

Emmanouil A. Zoulias
Laboratory Teaching Staff (EDIP)
Health Informatics
Laboratory of Health Informatics, Public Health Sector
123 Papadiamantopoulou Str, Goudi, Athens 11527
telephone: +30 210 746 1504, e-mail: ezoulias@nurs.uoa.gr

TEACHING

Undergraduate

1. Biomedical Informatics and Technology, 3rd semester
2. Introduction to Informatics and Data Analysis (laboratory), 1st semester
3. Health Informatics (laboratory), 2nd semester

Postgraduate

1. Analysis of Biomedical Signal and Images, 2rd semester, Specialty «Health Informatics», Inter-University Postgraduate Programme «Healthcare Management – Health Informatics»
2. Intelligent Decision Support Systems, 2rd semester, Specialty “Health Informatics”, Inter-University Postgraduate Programme “Healthcare Management – Health Informatics”
3. Health Informatics (laboratory), 1st semester, Multi specialities, Faculty’s Postgraduate Programme,

EDUCATION

Doctoral Diploma

- Inter-University Postgraduate Programme on Biomedical Technology, National Technical University of Athens and University of Patras, 2012

Postgraduate Diploma

- Biomedical Instrumentation Engineering, University of Dundee, UK, 1997

Degree

- Diploma of Electrical and Computer Engineer, National Technical University of Athens, 1996

RESEARCH INTERESTS

1. Digital Health,
2. Biomedical Instrumentation,
3. Artificial Intelligence, Decision Support Systems, Machine Learning,
4. Analysis of Health Data,
5. Health Informatics,
6. Web and Mobile Technologies,
7. Educational Computer Applications in the health sector,
8. Business Modelling, Project Management,

RESEARCH PROGRAMMES

1. 2021 – 2022: Funded by the European Commission research project entitled “Digital Entrepreneurial Nest and Industry 4.0 in Montenegro (Dig€Nesti4.0) and Scientific Supervisor Professor Mr. Ioannis Mantas, with the object of my participation as a Researcher.
2. 2022 – 2024: Funded by the European Commission research project Erasmus + KA2 PROJECT: “European Master on Active Ageing and Age Friendly Society”, and Scientific Supervisor Professor Ms. Panagiotas Sourtzis and subject to the preparation and writing of deliverables in Intellectual Outputs 4, 5, 6 and 7 (K.E. 17267 / Number/Character of Contract: 2020-1-FI01-KA203-066477).
3. 2020 – 2022: Funded by the European Commission research project entitled “One Network for Europe — OneNet” and Scientifically Responsible by Professor Mr. Mari Theodoros and subject of the Work in the framework of: WP4 Integrated System Operation for OneNet, WP8 Southern Cluster Demonstrator (WP leader, WP11 From OneNet demonstrators to EU wide implementation of coordinated market schemes and interoperable platforms for standardized system products, WP13 Dissemination and Exploitation. Grant Agreement number: 957739 — OneNet — H2020-LC-SC3-2018-2019-2020 / H2020-LC-SC3-2020-EC-ES-SCC (E/KE K.E. 16729)2017 – 2018: SlideWiki, Grant Agreement number: 688095 — SlideWiki — H2020-ICT-2015, National Centre of Public Administration and Local Governance.
4. 2016 – 2018: eCraft2Learn, Grant Agreement number: 731345, H2020-ICT-2016-2017/H2020-ICT-2016-1.
5. 2015 – 2016: Administration of 1st Regional Health Care System - Creating a Database for Research and Clinical Studies for the Administration of 1st Regional Health Care System.
6. 2015 – 2017: ROBOTICS-BASED LEARNING INTERVENTIONS FOR PREVENTING SCHOOL FAILURE AND EARLY SCHOOL LEAVING” (ROBOESL), PARTNERSHIP AGREEMENT Number [2015-1-IT02-KA201-015141]- 949180212, ERASMUS+/KA2.
7. 2014 – 2017: Making construals as a new digital skill for creating interactive open educational resources (CONSTRUIT!), Project number: 2014-1-UK01-KA200-001818, ERASMUS+/KA2.
8. 2015: NCSR Demokritos – CONCORDE Framework Programme FP7/2007-2013 under Grant Agreement Number 607814 (<http://www.concorde-project.eu/>).

