

Markos N. Dendrinos

Electrical Engineering, NTUA.

Computer Science (Digital Signal Processing), Ph.D.

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1. STUDIES

1. Diploma of Electrical Engineering, National Technical University of Athens (NTUA), Febr. 1984. Thesis: "Graph-Theoretic structure for the Construction of Low Complexity Codes".
2. Ph.D. diploma in Spectral Analysis / Digital Signal Processing, 1989, NTUA, Computer Science Division, Electrical Engineering Dept. Dissertation : "High Resolution Spectral Analysis Methods" (theoretical analysis of high resolution spectral estimation methods giving innovative results in the fields of frequency measurement, model order estimation and retrieval of signals from noise).
3. M.Sc. diploma in the Post-graduate Programme of "History and Philosophy of the Sciences and the Technology", Febr. 2001.

2. PROFESSIONAL AND RESEARCH EXPERIENCE.

1. Evaluator of proposals of *Digital Convergence* Research Programme (2011).
2. Head of the Research and Development Projects Office of *Athena Research Center* (2008-2010).
3. Research and development in the *Institute for Language and Speech Processing (ILSP / Athena R.C.)*: Speech enhancement techniques based on Singular Value Decomposition (SVD) - Spectral analysis of various kinds of noise - Development of isolated words recognition module based on Hidden Markov Models (HMM) - Detection of silence in respiration and snoring signals (1992 - 2009).
4. Research and development in *Ideatech S.A.*: Design and implementation of multimedia (images / texts / sounds) data base management systems and digital repositories for massive document storage (filing systems), museum organization, speech messages memo systems and a management module for the management of bibliographic records of the National Library of Greece (1991 – 1997).
5. Research and development in *Noesis Ltd.*: Image analysis of documents for optical character recognition (OCR) - Speech analysis and compression - Font analysis for personalized printing (1987 - 1991).
6. Design and implementation of customized data base management systems for commercial companies (1985 – 1990).

3. RESEARCH PROJECT PARTICIPATION.

1. Project: *CrossCult*. Framework: *Horizon2020* Reflective 6-2015. Working environment: UNIWA (TEI-A). Duration: 2016-18. Description: Empowering reuse of digital cultural heritage in context-aware crosscuts of European history". 11 partners with coordinator: Luxembourg Institute of Science and Technology. UNIWA (TEI-A) contribution: Development of an ontology for the description of museum objects - Evaluation of navigation scenarios in archeological areas and museums - Project dissemination.
2. Project: *Development of Digital Services of Library of TEI-A*. National framework: *Digital Convergence*. Duration: 2011-13. Working environment: TEI-A. Responsible of the actions: Digitisation of content of existing files - Adaptation of ontology in OWL and connection to DSpace.
3. Project: *Work experience of the students of TEI-A*. National framework: *Education and Lifelong Learning*. Working environment: TEI-A. Duration: 2011-12. Actions: Design and

implementation of website for the project: *Supervising of work experience of students of TEI-A*.

