Μάριος Αντωνακάκης

Βιογραφικό Σημείωμα

Ο Δρ.-Μηχανικός Μάριος Αντωνακάκης είναι Επίκουρος Καθηγητής στο Ελληνικό Μεσογειακό Πανεπιστήμιο, με εξειδίκευση στην Τεχνητή Νοημοσύνη και τη μοντελοποίηση σύνθετων συστημάτων διαγνωστικής υγείας και περιβαλλοντικών και ενεργειακών βάσει δεδομένων. Είναι κάτοχος Διπλώματος Ηλεκτρονικού Μηχανικού και Μηχανικού Υπολογιστών (2012) και Μεταπτυχιακού Διπλώματος στη Βιοϊατρική Μηχανική (2015) από το Πολυτεχνείο Κρήτης (ΠΚ) και έλαβε το Διδακτορικό του από το Πολυτεχνείο του Ilmenau, Γερμανία (2021). Επί του παρόντος, είναι ερευνητικός συνεργάτης στο Ινστιτούτο Βιομαγνητισμού και Ανάλυσης Βιοσημάτων (IBB), Γερμανία, και μεταδιδακτορικός ερευνητής στο ΠΚ.

Η έρευνά του επικεντρώνεται στην επεξεργασία σημάτων και εικόνων, στη μοντελοποίηση βασισμένη σε γραφήματα και σε προηγμένες μεθοδολογίες Τεχνητής Νοημοσύνης (μηχανική μάθηση, βαθιά μάθηση και LLM) για πολυτροπική ανάλυση δεδομένων και προγνωστική μοντελοποίηση. Το έργο του υποστηρίζει εφαρμογές επιτήρησης και ιχνυλάτησης/πρόβλεψης σε συστήματα για το περιβάλλον, την υγεία, την εξόρυξη και τα ενεργειακά συστήματα, συμπεριλαμβανομένης της βελτιστοποίησης πόρων, της μοντελοποίησης σε επίπεδο συστήματος και των ψηφιακών διδύμων για σύνθετες και κρίσιμες υποδομές.

Έχει εκτεταμένη εμπειρία σε ευρωπαϊκά και εθνικά ερευνητικά έργα (Horizon Europe, EIT, Intereg, κ.α), συμβάλλοντας στην ανάπτυξη προγνωστικών μοντέλων και συστημάτων υποστήριξης αποφάσεων που βασίζονται στην Τεχνητή Νοημοσύνη. Είναι συγγραφέας περισσότερων από 60 επιστημονικών δημοσιεύσεων και έχει λάβει επτά διεθνή βραβεία καλύτερης εργασίας και πολλαπλές ανταγωνιστικές υποτροφίες (ΙΚΥ, Ίδρυμα Ωνάση, Ευρωπαϊκή Ένωση). Είναι συντάκτης στο Nature Scientific Reports, προσκεκλημένος συντάκτης σε ειδικά τεύχη και κριτής για περισσότερα από είκοσι διεθνή επιστημονικά περιοδικά.

Ερευνητικά Ενδιαφέροντα – Ανάπτυξη και εφαρμογή προηγμένων τεχνικών Τεχνητής Νοημοσύνης και μοντελοποίησης που βασίζονται σε δεδομένα, συμπεριλαμβανομένης της μηχανικής μάθησης (SVM, kNN, Random Forest, XGBoost), της βαθιάς μάθησης (C(G)NN, GAN, Transformers) και μεγάλων γλωσσικών μοντέλων (MistralAI, GPT-based models, BERT, Claude Anthropic), για την ανάλυση σύνθετων, πολυτροπικών και χωροχρονικών δεδομένων. Ιδιαίτερη έμφαση δίνεται στην τεχνητή νοημοσύνη που βασίζεται σε δεδομένα, συμπεριλαμβανομένης της μείωσης θορύβου, της καταλογισμού ελλειπουσών δεδομένων, της αύξησης δεδομένων και της σύντηξης πολυτροπικών δεδομένων, υποστηρίζοντας ισχυρή προγνωστική μοντελοποίηση σε πραγματικές συνθήκες. Τα ερευνητικά ενδιαφέροντα περιλαμβάνουν ψηφιακούς βιοδείκτες, μη επεμβατικά διαγνωστικά συστήματα, παρακολούθηση και επιτήρηση σε πραγματικό χρόνο, πρόβλεψη χρονοσειρών και ανίχνευση αντικειμένων, με εφαρμογές σε περιβαλλοντικά και ενεργειακά συστήματα, διαχείριση πόρων και βιώσιμες υποδομές.

Προσωπικές πληροφορίες

Τίτλος	Δρ. M.Sc. Ηλεκτρονικός Μηχανικός και Μηχανικός Υπολογιστών
Έτος γέννησης	1990
Μέρος γέννησης	Ηράκλειο Κρήτης
Τηλέφωνο επικοινωνίας	+30 28210 23063
Ιστότοπος	https://www.researchgate.net/profile/Marios_Antonakakis
Email	mantonakakis@hmu.gr
Προσωπική κατάσταση	Παντρεμένος
Παιδία	Ένα
Στρατ. υποχρεώσεις	Εκπληρωμένες

Σπουδές

09/2008 – 09/2013	Δίπλωμά στην Σχολή Ηλεκτρονικών μηχανικών και μηχανικών υπολογιστών, Πολυτεχνείο Κρήτης, Ελλάδα. (Βαθμός: 8.34/10) Τίτλος Εργασίας: 'Ανάλυση μαγνητοεγκεφαλογραφήματος (MEG) με χρήση προβολής ανεξαρτήτων συνιστωσών (ICA)' Εργασία: https://dias.library.tuc.gr/view/13174

09/2013 – 09/2015	Μεταπτυχιακό (M.Sc.) στην Σχολή Ηλεκτρονικών μηχανικών και μηχανικών υπολογιστών, Πολυτεχνείο Κρήτης, Ελλάδα. Τίτλος Εργασίας: 'Μη Γραμμικές μέθοδοι συγχρονισμού σε δεδομένα μαγνητοεγκεφαλογραφίας (MEG)' Εργασία: https://dias.library.tuc.gr/view/29031
08/2016 – 04/2021	Διδακτορικό (Dr.-Ing.), Βιοϊατρική Μηχανική, Ινστιτούτο Βιοϊατρικής Μηχανικής και Πληροφορικής, Τμήμα Επιστήμης Υπολογιστών και Αυτοματισμού Πολυτεχνείο Ίλμενο, Ίλμενο, Γερμανία (Αριθμός Πράξης Αναγνώρισης ΔΟΑΤΑΠ: Η8Δ12/2022). (Βαθμός: Magna Cum Laude), Τίτλος Εργασίας: 'Η επίδραση πειραματικών παραμέτρων και παραμέτρων μοντελοποίησης στην συνδυαστική ηλέκτρο- και μαγνητό- εγκεφαλογραφική ανάλυση πηγών και στη βέλτιστη διακρανιακή ηλεκτρική διέγερση επιληπτικής δραστηριότητας και δραστηριότητας από τον σωματοαισθητηριακό φλοιό' Εργασία: https://phdtheses.ekt.gr/eadd/handle/10442/55726 https://www.db-thueringen.de/receive/dbt_mods_00049153

Τωρινές και προηγούμενες θέσεις

01/2026 – παρόν	Επίκουρος Καθηγητής, Τμήμα Ηλεκτρονικών Μηχανικών, Πολυτεχνειακή Σχολή Ελληνικό Μεσογειακό Πανεπιστήμιο (ΕΛΜΕΠΑ)
2013 – παρόν	Συνεργάτης ερευνητής, Πολυτεχνείο Κρήτης
2016 – παρόν	Συνεργάτης ερευνητής, Ινστιτούτο Βιομαγνητισμού και Βιοανάλυσης Σημάτων, Πανεπιστήμιο Μίνστερ, Γερμανία
2013 – παρόν	Συνεργάτης ερευνητής, Biomedical Engineering Group, Dept. of Biomedical Engineering, University of Houston, TX, USA
2022 – 2025	Ακαδημαϊκός Υπότροφος, Τμήμα Ηλεκτρονικών Μηχανικών, Πολυτεχνειακή Σχολή Ελληνικό Μεσογειακό Πανεπιστήμιο (ΕΛΜΕΠΑ)
2023 – 2024	Ερευνητικός Συνεργάτης, Τμήμα Ιατρικής, Πανεπιστήμιο Κρήτης
2018 - 2021	Συνεργάτης ερευνητής, Τμήμα Αυτοματισμού, Πολυτεχνείο Ίλμενα, Γερμανία

Ερευνητική και Επαγγελματική Εμπειρία

06/2011 – 08/2011	Ελληνικό Κέντρο Θαλασσίων Ερευνών – **Ανάπτυξη** συστήματος εξόρυξης, οπτικοποίησης και αποθήκευσης δεδομένων από θαλάσσιους αισθητήρες
12/2013 – 03/2015	Συνεργάτης ερευνητής – Εργαστήριο DISPLAY, Πολυτεχνείο Κρήτης, Χανιά, Ελλάδα: Έργο 'CyberSensors' **– Ανάπτυξη** οπτικών συστημάτων επεξεργασίας εικόνας / βίντεο πραγματικού χρόνου για την διαχείριση υδάτων
05/2015 – 09/2015	Συνεργάτης ερευνητής – Toshiba, Εργαστήριο Επεξεργασίας Σήματος, Πανεπιστήμιο Πανεπιστημιακή Κλινική Ηρακλείου, Ηράκλειο Κρήτης, Ελλάδα: Έργο "Large scale evaluation of Phonocardiogram recordings" **– Ανάπτυξη** συστήματος μηχανικής εκμάθησης για χαρακτηρισμό παθολογικών φωνοκαρδιογραφημάτων
08/2016 – 02/2024	Μέλος της επιστημονικής ομάδας SIM-NEURO: Stimulation, Imaging and Modeling of NEUROnal networks in the human brain (Head: Prof. Dr. Carsten Wolters), Ινστιτούτο Βιομαγνητισμού και Βιοανάλυσης Σημάτων, Πανεπιστήμιο Μίνστερ, Μίνστερ. Έργο: EU ITN project ChildBrain: www.childbrain.eu (08.2016-10.2018) – Συγγραφή παραδοτέων (https://cordis.europa.eu/project/id/641652/reporting), – Ανάπτυξη συστήματος μη επεμβατικής διάγνωσης επιληψίας με χρήση TN και ΗΕΓ/ΜΕΓ/ΜΤ. SPP1665 (11.2018 – 10.2018)

