

CURRICULUM VITAE
Mrs Stavroula BARBOUNAKI (PhD)
Lecturer in IT systems and Services

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Nationality	Greek

EDUCATION

- 1993 - 1997: PhD in Biomedical Engineering,
Université Paris V - René Descartes, France.
(UFR Biomédicale des Saints Pères)
- 1992 - 1993: M.Sc. Biomedical Engineering (Diplômes d'Etudes
Approfondies – DEA) Université de Technologie de
Compiègne (UTC), France, Department of Biomechanics
and Biomedical Engineering.
- 1987 - 1992: B.Sc. Diploma of Electrical and Computer Engineering (5
year course),
National Technical University of Athens (NTUA), Greece,
Department of Electrical and Computer Engineering.

WORK EXPERIENCE

- 2000 to date: **Lecturer in IT systems and Services**,
Mercantile Marine Academy – Department of Engineering.
- 2002 to 2014: **Lecturer, in Project and Risk management, and Knowledge Management**, in MSc in e-Commerce,
Kingston University, in collaboration with Technological Educational Institute of Piraeus, Greece.
- 1997 to date: **Researcher in Biomedical Process Engineering**, Laboratory of Biomedical Engineering, Department of Electrical and Computer Engineering, National Technical University of Athens.
- 2008 to 2011: **Project Management Consultant**, Piraeus Port Authority, responsible for project management of IT systems integration.
- 2008 to 2009: **Business Process Management Consultant**, Olympic Airways, in collaboration with the Athens University of Economics and Business, responsible for business process modeling and management.
- 2003 to 2005: **Business Process Management Consultant**, Mutual Fund for Public Sector Clerks of Greece (ΜΤΠΥ), in collaboration with the Athens University of Economics and Business, responsible for business process modeling and management.
- 2003 to 2013: **Project Manager** to a number of projects with Technological Educational Institute of Piraeus, Greece (for details of project please see relevant section in the CV further below).
- 2004 to 2010: **Project Manager** to a number of projects with Technological Educational Institute of Ionion, Greece (for details of project please see relevant section in the CV further below).
- 2000 to 2010: **Project Manager** to a number of projects with the National & Kapodistrian University of Athens, Greece (for details of project please see relevant section in the CV further below).
- 1998 to 2003: **Research coordinator** for a number of projects with Technological Educational Institute of Piraeus, Greece (for details of project please see relevant section in the CV further below).
- 1996 to 2000: **Research Associate** for a number of projects with National Technical University of Athens, Institute of Communication and Computer Systems, Department of Electrical and Computer Engineering (ICCS-NTUA), Greece (for details of

project please see relevant section in the CV further below).

- 1999 to 2000: **Electrical Engineer**, Software Developer, Crawford – Graham Miller (Hellas) LTD, International Loss Adjusters.
- 1998 to 1999: Electrical Engineer, Mobil Hellas
- 1996 to 1997: **Research Assistant**, Hospital Pitié - Salpêtrière – Paris, France.
- 1992 to 1992: **Electrical Engineer**, Public Enterprise of Electricity.

AFFILIATION WITH PROFESSIONAL BODIES

- Technical Chamber of Greece
- Hellenic Union of Electrical Engineers
- Greek Society of Biomedical Technology

Reviewer for Journals
• Children.

AWARDS

Scholarships

- Hellenic State Scholarship Foundation for postgraduate studies in the area of Biomedical Engineering.
- Scholarship from Scientific Department of French Embassy for postgraduate studies in the area of Applied Electro science.

Research Awards

- **Best Paper Award**
Kardaras, D., Petrounias I., Barbounaki, S. and Kaperonis S. (2018). An Approach to Web Adaptation by Modelling User Interests Using TF-IDF: A Feature Selection and Multi-Criteria Approach Using AHP, published in the proceedings of the *HUSO 2018: The 4th International Conference on Human and Social Analytics*, Copyright (c) IARIA, 2018, ISBN: 978-1-61208-648-4.
- **Best Paper Award**
Kardaras D., Karakostas B., Barbounaki S., Papadopoulos A., and Kaperonis S. (2017). Integrating the Balanced Scorecard and Web analytics for Strategic Digital Marketing: A multi-criteria approach using DEMATEL, published in *the 6th International Conference on Data Analytics-DATA ANALYTICS 2017*, 12-16 November 2017, Barcelona, Spain, pp. 41-46, Copyright (c) IARIA, 2017. ISBN: 978-1-61208-603-3.

