**, "Cultural and linguistic activities in High School education: development of an educational electronic course", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.4)
- [26] I.Komi, D.Metafas, **M.Rangoussi**, "Teaching a course on Computers in high school: Content development in the Open Source E-Learning Platform Moodle", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.5)

- [27] F.Peraki, D.Metafas, **M.Rangoussi**, "E-learning Platform support for a high school project on Shakespeare's Language", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.6)
- [28] M.Grigoraki, D.Metafas, **M.Rangoussi**, "Developing Content for elementary school students in the Open E-Learning Platform Moodle: A project on mythology", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.7)
- [29] A.Politi, D.Metafas, **M.Rangoussi**, "Halloween: enhancing intercultural understanding using the Open E-Learning Platform Moodle", eRA-8 International Scientific Conference, TEI Piraeus, Greece, Sept. 23-25, 2013 (paper no. BB.3.13)
- [30] S.Mitilineos, N.-A.Tatlas, S.M.Potirakis, **M.Rangoussi**, E.Kyriakis-Bitzaros, I.Liaperdos, "Research Progress in the ESOUNDMAPS Project: Classification of sounds using ANNs", eRA-9 International Scientific Conference, TEI Piraeus, Greece, Sept. 22-24, 2014 (paper no. I.1.3)
- [31] **M. Rangoussi**, Ch. Patrikakis, A. Charitopoulos, "Open Academic Courses in the Department of Electronics Engineering", Open Academic Courses in TEI Piraeus Workshop, TEI Piraeus, 25-26 Sept. 2014.

## Project proposal presentations

- [1] S.M. Potirakis, M.Rangoussi, 6<sup>th</sup> International R&D Project Brokerage Event, organized by Uludag Textile Exporters Association (UTIB) and Bursa Textile and Clothing R&D Center (BUTEKOM), supported by TUBITAK-TEYDEB/Turkey, held in Bursa, Turkey, 3-4 April 2014. Presentation of four (4) proposals for R&D projects:

PROJECT 1	<b>SESSION:</b> Protech and Military Textiles <b>Project Title:</b> "Smart vest for the monitoring of first responders / border policemen situation: a wireless sensor network approach" <b>Coordinator:</b> Stelios M. Potirakis <b>Participants:</b> C.Vossou, S.Vassiliadis, S.Mitilineos, M.Rangoussi, G.Tuna, G.Gezer, K.Gulez
PROJECT 2	<b>SESSION:</b> Buildtech <b>Project Title:</b> "Textile acoustic ceiling tiles" <b>Coordinator:</b> Stelios M. Potirakis <b>Participants:</b> N.-A. Tatlas, C.Vossou, S.Vassiliadis, A.Cay, A.Marmarali, M. Rangoussi
PROJECT 3	<b>SESSION:</b> Functional Clothing Textiles <b>Project Title:</b> "Early Medical Warning by Thermo-chromic Garments" <b>Coordinator:</b> Maria Rangoussi <b>Participants:</b> A.Cay, A.Trikalinou, C.Vossou, E.Siores, S.M.Potirakis, S.Vassiliadis
PROJECT 4	<b>SESSION:</b> Hometech and Home Textiles. <b>Project Title:</b> "Active Noise Control by textile structures comprising embedded sound sensors and actuators based on piezoelectric fibers" <b>Coordinator:</b> Maria Rangoussi <b>Participants:</b> S.M.Potirakis, N.-A. Tatlas, C.Vossou, S.Vassiliadis, A.Cay, A.Marmarali, E.Siores,

## Textbooks (in greek)

- [TB1] Γ.Καραγιάννης, **Μ.Ραγκούση**, "Ψηφιακή Επεξεργασία Σημάτων: Θεωρία - Αλγόριθμοι - Πρακτική," Εκδόσεις Συμεών, Αθήνα 1993.  
Διδάχθηκε από το 1993-94 έως το 2006-7 στο αντίστοιχο μάθημα του 7<sup>ου</sup> / 6<sup>ου</sup> εξαμήνου σπουδών στη Σχολή Ηλεκτρολόγων Μηχανικών & Μηχανικών Υπολογιστών ΕΜΠ.
- [TB2] Α.Κοσσίδης, **Μ.Ραγκούση**, Σ.Ματιάτος, "Συμβολικές Γλώσσες και Αρχιτεκτονική Μικροεπεξεργαστών," Εκδόσεις Μπένου, Αθήνα 1996.  
Διδάχθηκε από το 1996-97 έως το 2016-17, στο αντίστοιχο μάθημα του 4<sup>ου</sup> εξαμήνου σπουδών στο Τμήμα Ηλεκτρονικών Υπολογιστικών Συστημάτων του ΤΕΙ Πειραιά.