	– Ανάπτυξη συστήματος μη επεμβατικής θεραπείας επιληψίας με χρήση ΤΝ. **– Συμμετοχή** στην συγγραφή της πρότασης (https://erapermed.isciii.es/wp-content/uploads/2021/01/Newsletter-ERA-PerMed_final.pdf, page 13).
10/2020 – 05/2024	Horizon2020: BUAS - https://borderuas.eu/ **– Ανάπτυξη** φορητού συστήματος επεξεργασίας εικόνας / βίντεο πολύ υψηλής ανάλυσης πραγματικού χρόνου με ΤΝ (yolov5) για τον εντοπισμό/ιχνιλάτηση αντικειμένων (άνθρωπο, ζώο, όχημα) και κατάτμηση περιβάλλοντος.
01/2021 – 08/2021	Προηγμένο Σύστημα Πρόληψης Επικίνδυνων Καταστάσεων για Βρέφη (x (επι) ΒΛΕΨΙΣ) - https://xvlepsis.gr/ **– Ανάπτυξη** συστήματος εντοπισμού άπνοιας σε δεδομένα μικροφώνου με χρήση επεξεργασίας σήματος και μηχανικής μάθησης.
10/2021 – 10/2022	Υποστήριξη λειτουργίας των υπηρεσιών του ΕΛΚΕ για την πλήρη παρακολούθηση των προγραμμάτων και ιδιαιτέρως την πλήρη διοικητική υποστήριξη και οικονομική διαχείριση των προγραμμάτων που θα χρηματοδοτηθούν από το HORIZON 2020 και το ΕΣΠΑ 2014-2020») **– Συμμετοχή** στην συγγραφή ελληνικών και ευρωπαϊκών προτάσεων Προκηρύξεις ΕΔΒΜ – 143 και ΕΔΒΜ – 166, EPIDOCNET, smartHEALTH, I-PAM, PRISM, TREEFENCE
02/2022 – 08/2024	Horizon2020: RE-EURECA-PRO - https://www.eurecapro.eu/re-eureca-pro/ **– Ανάπτυξη** μηχανισμών για δημιουργία κοινού ευρωπαϊκού γραφείου μεταφοράς τεχνολογίας.
08/2022 – 12/2023	Χρηματοδότηση Λειτουργίας Δομών και Δράσεων Μεταφοράς Τεχνολογίας-Πολυτεχνείου Κρήτης» (MIS) 5136151 - https://gnosi.tech/home/ **– Συνεισφορά** στις δράσεις γραφείου μεταφοράς τεχνολογίας του Πολ. Κρήτης
11/2022 – 06/2023	Απόκτηση Ακαδημαϊκής Διδακτικής Εμπειρίας σε Νέους Επιστήμονες Κατόχους Διδακτορικού 2022 – 2023 στο Ελληνικό Μεσογειακό Πανεπιστήμιο» με MIS 5180691 **– Παράδοση** μαθημάτων στο τμήμα Ηλεκτρονικών Μηχανικών, ΕΛΜΕΠΑ
03/2023 – 08/2024	Συνεργάτης Ερευνητής, Τμήμα Ιατρικής Παν. Κρήτης, Ηράκλειο Κρήτης, Horizon2020: SIMFONIA - https://www.sinfonia-appraisal.eu/#home **– Ανάπτυξη** ψηφιακού βοηθού ΤΝ (chatGPT agent) για συμβουλές σε προσωπικό πυρηνικής ιατρικής και ανάπτυξη μοντέλων πρόβλεψης για προσομοίωση δοσολογίας στην ακτινοθεραπεία
11/2023 – 06/2024	Απόκτηση Ακαδημαϊκής Διδακτικής Εμπειρίας σε Νέους Επιστήμονες Κατόχους Διδακτορικού στο Ελληνικό Μεσογειακό Πανεπιστήμιο» με MIS 6003253 **– Παράδοση** μαθημάτων στο τμήμα Ηλεκτρονικών Μηχανικών, ΕΛΜΕΠΑ
09/2024 – 02/2025	Απόκτηση Ακαδημαϊκής Διδακτικής Εμπειρίας σε Νέους Επιστήμονες Κατόχους Διδακτορικού στο Πολυτεχνείο» με MIS 6017330 **– Παράδοση** μαθημάτων στο τμήμα Χημικών Μηχανικών και Μηχανικών Περιβάλλοντος, Πολ. Κρήτης.
10/2023 – 01/2025	Εθνικό: https://smarthealth-edih.eu/ **– Παροχή** συμβουλευτικής σε ΜΜΕ υγείας / εκπαίδευσης σε φορείς υγείας
09/2025 – 02/2026	Απόκτηση ακαδημαϊκής διδακτικής εμπειρίας στο Ελληνικό Μεσογειακό Πανεπιστήμιο για το ακαδημαϊκό έτος 2025-2026» με MIS 6028711 **– Παράδοση** μαθημάτων στο τμήμα Χημικών Μηχανικών και Μηχανικών Περιβάλλοντος, Πολ. Κρήτης.
12/2024 – 12/2025	Εθνικό: https://safe-aorta.gr/

- **Ανάπτυξη** TN μοντέλων εντοπισμού και πρόβλεψης ανευρύσματος κοιλιακής αορτής

04/2026 – 12/2025 Ευρωπαϊκό: https://www.hieurecapro.eu/ (2025 – 2026)
- *Σχεδιασμός και εκτέλεση εκπαιδευτικών σεμιναρίων για ψηφιακή και πράσινη μετάβαση, ανάπτυξη AI εργαλείου ερωτοαποκρίσεων*

Τωρινά έργα

⇒ Ευρωπαϊκό (2024 – 2028): https://maasivetwinproject.eu/
- **Διαχείριση** δεδομένων και ανάπτυξη TN μοντέλων πρόβλεψης εφοδιαστικής αλυσίδας για δημιουργία μπαταριών.

⇒ Ευρωπαϊκό (2025 – 2027): EIT-HEI AquaSphere
- **Εκπαίδευση** και ενδυνάμωση πανεπιστημίων σε θέματα γαλάζιας οικονομίας και υδάτινων πόρων.

⇒ Ευρωπαϊκό (2025 – 2027): Intereg Ελλάδα Κύπρος MOSAIC
- *Αποτύπωση, Ανάδειξη και Αντιγραφή Ψηφιδωτών από (Εκκλησιαστικούς) Χώρους Υψηλής Πολιτιστικής Αξίας*

Επιτυχής συγγραφή και διαχείριση ερευνητικών προγραμμάτων

1. Υποτροφία Ιδρύματος Ωνάση (2018 – 2021) – PhD Thesis (Budget: 34.000,00€)
2. Συγχρηματοδοτούμενο ευρωπαϊκό – ελληνικό: smartHEALTH (2021-2024) (Budget: 147.660,00),
3. EIT-HEALTH (01/2023 – 12/2023): 'Personalised Real-time Interoperable Sepsis Monitoring (PRISM)' (Budget: 25.000,00€)
4. Δράση Φυτωρίου Ιδεών, Πολυτεχνείο Κρήτης (06/2023 – 11/2023): 'HeartGuard: Non-invasive and multi-sensor system for monitoring and real-time detection of physiological and pathological human biosignal activity' (Budget: 5.000,00€) – Επιστημονικός υπεύθυνος
5. HORIZON – MaasiveTwin (2024 – 2028) (Budget: 643.720,00)
6. ΓΓΕΚ – Εμβληματική δράση (2023 – 2025): SAFE-AORTA (Budget: 267.605,00€) - https://safe-aorta.gr/
7. ΓΓΕΚ – Εμβληματική δράση (2023 – 2025): Greece4.0 (Budget: 259.986.73€) - https://greece40.gr/
8. Δράση Φυτωρίου Ιδεών, Πολυτεχνείο Κρήτης (04/2024 – 11/2024): 'PULSEMIND – Portable Ultra-sensitive Life Sign Evaluation for Monitoring and INsightful Detection' (Budget: 3.000,00€) – Επιστημονικός υπεύθυνος
9. EIT-HEI / EITRawMaterials 2024 – AquaSphere: Empowering Higher Education Institutions (HEIs) Capabilities for Water and Maritime Innovation and Entrepreneurship (Budget: 1.340.000, TUC: 291.500,00) – Συντονιστής έργου και επιστημονικός υπεύθυνος.
10. Δράση Φυτωρίου Ιδεών, ΕΛΜΕΠΑ (04/2026 – 11/2026): 'FuseMind: Autonomous Sustainable Edge Orchestration for Multimodal Human State Intelligence' (Budget: 3.000,00€) – Επιστημονικός υπεύθυνος