9. 2010 – 2013: SAFROS - Patient Safety in Robotic Surgery, Project Number: 248960 CPI FP7-ICT-2009-4.
10. 2002: GLAUCAD – Glaucoma prevention by computer aided diagnostics, contract number EE QLGICT 2000-00651 DG Directorate BO.
11. 2000 – 2002: NCSR Demokritos, researcher in various European funded programs MEDASHIP, GALENOS, UNIVERSAL.

SCIENTIFIC PUBLICATIONS (selected)

1. Ognjanović, I., Zoulias, E., & Mantas, J. (2024, October). Progress achieved, landmarks, and future concerns in biomedical and health informatics. In *Healthcare* (Vol. 12, No. 20, p. 2041). MDPI.
2. Katika, A., Zoulias, E., Koufi, V., & Malamateniou, F. (2024). Greek Tweets on Long COVID: Topic Modelling Following Sentiment Analysis and ChatGPT Interpretation. *Studies in health technology and informatics*, 316, 1977-1978.
3. Nikolaos Kourmpanis, Joseph Liaskos, Emmanouil Zoulias, John Mantas. Predicting mortality outcomes in individual COVID-19 patients using machine learning algorithms. *Artificial Intelligence in Health* 2024, 1(3), 31–52. <https://doi.org/10.36922/aih.2591>
4. Kokkinaki, N., Koufi, V., Zoulias, E., & Malamateniou, F. (2024). Exploring Greek Population Attitudes Towards Using Health-Related Websites for Managing Their Health. In *Digital Health and Informatics Innovations for Sustainable Health Care Systems* (pp. 279-283). IOS Press.
5. Kourmpanis, N., Liaskos, J., Zoulias, E., & Mantas, J. (2023, June). Predicting Mortality in COVID-19 Patients Using 6 Machine Learning Algorithms. In *ICIMTH* (pp. 115-118).
6. Ognjanović, I., Šendelj, R., Laković, L., Mantas, J., Zoulias, E., Bokor, L., ... & Žugić, N. (2023). Montenegrin Digital Academic Innovation Hub: Supporting Digital Education, Business and Innovations in Medical Informatics. In *Healthcare Transformation with Informatics and Artificial Intelligence* (pp. 602-603). IOS Press.
7. Ströckl, D. E., Hoffland, M. D., & Zoulias, E. (2023). Survey Results on Online Teaching and Learning Environments in the European EMMA Project. In *Healthcare Transformation with Informatics and Artificial Intelligence* (pp. 427-431). IOS Press.
8. Petropoulos, P., Zoulias, E., Liaskos, J., & Mantas, J. (2023). Web and Mobile Enabled Application for Public Health Inspections. In *Healthcare Transformation with Informatics and Artificial Intelligence* (pp. 425-426). IOS Press.
9. Moutsana Tapolin, F., Liaskos, J., Zoulias, E., & Mantas, J. (2023). A conversational web-based chatbot to disseminate COVID-19 advisory information. In *Healthcare Transformation with Informatics and Artificial Intelligence* (pp. 483-486). IOS Press.
10. Katika, A., Zoulias, E., Koufi, V., & Malamateniou, F. (2023). Mining Greek tweets on long COVID using sentiment analysis and topic modeling. In *Healthcare Transformation with Informatics and Artificial Intelligence* (pp. 545-548). IOS Press.
11. Zoulias, E., Mantas, J., Ognjanovic, I., Sendelj, R., Lakovic, L., Kara, P. A., ... & Reich, C. (2023). Health Informatics Training Programs to Strengthen Health Workforce in Montenegro. In *Healthcare Transformation with Informatics and Artificial Intelligence* (pp. 596-599). IOS Press.
12. Zoulias, E., & Mantas, J. (2022). Accreditation on biomedical and health informatics in Europe: Guidelines and procedures. In *Informatics and Technology in Clinical Care and Public Health* (pp. 502-504). IOS Press.
13. Tsimaras, Dimitrios O., Stylianos Mystakidis, Athanasios Christopoulos, Emmanouil Zoulias, and Ioannis Hatzilygeroudis. "E-Learning Courses Evaluation on the Basis of Trainees' Feedback on Open Questions Text Analysis." *Education Sciences* 12, no. 9 (2022): 633.
14. Sijakovic, Nenad, Aleksandar Terzic, Georgios Fotis, Ioannis Mentis, Magda Zafeiropoulou, Theodoros I. Maris, Emmanouil Zoulias, Charalambos Elias, Vladan Ristic, and Vasiliki Vita. "Active System Management