Teaching Modules

1. Project Management (MSc. course),
2. Knowledge Management (MSc course),
3. Electronics (final year),
4. Design of Electronic Circuits (2nd year),
5. Biomedical Technologies (final year),
6. Computer Programming (2nd year),
7. Information Technology Systems (2nd year).

SOCIAL RESPONSIBILITY

Short course (15 hours) on IT offered voluntarily to unemployed young graduates. (March 2010).

RESEARCH INTERESTS

Intelligent Medical Decision Systems, Fuzzy Logic, Digital eco-Systems.

FOREIGN LANGUAGES: Greek, mother tongue.
French fluent,
English, fluent.

HOBBIES

Cinema.

Consulting (Indicative list)

1. Digital Transformation in Local Government (Attica Administrative Region, Athens, Greece, 2021).
2. Digital Transformation in Local Government (Amaroussion Municipality, Athens, Greece, 2020).
3. GDPR consulting services for a number of projects (private and public 2018-2021).
4. (2010-2011; 2011-2012): Evaluation of OLP (Piraeus Port Authority) Information systems architecture (in Greek).
5. (2009): Evaluation of Olympic Airways Information Systems Infrastructure and Management in English.
6. (2003-2005): Information systems evaluation in MTPY (public mutual fund organisation) in Greek.

REFEREED PUBLICATIONS

Books

1. Barbounaki, S. (2003). Electromechanics of Biological Fluids (in Greek). ISBN ISBN: 9789604180318.

Chapters in Books

1. Mousouraki E., Kardaras, D., Stalidis G., Barbounaki, S. and Papathanassiou E. (2019). Investigating the Social Media Potential to Attract Customers in the Banking Services Industry Using Fuzzy Delphi and Analytic Hierarchy Process, in Strategic Innovative Marketing and Tourism, Publ. Springer International Publishing.
2. Kardaras, D., Karakostas B., Barbounaki, S. and Kaperonis S. (2018). A Framework for Analyzing the Impact of Data Analytics and the Internet of Things on Digital Marketing, published in the Techno-Social Systems for Modern Economical and Governmental Infrastructures, edited book by Alexander Trousov and Sergey Maruev, Publisher: IGI Global: Information Science Reference, pp. 211-240, DOI: 10.4018/978-1-5225-5586-5.

Journals

1. Vrachnis, N.; Tsonis, O.; Vrachnis, D.; Antonakopoulos, N.; Paltoglou, G.; Barbounaki, S.; Mastorakos, G.; Paschopoulos, M.; Iliodromiti, Z. (2021). The Effect of Thyrotropin-Releasing Hormone and Antithyroid Drugs on Fetal Thyroid Function. *Children*, 8, 454. <https://doi.org/10.3390/children8060454>.
2. Vrachnis, N.; Zygouris, D.; Vrachnis, D.; Roussos, N.; Loukas, N.; Antonakopoulos, N.; Paltoglou, G.; Barbounaki, S.; Valsamakis, G.; Iliodromiti, Z. (2021). Perinatal Inflammation: Could Partial Blocking of Cell Adhesion Molecule Function Be a Solution? *Children*, 8, 380. <https://doi.org/10.3390/children8050380>.
3. A Biocybernetic Model for Anaemia Diagnosis Based on Fuzzy Cognitive Maps”, *Journal of Applied Research Review* (ISSN 2408-0535), Vol. XII, No 1, pp. 125-144, 2007 [Barbounaki S.]
4. “Proposing a Virtual Community Based Framework for the Investigation of Learning Problems of Special Needs People”, *Journal of Applied Research Review* (ISSN 2408-0535), Vol. XII, No 1, pp. 81-96, 2007 [Barbounaki S.]
5. “A Biocybernetic Model Based on a Hybrid Fuzzy Rule Approach for Medical Diagnosis”, *Journal of Applied Research Review* (ISSN 2408-0535), Vol. XIII, No 1, pp.