Διδασκαλία μαθημάτων

Αριθμός	**Ημερομηνία**	**Μάθημα**
1	2013 – 2015	"Digital signal and image processing biomedical applications" – ECE/TUC, Greece (επικουρική διδασκαλία)
2	2016 – 2020	"Advanced applications in biomedical engineering" – IBB/WWU, Germany (επικουρική διδασκαλία)
3	01 – 02 /2021	"Advanced MATLAB courses for computational neuroscientific applications/research" – AAISCS, Cyprus (κύριος διδάσκων)
4	10/2022 – 02/2023	"Algorithms and Complexity", Department of Electronic Engineers, Hellenic Mediterranean University (κύριος διδάσκων)
5	09/2022 – 02/2023	"Computational logic and logic programming", Department of Electronic Engineers, Hellenic Mediterranean University

		(κύριος διδάσκων)
6	02/2023 – 07/2023 02/2026 – 07/2026	"Graph Theory", Department of Electronic Engineers, Hellenic Mediterranean University (κύριος διδάσκων)
7	09/2023 – 11/2023	"Online Course on Machine/Deep Learning Basics and Applications with Real-Time Hands-on," Silesian University of Technology (κύριος διδάσκων)
8	02/2024 – 09/2024	"Digital Image and Signal Processing", Department of Electronic Engineers, Hellenic Mediterranean University (κύριος διδάσκων)
9	02/2024 – 09/2024	"Renewable Energy Resources", Department of Electronic Engineers, Hellenic Mediterranean University (κύριος διδάσκων)
10	09/2024 – 02/2025	"Biomedical Technology I", Technical University of Crete (κύριος διδάσκων)
11	09/2025 – 02/2025	"Data Structures", Department of Electronic Engineers, Hellenic Mediterranean University
12	02/2026 – 07/2026	"Object Oriented Programming", Department of Electronic Engineers, Hellenic Mediterranean University

Υποτροφίες Αριστείας

Ακαδημαϊκό έτος	**Βράβευση από**
2008 – 2009	Ίδρυμα κρατικών υποτροφιών
2008 – 2009	Πολυτεχνείο Κρήτης
2009 – 2010	Πολυτεχνείο Κρήτης
2010 – 2011	Ίδρυμα κρατικών υποτροφιών
2018 – 2020	Κοινωφελές ίδρυμα 'Αλέξανδρος Σ. Ωνάσης'

Βραβεία

	Ημερομηνία	**Βράβευση από**
1	21/04/2018	Τρίτο Καλύτερο poster, Συνέδριο "50 years of MEG" από ISACM/EMEGS, Πόρος, Ελλάδα
2	15/08/2016	MARIE SKŁODOWSKA-CURIE Fellowship – μέρος του ευρωπαϊκού έργου "ADVANCING BRAIN RESEARCH IN CHILDREN'S DEVELOPMENTAL NEUROCOGNITIVE DISORDERS (ChildBrain)." https://cordis.europa.eu/project/id/641652/results
3	23/09/2019	Βραβείο Νέου Ερευνητή, 13ο Διεθνές Συνέδριο στην Ιατρική Μηχανική, Ντόρτμουντ, Γερμανία
4	11/09/2021	Βραβείο 2ης Καλύτερης Εργασίας, 9ο Πανελλήνιο Συνέδριο Ελληνικής Εταιρίας Βιοϊατρικής Τεχνολογίας (ΕΛΕΒΙΤ), Θεσσαλονίκη, Ελλάδα. https://www.elevit.org.gr/images/elevit_2021/proceedings_final_03.pdf (σελ. 125)
5	27/10/2021	Βραβείο Καλύτερης Εργασίας, 21ο IEEE Διεθνές Συνέδριο στην Βιοπληροφορική και Βιομηχανική, Κρακούγεβίτς, Σερβία. http://www.bibe2021.kg.ac.rs/
6	27/08/2022	Βραβείο 2ης θέσης, 22ο Διεθνές Συνέδριο Βιομαγνητισμού, Διαγωνισμός Ανάλυσης Δεδομένων Επιληψίας. https://biomag2020.org/awards/data-analysis-competitions/
7	15/09/2024	Βραβείο 1ης θέσης, 12ο Διεθνές Συνέδριο στον Συναισθηματικός Υπολογισμός και Ευφυής Αλληλεπίδραση https://www.tuc.gr/en/university/in-the-spotlight/item/1st-place-award-in-the-international-emotion-recognition-challenge-from-eeg-signals

Τρέχον ιδιότητα μέλους

11/2020 – παρόν	Μέλος στην διεθνή κοινότητα Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών (IEEE – αριθμός μέλους: 95603306)
12/2020 – παρόν	Μέλος στην διεθνή κοινότητα Ηλεκτροεγκεφαλογραφήματος και Κλινικής Νευροφυσιολογίας (http://www.ecnsweb.org/)
01/2021 – παρόν	Μέντορας στην ελληνική διεθνής κοινότητας IEEE EMB Βιοϊατρικών Μηχανικών (https://r8.ieee.org/greece-embs/members/)
01/2020 – παρόν	Μέλος Ελληνικής Εταιρίας Βιοϊατρικής Τεχνολογίας (ΕΛΕΒΙΤ)
05/2025 – παρόν	Γραμματέας Κλινικής Ιατρικής, ΕΛΕΒΙΤ

Διοργάνωση διεθνή συνέδριων

Αριθμός	**Ημερομηνία**	**Πληροφορίες Συνεδρίου**
1	07/2024	IISA 2024 - The Fifteenth International Conference on Information, Intelligence, Systems and Applications, https://easyconferences.eu/iisa2024/
2	10/2024	IST2024 – IEEE International Conference on Imaging Systems and Techniques, https://ist2024.ieee-ims.org/about/conference-organizers
3	05/2025	IEEE MeMeA – IEEE Medical Measurements and Applications https://memea2025.ieee-ims.org/about/organizing-committee
4	10/2025	IST2025 – IEEE International Conference on Imaging Systems and Techniques https://ist2025.ieee-ims.org/about/conference-organizers
5	11/2025	BIBE2025 – IEEE International Conference on International Conference on Bioinformatics & Bioengineering, https://easyconferences.eu/bibe2025/committees/
6	07/2026	AIAI2026 – Artificial Intelligence Applications and Innovation, https://ifipaiai.org/2026/committees/

Συντάκτης ή Προσκεκλημένος Συντάκτης σε Επιστημονικό Περιοδικό

Αριθμός	**Ημερομηνία**	**Επιστημονικό Περιοδικό**
1	12/2021 – 12/2023	MDPI – International Journal of Environmental Research and Public Health (Impact factor: 4.614), Special Issue "Special Issue "Neurodiseases and Public Health." https://www.mdpi.com/journal/ijerph/special_issues/neuro_disease_health
2	01/2022	MDPI – Sensors (Impact factor: 3.847). Special Issue "Advances on UAV-Based Sensing and Imaging." https://www.mdpi.com/journal/sensors/special_issues/UAV_SI
3	08/2023	Elsevier – "Brain Organoid and Systems Neuroscience Journal", https://www.sciencedirect.com/journal/brain-organoid-and-systems-neuroscience-journal/about/editorial-board
4	08/2023	MDPI – Multiple Sensor Signal and Image Processing for Clinical Application. Special Issue "Multiple Sensor Signal and Image Processing for Clinical Application," https://www.mdpi.com/journal/sensors/special_issues/INH955Q9N2
5	04/2024	Springer Nature: Scientific Reports (Impact factor: 5.133), https://www.nature.com/srep/about/editors
6	09/2025	Springer Nature: Scientific Reports (Impact factor: 5.133), Special Issue https://www.nature.com/collections/jcbhafgdgi/guest-editors

Οργάνωση συμποσίων σε διεθνή/εθνικά συνέδρια

Αριθμός	**Ημερομηνία**	**Διοργανωτές/ Πληροφορίες Συμποσίου**
1	08/2017	MC Piastra, **M Antonakakis**, S Homölle. FieldTrip workshop, Pre-conference training courses at the BACI2017 conference in Bern, Switzerland, http://www.baci-conference.com
2	07/2019	A Thielscher, M Siniatchkin, R Salvador, O Puonti, Miranda, S Makarov, **M Antonakakis**. Transcranial Direct Current Stimulation in Adolescents and Adults: Towards a Precision Medicine Approach Based on Numerical Models Invited Session. 41th Annual International