- Approach for Flexibility Services to the Greek transmission and distribution system." *Energies* 15, no. 17 (2022): 6134.
15. Zafeiropoulou, Magda, Ioannis Mentis, Nenad Sijakovic, Aleksandar Terzic, Georgios Fotis, Theodoros I. Maris, Vasiliki Vita, Emmanouil Zoulias, Vladan Ristic, and Lambros Ekonomou. "Forecasting transmission and distribution system flexibility needs for severe weather condition resilience and outage management." *Applied Sciences* 12, no. 14 (2022): 7334.
16. Mourtzou, Maria, and Emmanouil Zoulias. "Health Informatics Applications and Tourism: Personalized Information for Patients with Rare Diseases." *International Journal of Caring Sciences* 15.1 (2022).
17. Platis, Charalambos, Despoina, Papagiannopoulou, **Emmanouil, Zoulias**, et al. "Evaluation of the Physicians' Empathy by their Patients: A Study among the Population of Evia Island, Greece." *International Journal of Caring Sciences* 13.1 (2020): 620. (Available from: [http://internationaljournalofcaringsciences.org/docs/68 %20zoulias original 13 1.pdf](http://internationaljournalofcaringsciences.org/docs/68%20zoulias_original_13_1.pdf))
18. Platis, Ch., Spanou, A., Messaropoulos, P., Kastanioti, A., **Zoulias. E.** (2020). "Diabetic patients' quality of life and their relationship in compliance with antidiabetic treatment. Case study of patients in a Public Hospital". *WSEAS Transactions on Biology and Biomedicine*. WSEAS Transactions on Biology and Biomedicine, ISSN / E-ISSN: 1109-9518 / 2224-2902, Volume 17, 2020, Art. #5, pp. 32-38. <https://doi.org/10.37394/23208.2020.17.5>
19. Dimitris Alimisis, Rene Alimisi, Dimitrios Loukatos, **Emmanouil Zoulias** (2019) "*Kids make their own robots: good practices from the eCraft2Learn project*", FORMARE, Firenze University Press, Vol 19, No1, P. 12-29 (Invited paper), available online <http://www.fupress.net/index.php/formare/article/view/24733>. DOI: <http://dx.doi.org/10.13128/formare-24733>.
20. R. Alimisi, C. Papasasantou, D. Loukatos, and **E. Zoulias**, (2018) "*The eCraft2Learn workshops: putting forward an open craft and project based methodology for computer-supported artefact construction*", 1st conference in 3D printing in education, science and industry, 18-19th June 2018 Centre for Innovation and Technology Transfer Management of Warsaw University of Technology Short Abstract (https://project.ecraft2learn.eu/wp-content/uploads/2018/08/eCraft2Learn_Abstract-approved.pdf).
21. Konstantinos Asimakopoulos, **Emmanouil Zoulias**, Ioannis Saranteas, Ioannis Makaris, Georgia Sandali and Thomais Spiliou, (2018) "*The eCraft2Learn project in 1st EPAL KORYDALLOS: integrating a FabLab in the school curriculum*", 11th Pan-Hellenic & International Conference on ICT in Education, October 2018 (proceedings http://hcicte2018.csd.auth.gr/docs/proceedings_HCICTE2018_final.pdf).
22. Platis Charalampos, **Zoulias Emmanouil**, Iracleous Dimitrios, Evaggelia Lappa, (2017) September. "*Design and implementation of monitoring and evaluation of healthcare organization management.*" In AIP Conference Proceedings Vol. 1872 No. 1, p. 020028 (2017); doi: 10.1063/1.4996685 View online: <http://dx.doi.org/10.1063/1.4996685>, Published by the American Institute of Physics.
23. Papadimitriou A., Platis C., **Zoulias E.** (2017) "*The Role of Local Government in the Provision of Social Services in the Third Age. Case Study: The Municipality of Volos.*" In: Kavoura A., Sakas D., Tomaras P. (eds) *Strategic Innovative Marketing*. Springer Proceedings in Business and Economics. Springer, Cham. https://doi.org/10.1007/978-3-319-56288-9_23, First Online: 03 June 2017
24. Moutzouropoulou G, **Zoulias E.**, (2017) "*ICT Tools for Crisis Management Events – Rescue by Aeronautical Means*", *WSEAS Transactions on Information Science and Applications*, ISSN / E-ISSN: 1790-0832 / 2224-3402, Volume 12, Art. #32, pp. 324-329G.
25. Platis C., **Zoulias E.** (2017) "*Leadership Capabilities and their Effect on Job Performance, an Approach in Healthcare Sector.*" In: Kavoura A., Sakas D., Tomaras P. (eds) *Strategic Innovative Marketing*. Springer Proceedings in Business and Economics (pp. 365-371). Springer, Cham. https://doi.org/10.1007/978-3-319-33865-1_46.
26. **Zoulias E.**, Moutzouropoulou G., Platis C. (2017) "*Management of Medical Crisis Events Using ICT Tools.*" In: Kavoura A., Sakas D., Tomaras P. (eds) *Strategic Innovative Marketing*. Springer Proceedings in Business and Economics. Springer, Cham https://doi.org/10.1007/978-3-319-33865-1_44.
27. Platis C., **Zoulias E.** (2017) "*Organization Style and Its Effect on Employee Satisfaction and Personal Performance.*" In: Kavoura A., Sakas D., Tomaras P. (eds) *Strategic Innovative Marketing*. Springer Proceedings