4. Project: *Curriculum reform of the Department of Librarianship and Information Systems of TEI-A*. National framework: *EPEAEK (EKT / ETPA)*. Working environment: TEI-A. Duration: 2003-2005. He had the scientific and financial management for the equipment part of the project (ETPA). He also worked at: Reformation of the curriculum - development of laboratories of informatics - Creation of a digital library of the department - Pilot application of the new curriculum - Evaluation of the new curriculum.
5. Project: *Introduction of Business Actions, Innovative Applications and Selective Lessons*. National framework: *EPEAEK*. Working environment: TEI-A. Duration: 2003-2005. He was involved in the introduction of optional selective lessons focused on business, innovation and management of a company and also in the development of Case Studies. Working environment : Dept. of Library Studies and Information Systems of TEI of Athens.
6. Project: *MUSTUTOR*. Framework: EU Programme *ESPRIT*. Working environment : Speech Dept. of ILSP. Duration: Oct.1997 - June 1999. He worked for the development of an interactive multimedia music tuition system for training of the recorder. ILSP contribution: Speech / audio recognition - Optical recognition of the musical notation (notes, durations, treble clefs etc) of musical pieces for the automatic conversion of written musical pieces to equivalent MIDI files - Design and development of an environment of musical exercises.
7. Project: *TOSAFES*. Framework: EU Programme *TIDE*. Working environment : Speech Dept. of ILSP. Duration: Jan.1997 - Feb.1998. He had the scientific and financial management for ILSP at a medical project aiming at the prediction or detection of the phenomenon of Obstructive Sleep Apnea (OSA). The work was based on spectral analysis and event detection applied to respiration and snoring signals.
8. Project *FREETEL*. Framework: EU Programme *ESPRIT*. Working environment : Speech Dept. of ILSP. Duration: May 1992 - Dec. 1994. He worked at a speech project aiming at noise elimination and echo cancellation in the environment of handsfree telecommunications.
9. Project *IDEO-IMAGE*. Framework: National Programme *MOPPIT*. Working environment: R&D Dept. of Ideatech S.A. Duration: 1992 – 1994. He worked at a multimedia project resulted in the production of an innovative multimedia system (multimedia library) for the representation, access and management of texts, images and sounds.

4. INSTRUCTIVE EXPERIENCE.

1. Department of Archives, Libraries and Information Systems of University of West Attica: Professor from March 2018 until now. Department of Librarianship and Information Systems of Technological Educational Institute of Athens (TEIA): Professor from Sept. 2006 until Feb. 2018. Associate Professor from Febr. 2003 until Aug. 2006, Assistant Professor from Mar. 1998 until Jan. 2003. Courses: Introduction in the Information Technology, Communications and Networks, Information Systems and Databases, Semantics Science, History & Philosophy of Science.
2. Exploitation and use of distance learning tools and capabilities in the frame of the Moodle e-class platform of the University for the assignment of works and quizzes to the students. Synchronous distance learning in the frame of the environment of Microsoft Teams through using various tools, such as Microsoft Notes and Whiteboard.
3. Instruction of the Lesson *From Information to Semantics* at the Post-Graduate Programme *Information Management in Libraries, Archives and Museums* organized by Dept. of Archives, Libraries and Information Studies, UNIWA. Spring semesters of 2018-9, and 2019-20.

4. Instruction of the Lesson *Information Systems* at the Post-Graduate Programme *Computer Science – Management and Organisation of Libraries focused on the New Technologies of Information* organized by Dept. of Library Studies of Ionion University and Dept. of Librarianship and Information Systems of TEIA. Winter semesters of 2003-4, 2004-5 and 2006-7.
5. Instruction of the lesson *Programming Principles – Databases* at the Post Graduate Programme *Technoglossia* organised by University of Athens and NTUA. Winter semester of 2003-4 (Technoglossia II), winter semester of 2004-5 (Technoglossia III), winter semester of 2006-7 (Technoglossia IV), winter semester of 2008-9 (Technoglossia V), winter semester of 2010-11 (Technoglossia VI), winter semester of 2011-12 (Technoglossia VII), winter semester of 2012-13 (Technoglossia VIII).
6. Instruction of computer science lessons at various departments of TEIA. Duration: 1991 - 1998.
7. Instruction of *Informatics* and *Communication & Networks* in the National Centre for Public Administration & Local Government (EKDAA). Duration: 2010-2011.
8. *Adult education of High-School teachers* in the Centre of Support of Adult-Education of ILSP in topics of *Introduction to Computer Technology*, *Microsoft Office Packages* and various educational packages. Duration: Mar. 2003 – May 2003.
9. Development and presentation of two educational packets, the one for the lesson *Signals and Systems* and the other for the lesson *Digital Signal Processing* at the Computer Science Division of NTUA. Duration: winter semesters 1987 and 1988.
10. Assistance in the instruction of the following lessons at the Computer Science Division of NTUA: *Computer Programming with Fortran* (winter semester 1984), *Digital Signal Processing* (winter semesters 1986, 1987, 1988).