		Conference of the IEEE Engineering in Medicine and Biology Society, Berlin, Germany. https://embs.papercept.net/conferences/conferences/EMBC19/program/EMBC19_ContentListWeb_3.html
3	10/2019	G Giannakakis and **M Antonakakis**. Spatiotemporal computational neuroimaging methods (EEG, MEG, MRI, etc.) in epilepsy. 19th International Conference of the IEEE in Bioinformatics and Bioengineering, Athens, Greece. https://bibe2019.ics.forth.gr/participation/special-session-spatiotemporal-computational-neuroimaging-methods-in-epilepsy/
4	10/2021	**M Antonakakis**, SI Dimitriadis. Sensor/Source space functional connectivity of brain disorders on the basis of realistic head modeling. BACI2021 conference, Virtual, http://www.baci-conference.com
5	09/2022	**M Antonakakis** and M Zervakis. Biomedical image and signal methods and applications for analysing human abnormal body responses. IEEE BHI-BSN 2022, https://bhi-bsn-2022.org/?page_id=3212
6	09/2023	**M Antonakakis**. Modeling and analysis of electrophysiological recordings for the characterization of pathological brain activity. 6th Basic and Clinical multimodal Neuroimaging (BaCI) International Conference, Istanbul, Turkey. https://baci-conference2023.com/
7	10/2023	**M Antonaakis**, Digital health services to facilitate non-invasive diagnostics of brain diseases. 10th Panhellenic Conference on Biomedical Technology, Thessaloniki, Greece, October 2023. http://www.elevit.org.gr/
8	10/2023	P Natsiavas, A Dimitriadis, **M Antonkakis**, Interlinking companies and public organizations with research community in the context of smart health – The case of smartHEALTH EDIHs. 10th Panhellenic Conference on Biomedical Technology, Thessaloniki, Greece, October 2023. http://www.elevit.org.gr/
9	01/2024	**M Antonakakis, K Politof**, Accurate localization of brain activity through finite elements and deep learning techniques. smartHEALTH – Annual Forum, NCSRD, Athens, Greece, January 2024 https://smarthealth-edih.eu/2024/03/05/ethsio-forum-europaikou-komvou/
10	04/2024	**M Antonakakis**, Electromagnetic activity analysis for non-invasive diagnosis of brain disorders. 18th Neurology Symposium, Heraklion, Greece, April 2024. https://acne.gr/
11	05/2025	C Manopoulous, G Stavroulakis, N Diangelakis and **M Antonakakis**. The role of computational models and artificial intelligence for digital twins in non-invasive diagnosis of brain and heart diseases. In 11th Panhellenic Conference on Biomedical Technology, Athens, Greece, May 2025. http://www.elevit.org.gr/
12	05/2025	C Karamanis, I Gkouzionis, G Lountos and **M Antonakakis**. Digital health services to facilitate non-invasive diagnostics of brain diseases. In 11th Panhellenic Conference on Biomedical Technology, Athens, Greece, May 2025. http://www.elevit.org.gr/
13	05/2025	**M Antonakakis,** G Stavroulakis, P Spachos, V Groza. Artificial Intelligence and Modelling tools. IEEE IMS DEI2M/PDE @ MeMeA 2025. https://memea2025.ieee-ims.org/

Δημοσιεύσεις σε επιστημονικά βιβλία

Αριθμός	**Ημερομηνία**	**Συγγραφής/ Πληροφορίες Εκδοτικού Οίκου**
1	08/2021	CH Wolters, **M Antonakakis**, MC Piastra, A Khan, J Vorwerk. Characterization of the somatosensory system. Springer Nature Special Issue of the Neuromethods on "Translational Methods for Multiple Sclerosis Research." Springer – Neuromethods (https://www.springer.com/gp/book/9781071612125).
2	01/2024	SK Varun, TK Reddy, **M Antonakakis**, Michelis Zervakis. Chapter 9 - Source localization of epileptiform MEG activity towards

		intelligent smart healthcare: a retrospective study. "Data Fusion Techniques and Applications for Smart Healthcare" https://www.sciencedirect.com/book/9780443132339/data-fusion-techniques-and-applications-for-smart-healthcare#book-info
3	09/2024	Athanasakis, I, Myttas D, Katsilieris T, Bellou E, Zervakis M, **Antonakakis M**, et al. (2025). BorderUAS Project: Semiautonomous Border Surveillance Platform Combining a Lighter-Than-Air (LTA) Unmanned Aerial Vehicle (UAV) with Ultra-High-Resolution Multisensor Surveillance Payload: A Comprehensive Overview. In: Gkotsis, I., Kavallieros, D., Stoianov, N., Vrochidis, S., Diagourtas, D., Akhgar, B. (eds) Paradigms on Technology Development for Security Practitioners. Security Informatics and Law Enforcement. Springer, Cham. https://doi.org/10.1007/978-3-031-62083-6_32

Ανοικτά Δεδομένα / Μεθοδολογίες

Αριθμός	**Ημερομηνία**	**Συγγραφής/ Πληροφορίες Εκδοτικού Οίκου**
1	06/2020	Piastra, M. C., Schrader, S., Nüßing, A., **Antonakakis, M.,** Medani, T., Wollbrink, A., Engwer, C., & Wolters, C. H. (2020). The WWU DUNEuro reference data set for combined EEG/MEG source analysis [Data set]. Zenodo. https://doi.org/10.5281/zenodo.3888381
2	09/2024	Erdbrügger, T., **Antonakakis, M**., Aydin, Ü., Westhoff, A., Höltershinken, M., Vorwerk, J., Schrader, S., Radecke, J.-O., Wagner, S., Medani, T., Piastra, M. C., Khan, A., Neugebauer, F., Pursiainen, S., Engwer, C., & Wolters, C. H. (2024). The University of Münster DUNEuro-based pipeline to create personalized head models with calibrated skull conductivity for EEG/MEG source analysis and optimized multi-channel tES. Zenodo. https://doi.org/10.5281/zenodo.13788989

Δημοσιεύσεις σε επιστημονικά περιοδικά

Google scholar: https://scholar.google.ca/citations?user=27KeZXMAAAAJ&hl=en
ResearchGate: https://www.researchgate.net/profile/Marios-Antonakakis

Αριθμός	**Ημερομηνία**	**Συγγραφής/Όνομα Περ./Πληροφορίες Περ.**
1	05/2014	M Vourkas, E Karakonstantaki, PG Simos, V Tsirka, **M Antonakakis**, M Vamvoukas, C Stam, S Dimitriadis, S Micheloyannis: Simple and difficult mathematics in children. A Minimum Spanning Tree EEG network analysis. Neuroscience Letters 576: 28-33.
2	12/2015	**M Antonakakis**, M Zervakis, CEM van Bijsterveldt, DI Boomsma, EJC De Geus, S Micheloyannis, and DJA Smit. Genetic effects on source level phase-locked and phase-independent brain responses in a visual oddball task. Biological Phycology, 114: 69–80.
3	02/2016	**M Antonakakis**, SI Dimitriadis, M Zervakis, R Rezaie, A Babajani-Feremi, S Micheloyannis, G Zouridakis and AC Papanicolaou: Altered Cross-frequency Coupling in Resting-State MEG after Mild Traumatic Brain Injury. Int J Psychophysiol, 102:1–11.
4	07/2017	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou, G Zouridakis: Reconfiguration of Dominant Coupling Modes in Mild Traumatic Brain Injury Mediated by δ-band Activity: a Resting State MEG Study. Neuroscience 356:275–286.
5	08/2017	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou, G Zouridakis: Altered Rich-Club and Frequency-Dependent Subnetwork Organization in Mild Traumatic Brain Injury: A MEG Resting-State Study. Front Hum Neurosci 11:416.
6	12/2017	SI Dimitriadis, **M Antonakakis**, PG Simos, JM Fletcher and AC Papanicolaou: Data-driven Topological Filtering based on Orthogonal Minimal Spanning Trees: Application to Multi-Group MEG Resting-State Connectivity. Brain Connectivity 7(10):661-670.

7	04/2019	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou, G Zouridakis: Alterations in Dynamic Spontaneous Network Microstates in Mild Traumatic Brain Injury: A MEG Beamformed Dynamic Connectivity Analysis. BioArxiv https://doi.org/10.1101/596155
8	08/2019	**M Antonakakis**, S Schrader, A Wollbrink, R Oostenfeld, S Rampp, J Haueisen, CH Wolters. Source reconstruction of somatosensory P20/N20 component: comparison of stimulation types, head models and measurement modalities. Hum Brain Mapp. 2019; 1– 18.
9	01/2020	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou, G Zouridakis: Aberrant Whole-Brain Transitions and Dynamics of Spontaneous Network Microstates in Mild Traumatic Brain Injury. Front Comput Neurosci. 2020; 13:90.
10	09/2020	**M Antonakakis**, S Schrader, Ü Aydin, A Khan, J Gross, M Zervakis, S Rampp, CH Wolters. Inter-Subject Variability of Skull Conductivity and Thickness in Calibrated Realistic Head Models. NeuroImage, 223, 17353.
11	10/2020	S Schrader, **M Antonakakis** , S Rampp, C Engwer, C Wolters CH. A novel method for calibrating head models to account for variability in conductivity and its evaluation in a sphere model. Phys Med Biol. doi: 10.1088/1361-6560/abc5aa.
12	11/2020	A Rezaei, **M Antonakakis**, MC Piastra, CH Wolters, S Pursiainen. Parametrizing the Conditionally Gaussian Prior Model for Source Localization with Reference to the P20/N20 Component of Median Nerve SEP/SEF. Brain Sci., 10(12), 934; doi.org/10.3390/brainsci10120934.
13	10/2021	A Khan, **M Antonakakis**, N Vogenauer, J Haueisen, CH Wolters. Individually optimized multi-channel tDCS for targeting somatosensory cortex. Clin Neurophysiol. 2022 Feb; 134:9-26. doi: 10.1016/j.clinph.2021.10.016.
14	12/2021	A Rezaei, J Lahtien, F Neugebauer, **M Antonakakis**, MC Piastra, A Koulouri, CH Wolters, S Pursiainen.Reconstructing subcortical and cortical somatosensory activity via the RAMUS inverse source analysis technique using median nerve SEP data. Neuroimage. 2021 Dec 15; 245:118726. doi: 10.1016/j.neuroimage.2021.118726.
15	12/2021	F Neugebauer, **M Antonakakis**, K Unnwongse, Y Parpaley, J Wellmer, S Rampp, and CH Wolters. Validating EEG, MEG and combined MEG and EEG beamforming for an estimation of the epileptogenic zone in focal cortical dysplasia. Accepted for publication MDPI Brain Sciences.
16	01/2022	K. Kumar Singh, S Kumar, **M Antonakakis**, K. Moirogiorgou, KL Kashyap, M Kumar Bajpai, M Zervakis. Deep Learning Capabilities for the Categorization of Microcalcification. Int. J. Environ. Res. Public Health 2022, 19, 2159.
17	02/2022	NG Bourbakis, K Michalopoulos, **M Antonakakis**, M Zervakis, A New Multi-resolution Approach to EEG Brain Modeling Using Local-Global Graphs and Stochastic Petri-Nets. Int J Neural Syst 26;2250006.
18	02/2022	G Kampas, A Vasileiou, **M Antonakakis**, M Zervakis, E G Spanakis, V Sakkalis, PLeškovský, S S Carballido, R Gliga, D Vinković, B Pečnik. Design of Sensors' Technical Specifications for Airborne Surveillance at Borders. Journal of Defence & Security Technologies, 5(4) - 4, 58-83.
19	11/2022	NJ Simos, K Manolitsi, EA Stamatakis, AI Luppi, **M Antonakakis**, A Kagialis, M Zervakis, D Antypa, E Kavroulakis, TG Maris, A Vakis, and E Papadaki. Chronic mild traumatic brain injury: Aberrant static and dynamic connectomic features identified through machine learning model fusion. Neuroinform (2022). https://doi.org/10.1007/s12021-022-09615-1
20	12/2022	A Khan, **M Antonakakis**, SS Krüger, R Lencer, M Nitsche, W Paulus, J Gross, CH. Wolters. Can individually targeted and optimized multi-channel tDCS outperform standard bipolar tDCS in stimulating the