- in Business and Economics. (pp. 151-158). Springer, Cham, Springer, Cham. DOIhttps://doi.org/10.1007/978-3-319-56288-9_21.
28. Beynon, M., Boyatt, R., Foss, J., Hall, C., Hudnott, E., Pope, N., Russ, S., Macleod, H., Alimisis, D., Alimisi, R. and **Zoulias, E.**, (2016). "*Playing Games with Observation, Dependency, and Agency in a New Environment for Making Construals.*" 2016 International Conference on Interactive Technologies and Games (ITAG), Nottingham, 2016, pp. 21-28. doi: 10.1109/iTAG.2016.11. IEEE.
29. Dimitrios O. Tsimaras, **Emmanouil A. Zoulias**, (2016) "*Evaluation of Vocational e-learning Seminars*", WSEAS Transactions on Advances in Engineering Education, ISSN / E-ISSN: 1790-1979 / 2224-3410, Volume 13, Art. #9, pp. 84-91.
30. Charalampos Platis, **Emmanuel Zoulias** and Stelios Zimeras, (2014) "*Impacts of Robotic Assisted Surgery on Hospital's Strategic Plan: A Social Cost Approach*", 195-205, Concepts and Trends in Healthcare Information Systems, D.-D. Koutsouris, A. A. Lazakidou (eds.), Concepts and Trends in Healthcare Information Systems, Annals of Information Systems 16, DOI 10.1007/978-3-319-06844-2_12, © Springer International Publishing Switzerland.
31. Charalampos Platis, **Emmanuel Zoulias**, (2014) "*Impacts of robotic assisted surgery on hospital's strategic plan*", Procedia - Social and Behavioral Sciences Volume 147, 25 August 2014, Pages 321–326, 3rd International Conference on Integrated Information (IC-ININFO).
32. Dimitris Alimisis, **Emmanouil Zoulias**, (2013) "*Aligning technology with learning theories: A simulator-based training curriculum in surgical robotics*", Interactive Technology and Smart Education, Vol. 10 Iss 3 pp. 211 – 229, Permanent link to this document: <http://dx.doi.org/10.1108/ITSE-05-2013-0011>.
33. Alimisis D., Fengou M., **Zoulias E.**, (2013) "*Robotics in Surgery: Designing a Simulator-Based Training Curriculum.*" In P. Kommers & P. Isaías (eds.) Proceedings of the International Conference e-Society 2013, Lisbon, pp. 233-240.
34. **Zoulias E.**, Asvestas, P. A., Matsopoulos, G. K., & Tseleni-Balafouta, S. (2011) "*A decision support system for assisting fine needle aspiration diagnosis of thyroid malignancy.*", Analytical and quantitative cytology and histology/the International Academy of Cytology [and] American Society of Cytology, 33(4), pp215-222.
35. Delibasis, K. K., Asvestas, P. A., Matsopoulos, G. K., **Zoulias, E.**, & Tseleni-Balafouta, S. (2009). "*Computer-aided diagnosis of thyroid malignancy using an artificial immune system classification algorithm.*", Information Technology in Biomedicine, IEEE Transactions on, 13(5), 680-686, doi: 10.1109/TITB.2008.926990.
36. **E. Zoulias**, P. Asvestas, G. Matsopoulos, N. Uzunoglu, S. Tseleni-Balafouta, H. Gakiopoulou, (2008) "*A data mining approach for classifying FNA thyroid data*", 6th European Symposium on BioMedical Engineering ESBME 2008, Chania, Greece, 19-21 June, 2008.
37. **Zoulias E.**, Gakiopoulou, H., Patsouris, E., Matsopoulos, G., Uzunoglu, N., & Tseleni-Balafouta, S. (2007, August). "*Analysis of the cytological features of 9054 FNA of thyroid and correlation to the cytological and histological diagnoses.*" In VIRCHOWS ARCHIV (Vol. 451, No. 2, pp. 264-265). 233 SPRING STREET, NEW YORK, NY 10013 USA: SPRINGER.