5. PUBLICATIONS.

5.1. Scientific Monographs

1. NTUA – Electrical Eng. Thesis: “Graph-theoretic Scheme for the Construction of Low Complexity Codes”, Athens, Feb, 1984
2. PhD Thesis: “High Resolution Spectral Analysis Methodologies”, Athens, Oct 1989.
3. M.Sc. Thesis in the Post-graduate Programme: *History and Philosophy of the Sciences and the Technology*: “The influence of the alchemical ideas upon Chemistry (16th – 18th centuries)”, Sept. 2000.

5.2. Scientific Books

1. E.Desypri, M. Dendrinis, ECDL Series, Basic Concepts of Informatics, Libris-Tech Publ, Athens, 2003 [in Greek]
2. M. Dendrinis, V. Katsouros, ECDL Series, Databases – Microsoft Access 2000, Libris-Tech Publ, Athens, 2003 [in Greek]
3. M. Dendrinis, V. Katsouros, ECDL Series, Databases – Microsoft Access 2002, Libris-Tech Publ, Athens, 2004 [in Greek]
4. M. Dendrinis, *Introduction to Information Technology – Applications in Librarianship*, Libris-Tech Publ, Athens, 2006 [in Greek]
5. M. Dendrinis, *Software applications for Library Management*, Libris-Tech Publ, Athens, 2006 [in Greek]
6. M. Dendrinis, *Telecommunications and Networks: Basic issues & Library Applications*, Libris-Tech Publ, Athens, 2006 [in Greek]
7. D. Kouis, M. Dendrinis, *Introduction to Information Technology*, New Technology Publications, Athens, 2010 [in Greek]

8. M. Dendrinou, *Telecommunications – Internet - Libraries*, New Technology Publications, Athens, 2010 [in Greek]
9. Isabella di Morra, *Through desolate Streets*, translation by Anna Griva, Addendum: “The mystical keys of Isabella di Morra” by Markos Dendrinou, Publ. Koukoutsis, 2014 [in Greek]
10. Gaspara Stampa, *My body full of fire or stone*, translation by Anna Griva, Addendum: “The alchemical poetry of Gaspara Stampa” by Markos Dendrinou, Publ. Koukoutsis, 2015 [in Greek]
11. Markos Dendrinou and Dimitris Kouis, *Basic Principles and Technologies in Information Science*. Athens 2016. E-book:
https://repository.kallipos.gr/pdfviewer/web/viewer.html?file=/bitstream/11419/6447/4/9662_master_document%20.pdf [in Greek]
12. Sara Copia Sullam, *La bella Hebraea*, translation by Anna Griva, Addendum: “A poetess philosopher” by Markos Dendrinou, Publ. Rome, 2019 [in Greek]
13. Markos Dendrinou, *Hypatia as astronomer, mathematician and philosopher*, Publications Bartzoulianos, 2020 [to be published]

5.3. Participation in collective volumes - Addenda

1. Anna Griva, Markos Dendrinou, “The revival of the world through the women: the paradigm of three poetesses of the Italian Renaissance”, in *From Sappho to Emily Dickinson, women poetesses in time*, Publ. Gabrilidis, 2019 [in Greek].
2. Markos Dendrinou, “Hypatia through the letters of Synesius” in *Heroides, Six texts for the woman as protagonists in literature*, Publ. Syrtari, 2020 [to be published]