		primary somatosensory cortex? Brain Stimulation 16(1):1-16. https://doi.org/10.1016/j.brs.2022.12.006
21	01/2023	T Medani, J Garcia-Prieto, F Tadel, **M Antonakakis**, TErdbrugger, M Holtershinken, W Mead, S Schrader, A Joshi, C Engwer, CH Wolters, JC Mosher, RM Leahy. Brainstorm-DUNEuro: An integrated and user-friendly Finite Element Method for modeling electromagnetic brain activity, NeuroImage (2023), doi: https://doi.org/10.1016/j.neuroimage.2022.119851
22	02/2023	A Karasmanoglou, **M Antonakakis**, M Zervakis. ECG-based Semi-supervised Anomaly Detection for early detection and monitoring of epileptic seizures. Int. J. Environ. Res. Public Health 2023, 20(6), 5000; https://doi.org/10.3390/ijerph20065000
23	01/2024	Karittevlis C, Papadopoulos M, Lima V, Orphanides GA, Tiwari S, **Antonakakis M**, Papadopoulou Lesta V, Ioannides AA. First activity and interactions in thalamus and cortex using raw single-trial EEG and MEG elicited by somatosensory stimulation. Front Syst Neurosci. 2024 Jan 5;17:1305022. doi: 10.3389/fnsys.2023.1305022.
24	02/2024	**M Antonakakis**, F Kaiser, S Rampp, S Kovac, H Wiendl, W Stummer, J Gross, C Kellinghaus, M Khaleghi-Ghadiri, G Möddel, C H. Wolters. Targeted and optimized multi-channel transcranial direct current stimulation for focal epilepsy: An N-of-1 trial. Brain Stimul. 2024, 17(2):221-223. doi: 10.1016/j.brs.2024.02.010
25	09/2024	A Karasmanoglou, G Giannakakis, P Vorgia, **M Antonakakis**, M Zervakis. Semi-Supervised Anomaly Detection for the Prediction and Detection of Pediatric Focal Epileptic Seizures on fused EEG and ECG data. Biomedical Signal Processing and Control, Vol. 101, 107083. doi: https://doi.org/10.1016/j.bspc.2024.107083
26	11/2024	Katehakis DG, Filippidis D, Karamanis K, Kouroubali A, Farmaki A, Natsiavas P, Krithara A, Christodoulou EG, **Antonakakis M** and Plexousakis D (2024) The smartHEALTH European Digital Innovation Hub experiences and challenges for accelerating the transformation of public and private organizations within the innovation ecosystem. Front. Med. 11:1503235. doi: 10.3389/fmed.2024.1503235
27	12/2024	**Antonakakis M**, Zervakis M. Advances in Unmanned Aerial Vehicle-Based Sensing and Imaging. Sensors. 2024; 24(24):8094. https://doi.org/10.3390/s24248094
28	12/2025	SK Varun, TK Reddy Bollu, S Panwar, P Agarwal, CT Lin, **M Antonakakis**, M Zervakis. n-cylindrical Symbolic Response, a standalone and synergistic biomarker for Epilepsy diagnosis on EEG modality. IEEE J Biomed Health Inform. 2025 Nov 24; doi: 10.1109/JBHI.2025.3635229
29	04/2026	H. K. Pathak, S. Priya, U. Chaurasia, K. K. Singh, **M. Antonakakis** and M. Zervakis, "Learning Where to Look: Differentiable Slice Selection and Efficient Channel Attention for FCD-II MRI Classification," in IEEE Journal of Biomedical and Health Informatics, doi: 10.1109/JBHI.2026.3685656

Δημοσιεύσεις σε διεθνή συνέδρια

Google scholar: https://scholar.google.ca/citations?user=27KeZXMAAAAJ&hl=en

ResearchGate: https://www.researchgate.net/profile/Marios-Antonakakis

Αριθμός	**Ημερομηνία**	**Συγγραφής/Όνομα Συνεδρίου/Πληροφορίες Συνεδρίου**
1	11/2013	**M Antonakakis**, G Giannakakis, M Tsiknakis, S Micheloyannis and M Zervakis. Synchronization coupling investigation using ICA cluster analysis in resting MEG signals in Reading Difficulties. 13th International Conference of the IEEE in Bioinformatics and Bioengineering, Chania, Greece.
2	11/2014	**M Antonakakis**, V Tsirka, M Zervakis and S Micheloyannis. A Minimal Spanning Tree Analysis of EEG Responses to Complex Visual Stimuli. 26th IEEE International Conference on Tools with Artificial Intelligence, Limassol, Cyprus.

3	05/2015	**M Antonakakis**, V Tsirka, SI Dimitriadis, S Micheloyannis and M Zervakis. Rich Club Differentiation of Phase Synchronization EEG Responses. 6th Panhellenic Conference on Biomedical Technology, Athens, Greece, May, 2015.
4	08/2015	**M Antonakakis**, SI Dimitriadis, M Zervakis, R Rezaie, A Babajani-Feremi, S Micheloyannis and AC Papanicolaou. Comparison of Brain Network Models using Cross-Frequency Coupling and Attack Strategies. 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Milan, Italy.
5	09/2015	K Moirogiorgou, S Nerantzaki, G Livanos, **M Antonakakis**, NP Nikolaidis, EGM Petrakis, AE Savakis, G Giakos, M Zervakis and K Mania. Color Characteristics for the Evaluation of Suspended Sediments. 12th annual International Conference on Imaging Systems and Techniques (IST), Macau, China.
6	09/2015	G Livanos, K Moirogiorgou, **M Antonakakis**, EGM Petrakis, AE Savakis, M Zervakis, G Giakos and S Shrestha. Lung Tissue Evaluation Detecting and Measuring Morphological Characteristics of Cell Regions. 12th annual International Conference on Imaging Systems and Techniques (IST), Macau, China.
7	08/2016	**M Antonakakis**, SI Dimitriadis, M Zervakis, R Rezaie, A Babajani-Feremi, AC Papanicolaou and G Zouridakis. Mining Cross-Frequency Coupling Microstates from Resting State MEG: An Application to Mild Traumatic Brain Injury. Comparison of Brain Network Models using Cross-Frequency Coupling and Attack Strategies. 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Orlanto, Florida, USA.
8	10/2016	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou and G Zouridakis. Improving the Detection of mTBI Via Complexity Analysis in Resting – State Magnetoencephalography. International Conference on Imaging Systems and Techniques, Chania, Greece.
9	08/2017	**M Antonakakis**, S Schrader, J Haueisen and CH Wolters. Combined EEG/MEG source reconstruction of electric, hapto-tactile and pneumato-tactile somatosensory stimulation using realistic head volume conductor modelling. International Conference on Basic and Clinical Multimodal Imaging.
10	03/2018	**M Antonakakis**, S Schrader, A Khan, J Haueisen, R Oostenveld, CH Wolters. Age-related skull conductivity determined by a calibration procedure using combined somatosensory evoked potentials and fields and a realistic head model. Biosignale, Erfurt, Germany.
11	04/2018	**M Antonakakis**, R Oostenveld, J Wellmer, G Moddel, J Haueisen, S Rampp, CH Wolters. Age-related skull conductivity estimated by a calibration procedure using combined somatosensory evoked potentials and fields on realistic head models. 50 years of MEG, Poros, Greece. 3rd best poster. (**3rd best poster**).
12	08/2018	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou and G Zouridakis. Increased Repertoire of Network Microstates in δ frequency for mild traumatic brain injury subjects: A MEG Beamformed Connectivity Analysis. 21st International Conference on Biomagnetism (Biomag2018), Philadelphia, Pennsylvania, USA.
13	08/2018	**M Antonakakis**, A Wollbrink, A Khan, M Zervakis, W Paulus, M Nitsche, R Lencer, S Suntrup-Krueger, J Haueisen, CH Wolters. Individual targeting and optimization of multi-channel transcranial electric stimulation of the human primary somatosensory cortex. 21st International Conference on Biomagnetism (Biomag2018), Philadelphia, Pennsylvania, USA.
14	07/2019	**M Antonakakis**, A Wollbrink, A Khan, M Zervakis, W Paulus, M Nitsche, R Lencer, S Suntrup-Krueger, T Schneider, C Herrmann, J Haueisen, CH Wolters. Individual targeting and optimization of multi-channel transcranial electric stimulation of the human primary somatosensory cortex. 41th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Berlin, Germany.