BOOKS (Chapters in books)

- Alimisis D., Loukatos D., **Zoulias E.**, Alimisi R. (2020) "*The Role of Education for the Social Uptake of Robotics: The Case of the eCraft2Learn Project.*" In: Pons J. (eds) Inclusive Robotics for a Better Society. INBOTS 2018. Biosystems & Biorobotics, vol 25. Springer, Cham, First Online , 30 July 2019, DOI https://doi.org/10.1007/978-3-030-24074-5_30, Springer, Cham, Print ISBN 978-3-030-24073-8, Online ISBN 978-3-030-24074-5.
- Alimisi, R., Loukatos, D., **Zoulias, E.**, Alimisis, D. (2019) "*Introducing the making culture in teacher education: the eCraft2Learn project*", in M. Moro, D. Alimisis, L. Iocchi (Eds.) Educational Robotics in the Context of the Maker Movement, Springer (Pre-Print) to be printed as a chapter in book <https://www.springer.com/in/book/9783030181406>.
- Alimisis, D., Alimisi, R., Loukatos, D., **Zoulias, E.** (2019) "*Introducing Maker Movement in Educational Robotics: Beyond Pre-Fabricated Robots and "Black Boxes"*". In L. Daniela, L. (Ed.) Smart Learning with Educational Robotics:

ORGANIZATIONAL AND ADMINISTRATIVE ACTIVITIES

Within the Faculty

1. Member of the Organising Committee and reviewer of scientific papers of the 6 conferences (18th – 21st) entitled “International Conference on Informatics, Management and Technology in Healthcare (ICIMTH)”, held in Athens in July 2020 – 2024.
2. Member of the Scientific Committee and reviewer of scientific papers of the 34th Medical Informatics Europe Conference, entitled Digital Health & Informatics Innovations for Sustainable Health Care Systems, held in Athens in August 2024.