161-178, 2007 [Barbounaki S.]
6. “Modele pour Simuler et Etudier les Phenomenew Transitifs des Globules Rouges a la Circulation Sanguine”, Journal of Applied Research Review (ISSN 2408-0535), Vol. XIII, No 1, pp. 161-178, Το άρθρο έχει γίνει δεκτό και είναι υπό δημοσίευση [Barbounaki S.]
7. Memetic Algorithm for Solving the Economic Load Dispatch Problem”, Journal of Applied Research Review (ISSN 2408-0535), XIII, No 1, pp. 59-76, 2008 [Barbounaki S., Vlachos A.]
8. A mathematical approach of individual cell microcirculation via transition electrical phenomena”, Journal of Applied Research Review (ISSN 2408-0535), Vol. VII, No1, pp. 237-244, 2002 [Barbounaki S., Vazouras C., Koutsouris D.]
9. Ψηφιακή Επεξεργασία ηλεκτρικών παλμών παραγομένων από τη διέλευση κυττάρων διαμέσου οπών στα άκρα των οποίων εφαρμόζεται ηλεκτρικό πεδίο”, Journal of Applied Research Review (ISSN 2408-0535), Vol. VII, No1, pp. 223-236, 2002 [Barbounaki S., Vazouras C., Koutsouris D.]
10. Effects of Ascorbic Acid on Tert-Butyl Hydroperoxide induced Deformability Decrease in Human Erythrocytes”, Clinical Hemorheology and Microcirculation, Vol. 15, No 1, pp. 107-120, 1995. [Galaris D., Yova D., Korantzopoulos P., Barbounaki S., Koutsouris D.]

Referred Conferences

1. Bousdekis, A., Kardaras, D., & Barbounaki, S. (2021). Assessing the Impact of Hotel Services to the Customer Rating Using Fuzzy String Matching and Belief Networks. In The Seventh International Conference on Human and Social Analytics (HUSO) 2021. (In Press).
2. Bousdekis, A., Kardaras, DK. And Barbounaki, S. (2020). Modelling the Role of Social Media in Hotel Selection Using Bayesian Networks, published in the proceedings of the HUSO 2020, The 6th International Conference on Human and Social Analytics, pp. 33-38, 18-22 October, Porto Portugal, Copyright (c) IARIA, 2018, ISBN: 978-1-61208-800-6.
3. Bousdekis, A., Kardaras, DK. And Barbounaki, S. (2020). Hotel Quality Evaluation from Online Reviews Using Fuzzy Pattern Matching and Fuzzy Cognitive Maps, published in the 9th International Conference on Data Analytics-DATA ANALYTICS 2020, 25-29

<p>October 2020, Nice, France, pp. 61-66, Copyright (c) IARIA, 2020. ISBN: 978-1-61208-816-7.</p>
<p>4. Karnavas, S., Bousdekis, A., Barbounaki, S. and Kardaras, DK. (2020). An Intelligent Recommender System for E-learning Process Personalization: A Case Study in Maritime Education, published in the 9th International Conference on Data Analytics-DATA ANALYTICS 2020, 25-29 October 2020, Nice, France, pp. 84-89, Copyright (c) IARIA, 2020. ISBN: 978-1-61208-816-7.</p>
<p>5. Kardaras, D., and Barbounaki, S., (2019). A Website Selection Model in Programmatic Advertising using Fuzzy Analytic Hierarchy Process and Similarity Methods published in the 8th International Conference on Data Analytics-DATA ANALYTICS 2019, 22-26 September 2019, Porto, Portugal, pp. 20-25, Copyright (c) IARIA, 2019. ISBN: 978-1-61208-741-2.</p>
<p>6. Barbounaki, S., Dimitrioglou, N., Kardaras, D., Petrounias, I. (2018). Profiling Using Fuzzy Set QCA for Medical Diagnosis-The Case of Anemia published in the 7th International Conference on Data Analytics-DATA ANALYTICS 2018, 18-22 November 2018, Athens, Greece, pp. 55-60, Copyright (c) IARIA, 2018. ISBN: 978-1-61208-681-1.</p>
<p>7. Stalidis G., Kardaras D., and Barbounaki, S. (2018). Data-driven marketing and loyalty programs: The stance of supermarket customers, published in the proceedings of the 6th International Conference of Contemporary Marketing Issues, 27-29 June, Athens, Greece.</p>
<p>8. Kardaras, D., Petrounias I., Barbounaki, S. and Kaperonis S. (2018). An Approach to Web Adaptation by Modelling User Interests Using TF-IDF: A Feature Selection and Multi-Criteria Approach Using AHP, published in the proceedings of the HUSO 2018: The 4th International Conference on Human and Social Analytics, Copyright (c) IARIA, 2018, ISBN: 978-1-61208-648-4.</p>
<p>9. Tsiounia, K., Dimitrioglou, N., G., Kardaras, D., and Barbounaki, S. G. (2018). A Process Modelling and Analytic Hierarchy Process Approach to Investigate the Potential of the IoT in Health Services, published in the L. Lhotska et al. (eds.), World Congress on Medical Physics and Biomedical Engineering 2018, IFMBE Proceedings 68/1, https://doi.org/10.1007/978-981-10-9035-6_70, © Springer Nature Singapore Pte Ltd. 2019.</p>
<p>10. Kardaras D., Kaperonis S., Barbounaki S., Petrounias I., and Bithas K. (2018). An Approach to Modelling User Interests Using TF-IDF and Fuzzy Sets Qualitative Comparative Analysis, published in the Artificial Intelligence Applications and Innovations, Springer International Publishing AG 2018, L. Iliadis et al. (Eds.): AIAI</p>