15	07/2019	A Khan, **M Antonakakis**, N Vogenauer, A Wollbrink, S Suntrup-Krueger, TR-Schneider, CS Herrmann, M Nitsche, W Paulus, J Haueisen, CH Wolters. Constrained maximum intensity optimized multi-electrode tDCS targeting of human somatosensory network. 41th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Berlin, Germany.
16	09/2019	**M Antonakakis**, S Rampp, J Wellmer, CH Wolters. Combined EEG/MEG Connectivity Analysis in presurgical epilepsy diagnosis. Summer School on Imaging in Epilepsy, Epilepsy Surgery and Epilepsy Research, Bochum, Germany.
17	10/2019	**M Antonakakis**, S Rampp, C Kellinghaus, CH Wolters, G Möddel. Individualized targeting and optimization of multi-channel transcranial direct current stimulation in drug-resistant epilepsy. 19th International Conference of the IEEE in Bioinformatics and Bioengineering, Athens, Greece.
18	10/2019	K Politof, **M Antonakakis,** A Wollbrink**,** M Zervakis, CH Wolters. Effective Connectivity in the Primary Somatosensory Network using Combined EEG and MEG. 19th International Conference of the IEEE in Bioinformatics and Bioengineering, Athens, Greece.
19	10/2019	VS Dimakopoulos, **M Antonakakis**, G Moeddel, J Wellmer, S Rampp, M Zervakis, CH Wolters. Combined EEG/MEG Source Reconstruction of Epileptic Activity using a Two-Phase Spike Clustering Approach. 19th International Conference of the IEEE in Bioinformatics and Bioengineering, Athens, Greece.
20	04/2020	A Khan, **M Antonakakis**, TR Schneider, CH Carsten. P120 Combined EEG/MEG targeting and multi-electrode individually optimized tDCS stimulation of the human somatosensory network. Clinical Neurophysiology 131(4):e79-e80.
21	04/2020	VS Dimakopoulos, **M Antonakakis**, CH Wolters, M Zervakis,. P69 Combined EEG & MEG Source Analysis coupled with a Two - Phase Spike Clustering Approach: A multifocal epilepsy case. Clinical Neurophysiology 131(4):e212-e213.
22	09/2020	G Sdoukopoulou, **M Antonakakis**, CH Wolters, and M Zervakis. Preprocessing Techniques on Combined EEG and MEG Data of a Drug-Resistant Epilepsy Case. Society of Applied Neuroscience (SAN2020), Thessaloniki, Greece.
23	02/2021	T Medani, J Garcia-Prieto, F Tadel, S Schrader, **M Antonakakis**, A Joshi, C Engwer, C H Wolters, J C Mosher, R M Leahy. Realistic head modeling of electromagnetic brain activity: an integrated Brainstorm-DUNEuro pipeline from MRI data to the FEM solutions. Medical Imaging 2021: Physics of Medical Imaging
24	04/2021	**M Antonakakis**, S Rampp, M Zervakis, J Wellmer, CH Wolters. Dynamic effective connectivity of combined EEG/MEG sources in pharmacoresistant epilepsy. 10th International IEEE EMBS Conference on Neural Engineering.
25	04/2021	**M Antonakakis**, S Rampp, G Moeddel, CH Wolters. Head modeling effects on the individualized targeting and optimization of multi-channel TES in pharmacoresistant epilepsy. 10th International IEEE EMBS Conference on Neural Engineering.
26	04/2021	K Politof, **M Antonakakis**, A Wollbrink, CH Wolters, M Zervakis. Reconstruction of the Very Early Thalamo-Cortical Network with Combined EEG and MEG on Realistic Head Modeling. 10th International IEEE EMBS Conference on Neural Engineering.
27	04/2021	G Sdoukopoulou, **M Antonakakis**, S Rampp, V Sakkalis, J Wellmer, CH Wolters and M Zervakis. Cluster-based Combined EEG/MEG Source Analysis of High Frequency Oscillatory Activity from a Multi-Focal Epilepsy Case. 10th International IEEE EMBS Conference on Neural Engineering.
28	09/2021	M Papadogiorgaki, M Venianaki, P Charonyktakis, **M Antonakakis**, I Tsamardinos, M Zervakis, V Sakkalis, Heart Rate Classification Using ECG Signal Processing and Machine Learning. 21st International

		Conference of the IEEE in Bioinformatics and Bioengineering, Kragujevac, Servia.
29	09/2021	**M Antonakakis**, K Politof, G Klados, G Sdoukopoulou, S Schiza, M Papadogiorgaki, C Farmaki, M Pediaditis, M Zervakis, V Sakkalis. A New Multi-Feature Classification Scheme for Normal and Abnormal Respiratory Sounds Discrimination. 21st International Conference of the IEEE in Bioinformatics and Bioengineering, Kragujevac, Servia. (**Best Paper Award**)
30	09/2021	**M Antonakakis**, K Politof, G Klados, G Sdoukopoulou, S Schiza, C Farmaki, M Pediaditis, M Zervakis, V Sakkalis. Classification of Normal and Abnormal Respiratory Sounds with A New Multi-Feature Classification Scheme. 9th Panhellenic Conference on Biomedical Technology, Thessaloniki, Greece.
31	09/2021	NJ Simos, **M Antonakakis,** E Papadaki, and M Zervakis Classification of resting-state fMRI functional network disturbances from Patients with mild Traumatic Brain Injuries. 9th Panhellenic Conference on Biomedical Technology, Thessaloniki, Greece. (**Best Paper Award**)
32	09/2021	G Sdoukopoulou, **M Antonakakis**, G Moeddel, CH Wolters, M Zervakis. Interictal Spike Classification in Pharmacoresistant Epilepsy using Combined EEG and MEG. 21st International Conference of the IEEE in Bioinformatics and Bioengineering, Kragujevac, Servia.
33	06/2022	**M Antonakakis**, K Tsakos, A Tzavaras, E.G Spanakis, V Sakkalis, E Petrakis, M Zervakis. Real-Time Object Detection using an Ultra-High-Resolution Camera on Embedded Systems. 2022 Annual Int. Conf. on Imaging Systems and Techniques (IST), Kaohsiung, Taiwan
34	06/2022	A Karasmanoglou, **M Antonakakis**, M Zervakis. Towards a heatmap-based explanation of YOLOv5 object detection results with Layer-wise Relevance Propagation. 2022 Annual Int. Conf. on Imaging Systems and Techniques (IST), Kaohsiung, Taiwan
35	09/2022	**M Antonakakis**, SI Dimitriadis, M Zervakis, AC Papanicolaou and G Zouridakis. Characterization of mild Traumatic Brain Injuries with Network Microstates of Dominant Functional Connectivity from MEG-based Beamformed Connectivity Analysis. 22nd Int. Conf. on Biomagnetism (Biomag2022), Birmingham, UK
36	09/2022	K Politof, **M Antonakakis**, SI Dimitriadis, M Zervakis, and G Zouridakis. Characterization of Mild Traumatic Brain Injury using Finite Element Head Modeling and Fused EEG/MEG Source Connectivity Analysis .22nd Int. Conf. on Biomagnetism (Biomag2022), Birmingham, UK
37	09/2022	F Kaiser, **M Antonakakis**, S Rampp, C Kellinghaus, S Kovac, J Gross, G Moeddel, C Wolters. Combined EEG/MEG and optimized transcranial direct current stimulation for non-invasive diagnosis and therapy of focal epilepsy. 22nd Int. Conf. on Biomagnetism (Biomag2022), Birmingham, UK
38	09/2022	A Karasmanoglou, **M Antonakakis**, M Zervakis. Monitoring short-time novelty of Electrocardiogram signals for epileptic seizure anticipation using Unsupervised Anomaly Detection. IEEE BHI-BSN 2022, Ioannina, Greece.
39	09/2022	M Ravilla-Vallejo, C Gomez, H Robert, **M Antonakakis**, S Dimitriadis, J Poza. Neural Functional Connectivity of Patients with Mild Cognitive Impairment using Finite Element Source Analysis. IEEE BHI-BSN 2022, Ioannina, Greece.
40	07/2023	G Torakis, **M Antonakakis**, E Bei, V Sakkalis, M Zervakis. Design of a multi-feature classification scheme for infant epileptic seizures. 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Sydney, Australia.
41	07/2023	A Delatolas, **M Antonakakis**, V Sakkalis, C Wolters, M Zervakis. EEG Source Analysis with a Convolutional Neural Network and Finite Element Analysis. 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Sydney, Australia.
42	09/2023	A Karasmanoglou, **M Antonakakis**, M Zervakis. Semi-Supervised Seizure Detection in EEG Recordings using Deep Autoencoder