5.4. Papers in scientific journals with reviewers.

1. M. Dendrinou and F. Afrati, “A graph-theoretic scheme for the construction of low complexity codes”, *Technica Chronica (TEE) - ScientificRegion B*, Volume 6, Issue 1, pp. 37-60, Jan-Mar. 1986.
2. S. Bakamidis, M. Dendrinou and G. Carayannis, “SVD Analysis by Synthesis of Harmonic Signals”, *Acoustics Speech and Signal Processing (ASSP)*, IEEE, Vol. 39, No.2, pp. 472-477, Feb. 1991
3. M. Dendrinou, S. Bakamidis and G. Carayannis, “Speech Enhancement from Noise : A Regenerative Approach”, *Speech Communication*, Vol.10, No.1, pp.45-57, Feb.1991
<http://www.sciencedirect.com/science/article/pii/016763939190027Q>
4. M. Dendrinou, “A speaking electronic librarian”, *Ariadne Magazine*, Issue 33, Sept-Oct 2002, UKOLN, UK
<http://www.ariadne.ac.uk/issue33/dendrinou/>
5. M. Dendrinou and S. Bakamidis, “A resource description device used for more efficient library services”, *Information Technology and Libraries Journal*, Vol.21, No.4, Dec. 2002 (<http://www.ala.org/lita/ital/21/4/dendrinou/>)
6. M. Dendrinou, “Alchemical ideas during 16th – 18th centuries ”, *Journal of History and Philosophy of Science and Technology Nefsis*, Vol, 12, Summer 2003, pp. 58-80.
7. M. Dendrinou, “From the physical reality to the virtual reality in the library environment”, *Library Philosophy and Practice (LPP) Journal*, Vol. 7, No. 2, Spring 2005
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1015&context=libphilprac>
8. M. Dendrinou, “Philosophical Views about Digital Information and Relational Schemata”, *Library Philosophy and Practice (LPP) Journal*, Vol. 9, No. 1, Fall 2006
<http://digitalcommons.unl.edu/libphilprac/89/>
9. M. Dendrinou, “Computer science professionals and Greek Library Science”, *Education for Information*, IOS Press, Vol. 26, No.2, 2008, pp. 101-111.

10. M. Dendrinou, "From Information to Knowledge: From Positive Chatter to Negative Semantics", *PNLA Quarterly*, the official publication of the Pacific Northwest Library Association, Vol. 77, No. 4, Summer 2013
<https://pnla.org/wp-content/uploads/2018/03/volume-78-1.pdf>
11. Daphne Kyriaki-Manessi, Markos Dendrinou, Alexandra Tranta, "Exploring the Visualization of Concepts, Objects, Places, Time and Activities", *Journal of Liberal Arts and Humanities (JLAH)*, Issue: Vol. 1, No. 5, May 2020, pp. 35-40.
12. Markos Dendrinou, Anna Griva, *The sixth hypothesis of platonic Parmenides: From the Neoplatonists and Marsilio Ficino to a new hermeneutical approach*, *Journal Ελληνική Φιλοσοφική Επιθεώρηση* [accepted for publication] [in greek]
13. Anna Griva, Markos Dendrinou, "Beauty, form, matter: philosophical extensions of Sara Copia Sullam's poetry in the case of her debate with Baldassare Bonifaccio", *Journal διά-ΛΟΓΟΣ*, Issue 12, [accepted for publication] [in greek]