On other positions

3. IT Department Manager at National Centre of Public Administration and Local Governance – NCPALG (EKDDA) (1/2/2017 up to 2/7/2018)
4. Member of Design, Implementation, Development, Extension team for e-services for National Centre of Public Administration and Local Governance – NCPALG (1/2/2008 up to 2/7/2018)
5. Responsible for the Information System of National Centre of Public Administration and Local Governance – NCPALG (1/2/2008 up to 1/2/2012)
6. Responsible for the central site of National Centre of Public Administration and Local Governance – NCPALG and related sites (1/2/2008 up to 2/7/2018)
7. Technically responsible for www.opengov.gr (31-08-2011 up to 2/7/2018)
8. Technically responsible for Repository of Greece Public Administration (31-08-2011 up to 2/7/2018)
9. Member of the team for the Open Government Partnership Initiative as a representative of National Centre of Public Administration and Local Governance – NCPALG
10. Member of the quality board of National Centre of Public Administration and Local Governance – NCPALG.
11. Representative of National Centre of Public Administration and Local Governance – NCPALG for project e-goal setting 3/2017 up to 7/2018.
12. Member of Diavgeia and Open Data of National Centre of Public Administration and Local Governance – NCPALG. Development of all automations for the provision of open data, protocol number 352/16-1-2012 and 2778/28-4-2016 (ADA 6PHΠ4691Φ0-8ΣΠ).
13. Member of the team for the research and quality improvement of the educational duties of National Centre of Public Administration and Local Governance – NCPALG, protocol number 4422/16-3-2010.
14. Member of “Ermis” team – Startegic team of Ministry of Interior, protocol number 2447/30-6-2009.
15. Member of the team for the European Funded SlideWiki under Horizon 2020 with EU proposal 688095 (ADA: Ω2224691Φ0-T2Γ)
16. Report for Open Consultations 2009-2013 - «Public Consultations ». Research Work (2013).
17. Technical report for the security and security regulation for National Centre of Public Administration and Local Governance – NCPALG, (2012).
18. Representative of National Centre of Public Administration and Local Governance – NCPALG on the cyber warfare exercise «Panoptis».
19. Responsible for the sub project of design, development and support of the application of «Personal Training Passport» under Administration reform 2007 – 2013.
20. Member of the Committee «Implementation of an Integrated Health Information System A Regional Health and Welfare Attica" 2006 -2011 (Board Decision A DYPE Attica 27/10 / 10.09.2006)

21. Member of the Committee «Technical Support Consultant 1st Y.P.E. Attica “2006 -2010”
22. Member of the Committee of the project «Creating an Information System to support the organization and administration of the Health Units B Health Region Attica» (Decision K.t.P.AE 17 680 / 29.08.2007).
23. Representative of 1st Regional Health Care System in charge for telecommunication project of “Syzeffix”.
24. Representative of 1st Regional Health Care System for the IT observatory of Greece.
25. Member of the Committee «Implementation of data network on the health units of 1st Regional Health Care System and Welfare»
26. 22. Representative of 1st Regional Health Care System for «Syzeffix»
27. Participation in Supportive Crisis Management Group as a representative of the Coordinating Body Health field for the Olympic Games 2004.
28. Participation in the recommendation for proposals executing works or hospital equipment supply for inclusion in the Public Investment Programme 2006.
29. Participation in the working group of the study entitled "Study of innovative trends in the sector of health services"
30. Project Manager of Defense and Electronics Unit of company ANKO S.A. (2000 up to 2002)
31. Project Manager of European and National funded research programs in the field of telehealth and tele-education in NCSR Demokritos. (17/05/2000 up to 16/05/2002).

Member of Scientific Organisations and Companies

1. 2020: Member of Greek Biomedical Informatics and Health Informatics Association
2. 2017: Member of Hellenic Unit of Biomedical Instrumentation
3. 2016: Member of IEEE
4. 1997: Member of National Technical Chamber of Athens (code 77084)