		Representations and Anomaly Detection Methods. 6th Basic and Clinical multimodal Neuroimaging (BaCI) International Conference, Istanbul, Turkey.
43	10/2023	E Zahariadis, **M Antonakakis**, M Zervakis. Wildforest Fire Detection with ShRe-Xception Network on Aerial Optical and Infrared Images. 2023 Annual Int. Conf. on Imaging Systems and Techniques (IST), Copenhagen, Denmark.
44	10/2023	**M Antonakakis,** C Trimas, M Zervakis. A Two-Phase ResNet for Object Detection in Aerial Images. 2023 Annual Int. Conf. on Imaging Systems and Techniques (IST), Copenhagen, Denmark.
45	10/2023	G Tzedakis, E Tzamali, E. Spanakis, **M Antonakakis**, M Zervakis, V Sakkalis. Comparing YOLO-based Detectors for Pedestrian and Car Detection in Aerial Static Video: An Evaluation of Generalization Capacity and Performance. 2023 Annual Int. Conf. on Imaging Systems and Techniques (IST), Copenhagen, Denmark.
46	10/2023	A. Karasmanoglou, G. Giannakakis, P. Vorgia, **M. Antonakakis**, and M. Zervakis. Anomaly detection on heart-rate variability of paediatric patients with focal epilepsy for seizure detection. In 10th Panhellenic Conference on Biomedical Technology, Thessaloniki, Greece, October 2023.
47	12/2023	A Karasmanoglou, **M Antonakakis**, M Zervakis. Unsupervised Detection of Seizure-Related Dynamic alterations with Autoencoder-derived Deep Features. 23st International Conference of the IEEE in Bioinformatics and Bioengineering, Virtual.
48	12/2023	P Mishra, **M Antonakakis**, K Kumar Singh and M Zervakis. Colour Prediction using Vision Transformer and Continous Wavelet Transform on EEG signals. 23st International Conference of the IEEE in Bioinformatics and Bioengineering, Virtual.
49	09/2024	**M Antonakakis**, F Kaiser, S Rampp, S Kovac, H Wiendl, W Stummer, J Gross, C Kellinghaus, M Khaleghi-Ghadiri, G Möddel, CH Wolters, Personalized transcranial Direct Current Stimulation Driven by Combined EEG/MEG Source Analysis for Non-Invasive Therapy of Focal Epilepsy. 15th European Epilepsy Congress, September, 2024
50	09/2024	A Tsipourakis, **M Antonakakis**, F Kaiser, S Rampp, S Kovac, C Kellinghaus, G Möddel, CH Wolter, M Zervakis. The effect of transcranial Direct Current Stimulation on Dynamic Effective Connectivity EEG Patterns of a Focal Epilepsy Case. 15th European Epilepsy Congress, September, 2024.
51	09/2024	A Karasmanoglou, **M Antonakakis,** G Giannakakis, M Zervakis, P Vorgia. Unsupervised Seizure Detection in EEG An Unsupervised Interprable Framework for Seizure detection in EEG, ECG recordings using Changepoint Detection and Integrated Gradients. 15th European Epilepsy Congress, September, 2024. https://onlinelibrary.wiley.com/doi/full/10.1111/epi.18151
52	09/2024	A Karasmanoglou, M Zervakis, **M Antonakakis**. Unsupervised Seizure Detection in EEG Data Using Deep Autoencoder-Derived Features and Symbolic Dynamics. 15th European Epilepsy Congress, September, 2024. https://onlinelibrary.wiley.com/doi/full/10.1111/epi.18151
53	09/2024	G. Giannakakis, A. Karasmanoglou, M. Antonakakis, P. Vorgia and M. Zervakis, "Emotion Recognition Based on EEG Signals and Deep Neural Networks Architectures," 2024 12th International Conference on Affective Computing and Intelligent Interaction Workshops and Demos (ACIIW), Glasgow, United Kingdom, 2024, pp. 189-192, doi: 10.1109/ACIIW63320.2024.00038 **(Best Paper Award)**
54	11/2024	A Tsipourakis, **M Antonakakis**, F Kaiser, S Rampp, S Kovac, C Kellinghaus, G Möddel, CH Wolter, M Zervakis. The Effect of Multi-Channel tDCS on the Directed Connectivity Patterns of a Case with Focal Epilepsy using A Multi-Feature Machine Learning Evaluation. 24th International Conference of the IEEE in Bioinformatics and Bioengineering, Kragujevac, Servia.
55	11/2024	E Katsoupis, A Karasmanoglou, M Zervakis, **M Antonakakis**. PulSense: An AI-driven Cardiovascular Monitoring and Arrhythmia

		Detection System. 24th International Conference of the IEEE in Bioinformatics and Bioengineering, Kragujevac, Servia.
56	05/2025	E Bei, K Politof, K Moirogiorgou, **M Antonakakis** and Michalis Zervakis.In Morphological Analysis of Intraluminal Thrombus of Abdominal Aortic Aneurysm. 11th Panhellenic Conference on Biomedical Technology, Athens, Greece, May 2025.
57	05/2025	M Abadi, T Houari, B Benarabi, N Zerhouni, M Zervakis and **M Antonakakis.** Vision Transformer for Thyroid Ultrasound Image Classification. In 11th Panhellenic Conference on Biomedical Technology, Athens, Greece, May 2025.
58	05/2025	S Naka, **M Antonakakis** and Michalis Zervakis. ViTSeg – A Whole Heart Image Segmentation Model using Vision Transformers. In 11th Panhellenic Conference on Biomedical Technology, Athens, Greece, May 2025.
59	05/2025	S Kavvouras, **M Antonakakis**, K Politof, SI Dimitriadis, M Zervakis, A Papanikolaou, G Zouridakis. Detecting mild Traumatic Brain Injuries on Magnetoencephalography using Graph Convolutional Networks and Phase Synchronization. 20th edition of the IEEE International Symposium on Medical Measurements and Applications, Chania, Greece.
60	05/2025	U Chaurasia, HK Pathak, KK Singh, **M Antonakakis**, M Zervakis. EEGCA-Net: Channel-Attention Framework with Subject-Wise Fine-Tuning for Motor Imagery Classification. 20th edition of the IEEE International Symposium on Medical Measurements and Applications, Chania, Greece.
61	11/2025	C Chatzianagnostou, A Tsipourakis, K Biniakou, JP Crespo, CG Pena, KA Oungrinis, M Zervakis, **M Antonakakis**. Emotional State Alterations in Immersive Projection Environments: An EEG Study. 25th International Conference of the IEEE in Bioinformatics and Bioengineering, Athens, Greece.
62	11/2025	K Trivedi, HK Pathak, I Pathak, KK Singh, **M Antonakakis,** Michalis Zervakis. LungCLR: A Two-Stage Framework with Contrastive Pretraining for Low-Data Lung Cancer Histopathology. 25th International Conference of the IEEE in Bioinformatics and Bioengineering, Athens, Greece.
63	06/2026	C Chatzianagnostou, A Tsipourakis, K Biniakou, David Akoda, KA Oungrinis, M Zervakis, **M Antonakakis.** Classification of Emotional States via EEG Chronnectomics in Immersive Projection Environments. IEEE EEITE, Chania Greece.
64	09/2026	S Naka, **M Antonakakis**, G Livanos, S Darma, M Zervakis. Multi-Relational GCN Imputation for Missing Rare Earth Elements (REE) Production Time Series. IEEE International Conference on Evolving and Adaptive Intelligent Systems 2026, University of Pisa, Pisa, Italy.

Προσκεκλημένες ομιλίες / Πρόλογοι

Google scholar: https://scholar.google.ca/citations?user=27KeZXMAAAAJ&hl=en
ResearchGate: https://www.researchgate.net/profile/Marios-Antonakakis

Αριθμός	**Ημερομηνία**	**Συγγραφής/ Πληροφορίες Προλόγου**
1	02/2017	**M Antonakakis**. Multimodal analysis of combined EEG/MEG using priors from MRI. Centre for Interdisciplinary Brain Research (CIBR), Jyväskylä, Finland.
2	06/2018	**M Antonakakis**. "Brain Source Reconstruction of Epileptic Activity Using Combined EEG and MEG on a Calibrated Realistic Head Model." Scientific Symposium: "From the desk for epilepsy surgery: New source localization methods in clinical practice," Chairs: CH Wolters and S Rampp. Deutschen Gesellschaft für Epileptologie, Fürth, Germany.
3	08/2018	**M Antonakakis**. "Connectivity analysis in epilepsy networks using combined EEG/MEG source analysis and zoomed MRI." Scientific Workshop: "Connectivity analysis in epilepsy." Chair: C Vollmar.

		Summer School on Imaging in Epilepsy, Epilepsy Surgery and Epilepsy Research, Bochum, Germany.
4	08/2018	**M Antonakakis.** "Combined EEG/MEG source analysis for presurgical epilepsy diagnosis using calibrated realistic volume conductor model." Chairs: CH Wolters and S Rampp. Scientific Symposium: "Advanced MEG/EEG source analysis in epilepsy." 21st International Conference on Biomagnetism (Biomag2018), Philadelphia, Pennsylvania, USA
5	08/2019	**M Antonakakis.** "Combined EEG / MEG to individualize head modeling and its application to presurgical epilepsy diagnosis." Chairs: S Rampp and CH Wolters. Scientific Symposium on EEG and MEG source analysis methods. Summer School on Imaging in Epilepsy, Epilepsy Surgery and Epilepsy Research, Bochum, Germany.
6	09/2019	**M Antonakakis.** "Individual targeting effects and optimization of multi-channel transcranial electric stimulation of the human primary somatosensory cortex." Scientific Workshop: "New methods and experimental results for optimized multi-channel TES." Chairs: CH Wolters, and T Knösche. International Conference on Complex Medical Engineering, Dortmund, Germany. **1st Young Investigator Award**.
7	09/2020	**M Antonakakis.** "Individualized targeting and multi-channel transcranial stimulation in epileptology" Session: "E/MSI in Epileptology." Chairs: Stefan Rampp and Carsten Wolters. Summer School on Imaging in Epilepsy, Bochum, Germany.
8	09/2021	**M Antonakakis.** "Individualized targeting and multi-channel transcranial stimulation in epileptology" Session: "ESI in Epileptology." Chairs: Stefan Rampp and Carsten Wolters. Summer School on Imaging in Epilepsy, Bochum, Germany.
9	08/2022	**M Antonakakis.** "Combined EEG/MEG targeting and optimized transcranial electric stimulation in an inoperable epilepsy patient." Session: "Contribution of MEG, EEG and TES to the presurgical diagnosis and treatment of epilepsy." Chairs: Stefan Rampp and Carsten Wolters. 22st International Conference on Biomagnetism (Biomag2022), Birmingham, UK.
10	03/2022	**M Antonakakis.** "Machine Vision for Biomedical Imaging and Diagnostics Applications" **Keynote talk** on the 2nd International Conference on Machine Vision & Augmented Intelligence, March 4-6, 2022. (https://www.mvai.in/speakerDetails.php)
11	08/2022	**M Antonakakis**. "Biomedical image and signal processing for normal abnormal brain activity reconstruction and discrimination". **Keynote talk** – Workshop Artificial Intelligence for Addressing Problems in Precision Oncology.
12	11/2022	**M Antonakakis.** "Research and Innovation at TUC" 15th FoundIt-Bizrupt, Chania, Greece, https://www.eurecapro.eu/workshop-for-entrepreneurship-foundit/
13	07/2023	**M Antonakakis.** Spatiotemporal Analysis for Industrial Applications using image/signal processing and machine learning, Best Course 2023, https://best.tuc.gr/sc23/schedule/