<p>2018, IFIP AICT 519, pp. 606–615. © IFIP International Federation for Information Processing 2018, https://doi.org/10.1007/978-3-319-92007-8_51.</p>
<p>11.Kardaras D., Karakostas B., Barbounaki S., Papadopoulos A., and Kaperonis S. (2017). Integrating the Balanced Scorecard and Web analytics for Strategic Digital Marketing: A multi-criteria approach using DEMATEL, published in the 6th International Conference on Data Analytics-DATA ANALYTICS 2017, 12-16 November 2017, Barcelona, Spain, pp. 41-46, Copyright (c) IARIA, 2017. ISBN: 978-1-61208-603-3. Best Paper Award.</p>
<p>12.Dimitrioglou N., Kardaras D., and Barbounaki S. (2017). Multicriteria evaluation of the Internet of Things potential in health care: The case of dementia care, published in the 19th IEEE Conference on Business Informatics (CBI), Thessaloniki, Greece, 24-26 July 2017, pp. 454-462, DOI 10.1109/CBI.2017.34, ISBN 978-1-5386-3034-1.</p>
<p>13.Koutra, G., Kardaras D., Barbounaki S., and Stalidis G. (2017). A Multicriteria model for Personnel selection in Maritime Industry in Greece, published in the 19th IEEE Conference on Business Informatics (CBI), Thessaloniki, Greece, 24-26 July 2017, pp., 287-294, DOI 10.1109/CBI.2017.34, ISBN 978-1-5386-3034-1.</p>
<p>14.Kardaras D.K., Papathanassiou E, A., Barbounaki S., Karakostas, B., and Kikilia, A., (2008), An Exploratory Study of the Virtual Communities Contribution to Special Needs Pupils E-Learning in Greece: The Teachers Perspective, published in the proceedings of the IADIS International Conference Web Based Communities Amsterdam, The Netherland, June 24-26, pp. 141-148, ISBN: 978-972-8924-31-7.</p>
<p>15.Kikilia K., Barbounaki S., Agritellis I., Tseles D. (2008). Challenges for the Tourism Department of the TEI of Piraeus in Spetses, International Scientific Conference SynEnergy Forum, 28-31 May.</p>
<p>16.Kikilia K., Barbounaki S., Agritellis I., Tseles D. (2008). Fuzzy Modeling for Adapting Tourism Services to Customer Needs”, International Scientific Conferene SynEnergy Forum, 28-31 May.</p>
<p>17.Kardaras D.K, Barbounaki S, Karampotsios C., and Kikilia K. (2007). VC in Support of Learning: The Views of Pupils with Special Needs published published in the proceedings of the IADIS International Conference Web Based Communities Salamanca, Spain February 18-20, pp. 164-171, ISBN: 978-972-8924-31-7.</p>
<p>18.Barbounaki S., Vazouras C., Boynard M., Koutsouris D. (1997). Determination of Erythrocyte Deformability via Digital Analysis of Electrical Pulses Produced by an Advanced Version of Cell Transit Analyzer (CTA), European Congress of Clinical</p>