5.5. Announcements in conferences with reviewers.

1. M. Dendrinou and F. Afrati, "Considerations on Low Complexity Codes Concerning Symmetry and Cyclicity", *Proceedings of the European Meeting on Digital Techniques in Simulation Communication and Control (DIGITECH'84)*, IMACS (International Association for Mathematics and Computers in Simulation), pp. 263-268, Patras, Jul.1984.
2. M. Dendrinou and G. Carayannis, "Spectrum Analysis Using a New Autocorrelation Measure", *Proceedings of the International Conference on Acoustics Speech and Signal Processing, ICASSP'88*, IEEE, paper E6.7, pp. 2468-2471, New York, April 1988
<https://ieeexplore.ieee.org/document/197143>
3. M. Dendrinou, M. Rangoussi and G. Carayannis, "Overdetermined Spectral Analysis of Short Data Records", *Proceedings of the International Symposium on Circuits and Systems*, ISCAS'88, IEEE, pp. 1585-1588, Helsinki, June 1988
<https://ieeexplore.ieee.org/document/15235>
4. M. Dendrinou and S. Bakamidis, "End-Point Detection in Coloured Background Noise Using Singular Values Ratios", *Proceedings of the International Conference on Language Engineering on the Information Highway*, Santorini, Sept.1994.
5. M. Dendrinou and S. Bakamidis, "Voice Activity Detection in Coloured-Noise Environment through Singular Value Decomposition", *Proceedings of the International Conference on Signal Processing Applications & Technology, ICSPAT'94*, IEEE, pp. 137-141, Dallas, USA, Oct.1994.
6. M. Dendrinou, "A Case Study for the Management of a Set of Spectrally Analysed Signals Based in OODBMS", *Proceedings of the International Database Engineering and Application Symposium, Concordia University, IDEAS'97*, IEEE Montreal, Canada, Aug.1997
<https://ieeexplore.ieee.org/document/625666>
7. M. Dendrinou, "Obstructive Sleep Apnea (OSA) Detection through Energy and Spectral Measures", *International Conference on Signal Processing Applications and Technology (ICSPAT-98)*, IEEE, Toronto, Sept. 1998.
8. M. Dendrinou, S.Bakamidis, I.Dologlou and G.Carayannis, "Single Channel SVD based Noise Reduction Techniques", *4th European Conference on Noise Control, EURONOISE 2001*, Patra, 14-17 Jan.2001.
9. G. Tampouratzis, S. Bakamidis, I. Dologlou, G. Carayannis, M. Dendrinou, "The IMUTUS interactive music tuition system", *Acoustical Society of America (ASA) Conference in Pittsburgh, PA, USA, June 2002*.
10. M. Dendrinou, "Special interfaces with electronic library systems for persons with vision disabilities", *12th Hellenic Conference of Academic Libraries*, TEI of Serres, Nov. 2003, pp. 375-384. [in greek]

11. N. Kareklas, M. Dendrinou, "Safety issues in the distribution of information in the librarian community", *14th Hellenic Conference of Academic Libraries*, TEI of Athens, Dec. 2005. [in greek]
12. M. Dendrinou, "An interpretation of Aristotelian Logic according to George Boole", *The 1st International Conference on Integrated Information (IC-ININFO-2011)*, Oct. 2011, Kos, Greece
13. M. Dendrinou, "A medieval encyclopedia in terms of contemporary knowledge management schemes", *The 3rd International Conference on Integrated Information (IC-ININFO-2013)*, Sept. 2013, Prague, Czech Republic
14. Daphne Kyriaki-Manessi, Markos Dendrinou. "Developing an ontology for the University Archives: the domain of technological education". *The 3rd International Conference on Integrated Information*, Sept. 2013, Prague, Czech Republic. Published in *Procedia. Elsevier. Social and Behavioural Sciences*. 2014, pp. 349-359. DOI: 10.1016/j.sbspro.2014.07.11
15. M. Dendrinou, "An interpretation of the Platonic Sophist under the view of the contemporary semantical relations". *Proceedings of the Conference "History of Information"*. Law Library of the University of Athens, Ionian University. Athens, May 2013 [in greek]
16. Ioannis Triantafyllou . Georgios Giannakopoulos , Daphne Kyriaki-Manessi , Markos Dendrinou, Alexandros Koulouris, Spiros Zervos , "Significance of clustering and classification applications in digital and physical libraries", *4th International Conference on Integrated Information (IC-ININFO-2014)*, Sept. 2014, Madrid, Spain
17. Alexandra Barouchou, Markos Dendrinou, "Similarity extraction mechanism concerning historical personalities based on SQL queries in an RDBMS environment", *4th International Conference on Integrated Information (IC-ININFO-2014)*, Sept. 2014, Madrid, Spain
18. Markos Dendrinou, "Organization of the concepts of the Platonic dialogue Parmenides into a software ontology", *4th International Conference on Integrated Information (IC-ININFO-2014)*, Sept. 2014, Madrid, Spain
19. Anna Griva, Markos Dendrinou, "The Definitions of Plato in Bessarion Codex: another version of the platonic work through the manuscript of Bessarion", *46th Conference of Panhellenic Union of Philologists (PEF), «Byzantium: History and Civilization»*, 7 - 9 of Nov. 2019, Corinth, Greece [in greek]
20. Daphne Kyriaki-Manessi, Markos Dendrinou, Alexandra Tranta,, "The design of *palm tree decoration motif* in Greek art: Creation of an ontology", *International Conference of Greek folk art: Old themes with modern approaches*, Volos, 25-27 September, 2020 [in greek],
https://www.he.duth.gr/sites/default/files/activities/book_synedrio_folk_art_2020.pdf
21. Anna Griva, Markos Dendrinou, *The revival of the ancient greek ideal of education in the Speech of Theophilus Kairis to his students in 1839: a special approach of education by a famous Greek man of the Enlightenment*, 47ο Συνέδριο της Πανελληνίας Ένωσης Φιλολόγων (ΠΕΦ), 2021 [δεκτό προς παρουσίαση]