Κριτής σε διεθνή επιστημονικά περιοδικά

Publons: https://publons.com/wos-op/researcher/3905170/marios-antonakakis/

Αριθμός	**Όνομα περιοδικού**
1	Biomedical Signal Processing & Control
2	Brain Connectivity
3	MDPI, Brain Sciences
4	Journal of Neuronal Engineering
5	Biological Psychology
6	Journal of Biomedical and Health Informatics
7	Society of IEEE Engineering in Medicine and Biology
8	Society of IEEE Bioinformatics and Biomedical Engineering

9	Frontiers in Neuroscience
10	Frontiers in Brain Imaging Methods
11	PLOS ONE
12	Computer Methods and Programs in Biomedicine
13	Quantitative Imaging in Medicine and Surgery (QIMS)
14	Internet of Things, Elsevier
15	MDPI, International Journal of Environmental Research and Public Health
16	European Journal of Neuroscience
17	IEEE/ACM Transactions on Computational Biology and Bioinformatics
18	MDPI Brain Sciences
19	Nature Scientific Reports
20	Journal of Neural Engineering
21	NeuroImage
22	NeuroImage Clinical
23	Human Brain Mapping
24	Cerebral Cortex
25	IEEE Transaction AI / Imaging / Neural Systems & Rehabilitation Engineering

Thesis supervision (integrated M.Sc.)/master thesis / PhD thesis
TUC-Library: https://dias.library.tuc.gr/

School of Electrical and Computer Engineering, Technical University of Crete
Department of Electronic Engineering, Hellenic Mediterranean University

No	Period	Student name / Thesis title
1	2014 – 2015	Vasilios Pezoulas: 'Dynamin Connectivity Analysis of MEG.'
2	2014 – 2016	Marietta Patsioura: 'Analysis of Evoked Fields from Visual and Auditory Stimuli.'
3	2015 – 2017	Elena Petrou: 'Dominant Networks of Phase Synchronization.'
4	2016 – 2021	Nicolas Zoidis: 'Resting State Analysis MEG via Complexity.'
5	2017 – 2018	Vasilios Dimakopoulos: 'Characterization of epileptic activity based on integrated functional network on a realistic head model.'
6	2017 – 2018	Konstantinos Politof: 'Functional Connectivity in the Wrist Somatosensory Network: An EEG/MEG Study.'
7	2019 – 2021	Glykeria Sdoukopoulou: Comparison of low and high frequency oscillations of combined EEG/MEG source analysis: A drug-resistant epilepsy case study
8	2020 – 2022	Christos Trimas: 'Comparison of difference machine and deep learning schemes for the detection of objects from UAV-based images.'
9	2020 – 2022	Veniamin Malefioudakis: 'Terrain reconstruction using Photogrammetry.'
10	2020 – 2021	Glykeria Sdoukopoulou (**Master of Science**): Automatic Spike detection using Combined EEG/MEG source analysis with machine learning and deep learning approaches
11	2020 – 2022	Stavroula Tsakaneli (**Master of Science**): Graph theory metrics on the combination of genomics and electrophysiology for the accurate detection of multiple sclerosis
12	2021 – 2022	Thanos Delatolas: Combined Electromagnetic Source Imaging using Deep Learning and Finite Element Analysis
13	2022 – 2023	Manos Zahariadis: Wildforest fire detection using deep learning and fusion techniques on aerial image datasets
14	2023 – 2024	Konstantinos Dimopoulos: Photovoltaic panel inspection using unmanned aerial vehicles
15	2022 – 2024	Afroditi Kolomvaki: EEG source localization on different realistic brain anatomies using Deep Learning Techniques
16	2023 – 2024	Alexandra Tsipouraki: Analysis of electroencephalography in epilepsy after transcranial brain stimulation using connectivity models and machine learning methods
17	2023 – 2024	Maria Douridou: Analysis of magnetoencephalographic signals from children with reading difficulties using realistic head modeling and machine learning
18	2023 – 2024	Evangelos Katsoupis: Development of a cardiovascular disease monitoring system.
19	2023 - 2024	Sotiris Kavvouras: Analysis of MEG signals from patients with mTBI using multilayer functional connectivity, ML and Graph NNs

20	2021 – 2024	Apostolis Karasanoglou (**Master of Science**): Landcover segmentation from high-resolution and hyperspectral images
21	2019 – 2025	Konstantinos Politof (**Master of Science**): 'Functional connectivity of somatosensory network using realistic head modeling: An EEG/MEG study.'
23	2022 – 2024	Vasilis Giovanoglou: Object detection, localization and feature characterization of image data from UAV.
24	2022 – 2024	Stelina Naka: Cardiovascular segmentations tools using Vision Transformers
25	2023 – 2024	Klea Biniakou: Conduction and analysis of EEG brain responses from visual stimulus
26	2023 – 2024	Maria Koutalaki: Multi-frequency Network attacks on MEG recordings from patients with mTBI
27	2023 – 2025	Christina Chatzianaglostou: Conduction and analysis of EEG/ECG brain responses from audiovisual stimulus
28	2024 – 2025	Charilaos Kapelonis: Mosaic segmentation using SAM2
29	2022 – 2025	Maria Vlachakou: Landcover classification on very-high resolution images
30	2022 - present	Achilleas Sfakianakis: UAV Hyperspectral Image Segmentation for Vegetation Health Classification
31	2023 – present	Vasilis Gkentsoudis: Estimation of multi-level and multi-frequency functional connectivity networks of MEG recordings from patients with mTBI
32	2023 – present	Maria Kontogianni: Analysis of EEG brain responses from visual stimulus using deep learning
33	2023 – present	Konstantinos Peslis: Multibody deep learning segmentation
34	2025 – present	Stelina Naka (**Master Thesis**): Time series forecasting in raw earth material monitoring
35	2024 – present	Georgia Bantouva: Graph Neural Networks with Effective Connectivity on Epilepsy detection
36	2024 – present	Kleinta Giaoupi: Development of an EEG/ECG app for recording and anomaly detection
37	2025 – present	Ioannis Fasarakis: Heart rate detection using deep learning and imaging data
38	2025 – present	Fotis Markou: Mosaic color extraction and segmentation using SAM2
39	2024 – present	Meriem Abadi (**PhD Thesis**): Thyroid detection and characterization using deep learning and foundation modeling
40	2025 – present	Michalis Papalios: Rich club estimation on time-varying MEG graphs for reading difficulties detection
41	2025 – present	Eleni Stavropoulou: mTBI detection using KANetworks on MEG graphs
42	2024 – present	Maria Florou: Head tissues segmentation using deep learning
43	2025 – present	Ioannis Tzevelekis: Conduction and analysis of EEG data for Nostalgia detection
44	2024 – present	George Doukas: Epilepsy detection using vision transformers
45	2024 – present	Konstantinos Athanasoulis: Heart Aorta segmentation using MedSAM2
46	2024 – present	Eva Pantazi: Heart rate detection using pattern recognition techniques
47	2024 – present	Maria Strataki: EEG / ECG data analysis for emotion characterization

48	2024 – present	Dimitra Serefidou: Deep learning foundation modeling for brain tumor segmentation
49	2025 – present	Panagiotis Raptis: CTA (Computed Tomography Angiography) data from the same patient taken at different time points
50	2024 – present	Sofoklis Fileratos: Timeseries forecasting from multiple sources using deep learning procedures
51	2025 – present	Ioannis Koukoulomatis: Video EEG analysis with machine learning for the charactization of emotional states
52	2025 – present	George Siatrias: Online monitoring platform with carbon-driven features
53	2026 – present	Ntaniel Rouli: Equivariant GNNs for Molecular Representation Learning
54	2026 – present	Nikolaos Piertzovani: Segmentation of Epileptic Dysplasias in Magnetic Resonance Images using Deep Learning Techniques
55	2026 - present	Fotios Valsamos: Analysis of MEG data from stress analysis and early-life brain development
56	2026 - present	Veniamin Malefioudakis (**PhD Thesis**): Design and Development of an Autonomous Edge Infrastructure Orchestration Framework with Agentic AI for Cost Optimization (FinOps) and Energy Footprint (GreenOps) in Clinical Artificial Intelligence Infrastructures
57	2026 - present	David Akoda (**PhD Thesis**): Real-Time Edge AI for Multimodal EEG–ECG Anomaly Detection and Human State Monitoring
58	2026 - present	Panagiotis Theodorou: Satellite image compression on mining sides
59	2026 - present	Aikaterini Paschali: Analysis of multimodal biosignal for stress detection
60	2026 - present	George-Apollon Taouxis: EEG data analysis from relax and stress drive stimuli

Γλώσσες

Ελληνικά (Μητρική)

11/2015 Αγγλικά (C2 επίπεδο)

Τεχνικές δεξιότητες

Γλώσσες Προγραμματισμού	C, Java, C++, R, Python, Javascript, jQuery, PHP, MySQL, HTML
Άλλα εργαλεία	MATLAB, SPSS, MS Office, Dia, Scirun, ParaView, Docker
Λειτουργικά Συστήματα	MS Windows, Linux (distributions: Mint, Ubuntu), MacOS