Hemorheology, Lisbon, Πορτογαλία, June 29-July 2.
19.Barbounaki S., Vazouras C., Kehli A., Guillet R., Boynard M., Koutsouris D. (1997). Digital Processing of Produced Electrical Pulses by Cell Flow through Micropores”, World Congress on Medical Engineering and Biological Engineering and Computing, Magnificent Milestones and Emerging Opportunities in Medical Engineering, XI International Conference on Medical Physics, September 14-19, 1997, Nice, France.
20.Barbounaki S., Vazouras C., Kehli A., Boynard M., Koutsouris D. (1997). Transition Electrical phenomena in measurements of Cell Flow through Micropores”, World Congress on Medical Engineering and Biological Engineering and Computing Magnificent Milestones and Emerging Opportunities in Medical Engineering, XVIII International Conference on Medical and Biological Engineering, XI International Conference on Medical Physics, September 14-19, 1997, Nice, France.
21.Kehli A., Sennaoui A., Barbounaki S., Boynard M. (1997). Red Blood Cell Classification using a Back Propagation Neural Network”, World Congress on Medical Engineering and Biological Engineering and Computing Magnificent Milestones and Emerging Opportunities in Medical Engineering, XVIII International Conference on Medical and Biological Engineering, XI International Conference on Medical Physics, September 14-19, 1997, Nice, France.
22.Barbounaki S., Vazouras C., Kehli A., Boynard M., Koutsouris D. (1997). Transition Phenomena Affecting the Shape of Pulses Observed during Individual Cell Flow through Micropores”, 19th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Oct. 30 - Nov. 2, 1997, Chicago IL USA.
23.Barbounaki S., Vazouras C., Guillet R., Kehli A., Boynard M., Koutsouris D. (1995). Theoretical Analysis of the Transient Electrical Phenomena During Passage Through Micropores of Red Blood Cells Placed in an Electric Field, 9th International Congress of Biorheology, 2nd International Conference on Clinical Hemorheology, Big Sky, Montana, USA, 23-28 July.

European Research Projects

I participated to several EU funded research projects (BRITE, ESPRIT, 5th Framework, Life) as project manager, researcher, or research co-ordinator. More information can be given upon request.

INDICATIVE PROJECTS UNDERTAKEN (details upon request)

Total number of projects 41

1. Digital Transformation Consulting and Report, Attica Administrative Region, Athens, Greece.
2. Digital Transformation Consulting and Report, for Amaroussion Municipality, Athens Greece.
3. Strategic Planning Consulting and Report for Amaroussion Municipality, Athens Greece.
4. A number of GDPR consulting and Reports for private and public companies.
5. Assessing the level of the Piraeus Port Authority IT systems' integration.
6. Specification and Evaluation of Business Processes of Olympic Airways services.
7. Capturing and Assessing of the Customer Facing Mutual Fund for Public Sector Clerks of Greece (MTPIY) Business Processes.
8. Establishment of a Biomedical Engineering Laboratory and an Applied Biophysics Laboratory – NTUA
9. Design and development of an intelligent system of studying the blood circulation during Hyperthermia - Siemens A.E.
10. EUROMED– EU/GSRT
11. Mobile Unit for Health Care via Telematics Support (Ambulance) - EU/DGXIII
12. Sensor Aided Intelligent Wheel Chair Navigation (SENARIO) - EU/TIDE
13. Generic System for the Management and Image Processing (NIKA) – EU/GSRT
14. Development of Products and Services for the Endorsement of Biomedical Engineering (Biotech-Net II) - EU/GSRT
15. Distributed Environmental Disaster Information and Control System (DEDICS) - Telematics Application Program - EU/DGXIII
16. Mobile robotics technology for health care services research network (MOBINET)- EU/TMR

17. Regional Secure Healthcare Networks (RESHEN)
18. Assembling Data and Knowledge at the Point of Care to Improve Medical Decision Making and Prevent Errors (AMICA), EU / AMICA
19. Mapping out of Strategic Development of Cultural Heritage in Georgia – Contribution of the Greek Civilization – EU/GSRT
20. Quality Healthcare Management and Well-Being through INTERLIFE Services (INTERLIFE)
21. Teleeducation in High Schools – EU/GSRT
22. Personal Electronic Health Record Services for the Mobile Citizen (pEHR)
23. Intelligent Wheelchair Navigation System (AUTONOMY) – EU/INNOVATION-Specific RTD Program
24. Distributed environmental disaster information and control system (DEDICS)
25. Distance learning and career advice for people with special needs on automation and information technologies in industrial environment (DELICATE)
26. Medical Products Electronic Commerce (MEDICOM)
27. Mobile medical data (MOMEDA)
28. Emergency 112– EU/GSRT
29. Intranet Health Clinic– EU/GSRT
30. Virtual Simulation and Treatment via Telematics Applications in Clinical Radiooncology (VIRTUOSO)
31. Flexible Endorsement of Multiple Bibliography – EU/GSRT