5.6. Indicative citations

[Google-scholar Sept 2020: in sum 334]

1. M. Dendrinou, S. Bakamidis, and G. Carayannis, "Speech Enhancement from Noise: A Regenerative Approach", *Speech Communication*, 10(1):45-57, February 1991: 239 citations.
2. S. Bakamidis, M. Dendrinou, and G. Carayannis, "SVD Analysis by Synthesis of Harmonic Signals", *IEEE Transactions on Signal Processing*, 39(2), 1991: 51 citations.

3. Daphne Kyriaki-Manessi, Markos Dendrinou. "Developing an ontology for the University Archives: the domain of technological education", *Procedia-Social and Behavioral Sciences*, Vol. 147, pp. 349-359, Elsevier: 9 citations.
4. M Dendrinou, G Carayannis, "Spectrum analysis using a new autocorrelation measure", *ICASSP-88.*, International Conference on Acoustics, Speech, and Signal Processing, pp. 2468-2471, IEEE: 6 citations.
5. M. Dendrinou and S. Bakamidis, "Voice Activity Detection in Coloured-Noise Environment through Singular Value Decomposition", *Proceedings of the International Conference on Signal Processing Applications & Technology, ICSPAT'94*, IEEE, pp. 137-141, Dallas, USA, Oct.1994: 5 citations.
6. M. Dendrinou, "A speaking electronic librarian", *Ariadne Magazine*, Issue 33, Sept-Oct 2002, UKOLN, UK (<http://www.ariadne.ac.uk/issue33/dendrinou/>) : 5 citations.
7. M. Dendrinou, "Computer science professionals and Greek Library Science", *Education for Information*, IOS Press, Vol. 26, No.2, 2008, pp. 101-111: 4 citations.
8. M. Dendrinou, "From the physical reality to the virtual reality in the library environment", *Library Philosophy and Practice (LPP) Journal*, Vol. 7, No. 2, Spring 2005 (<http://libr.unl.edu:2000/LPP/lpp.htm>) : 3 citations.
9. I Triantafyllou, A Koulouris, S Zervos, M Dendrinou, G Giannakopoulos, "Significance of clustering and classification applications in digital and physical libraries", *AIP Conference Proceedings* 1644 (1), 133-140: 3 citations.
10. M Dendrinou, "Special interfaces of library electronic systems for persons with visual disabilities", *Proceedings of 12th Panhellenic Academic Library Conference*, 12-14: 3 citations

6. Literature – Poetry

[1] Markos Dendrinou, *The gold of doge*, Poems, Publ. Gavriilidis, 2019 [in Greek]