



Ivan Martinović

PhD in Electrical Engineering | AI in Medicine |

Researcher | Consultant | Lecturer |

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KEY CAREER ACHIEVEMENTS

- Accomplished international PhD Researcher, who effectively conducted and managed research with the leading universities, organizations, and companies across the US, Canada, Croatia, and Montenegro
- Actively participated/participates in 37 international/national scientific, educational, and innovation projects, including several bilateral projects, one Horizon 2020/Horizon Europe project, one IPA project, two COST actions, as well as the project for establishing Montenegro's first Centre of Excellence, BIO-ICT.
- Successfully advised multinational, national, non-governmental, and governmental organizations on STEM education and application of AI
- Created the first AI education program, currently used by the Human Resources Administration of the Government of Montenegro to train civil servants and public employees.
- Founder and CEO of NGO Montenegrin scientific technology hub epiSTEMe
- Several times awarded for being the top-performing student and granted a PhD scholarship
- Awarded with WSIS Prize 2024 Champion by the International Telecommunication Union (ITU)
- Author of 18 scientific publications

WORK EXPERIENCE

Sep 2025 – Dec 2025 **Researcher (RIS Talent)** at MAPP Center, Aarhus University, Denmark

- Recognized among 50 PhD candidates in Europe and awarded a place in the prestigious RIS Fellowship Program by EIT Food, part of the European Institute of Innovation and Technology (EIT).
- Developing and applying AI in the food sector

Feb 2024 – **Founder and CEO** at Montenegrin scientific technology hub epiSTEMe

- epiSTEMe research organization which contributes to the development and popularization of science, innovation, technology, and technological-scientific culture through STEM fields in Montenegro

Jan 2024 – **Consultant** at Human Resources Administration, Government of Montenegro

- Official lecturer in the field of AI, delivering a program designed for civil servants and public employees.
- Ready4EU project

Feb 2023 – Dec 2023 **Visiting Researcher** at the University of Toronto (Canada)

(Jun 2025 – July 2025)

- Research group: <http://imedlab.org/>
- Developing new and original methods of automatic analysis of fluoroscopy X-ray based on AI

Oct 2021 – Apr 2022 **Consultant** at British Council (Montenegro)

- Initiating and supporting the setup and fully activating Coding Clubs in over 160 schools in Montenegro
- Working on the 21st Century Schools education program, designed and realized by the British Council
- Learning pupils aged 10-15 problem-solving and practical programming skills via physical computing

Jan 2021 – Sep 2022 **Researcher** at Lockandgo (Montenegro)

- Working on the development of the Digital Locker startup, an innovative service for sustainable tourism
- Researching, designing, testing, and implementing of digital locker prototype
- Achieved to be supported and funded by the Government of Montenegro and the European Union under a collaborative grant scheme for innovative project ideas

Dec 2020 – Feb 2026 **PhD Researcher** at the University of Montenegro (Montenegro)

- Conducting research in cooperation with the University of Toronto, the University of Pittsburgh, Ericsson Nikola Tesla Zagreb, Clinical Center of Montenegro, and Glosarij, as a fellow of the Ministry of Science
- Developing new and original methods of automatic analysis of fluoroscopic X-rays based on AI

Sep 2020 - Present **Mentor** at Montenegro Makers (Montenegro)

- <https://montenegromakers.me/o-nama/>
- Establishment and Implementation of the First National Robotics League for Elementary School Students (400 participants)

Sep 2019 - Present **Student Expert** at Agency for control & quality assurance of higher education (Montenegro)

- Providing expertise in the process of evaluation and certification of higher education institutions and study programs in line with European Standards and Guidelines of quality assurance in the European Higher Education Area (EHEA)

May 2020 - Nov 2020 **Engineer for Medical Equipment** at Glosarij (Montenegro)

- Acted as a Engineer for medical devices, and business partner with Siemens Healthineers
- Assisted sales team through conducting equipment demo, installation, implementation, configuration, and training towards HCPs to ensure customer satisfaction

Jul 2019 - Sep 2019 **Researcher** at Ericsson Nikola Tesla Zagreb (Croatia)

- Participated in R&D workshop under the guidance of specialists from the industry and faculties, within topics of measurement and comparison of motion speeds in real and virtual environments
- Worked on software, documentation, technical report, and the presentation on the final day

Sep 2018 - **Lecturer** at American Corner (Montenegro)

- Creator and Lecturer of education programs supported by the American embassy in Podgorica

Jan 2018 - May 2019 **Researcher** at Faculty of Electrical Engineering (Montenegro)

- Led research, design, test, and execution of diverse types of robots in the Montenegro Wearable Robots project
- Assisted and demonstrated laboratory exercises to students in the Basic Electronics Course at faculty - the program for professional training funded by the Government of Montenegro
- *Assisted as a Researcher at the BIO-ICT Centre of Excellence of innovative smart agriculture systems*

Sep 2017 - **Researcher** at Montenegrin Science Promotion Foundation-PRONA (Montenegro)

- Responsible for conducting research projects and popularization of science in Montenegro

Jul 2017 - Sep 2017 **Researcher** at Faculty of Electrical Engineering JJ Strossmayer Osijek (Croatia)

- Worked in the laboratory for computer graphics and mathematical processing images

- Worked in various software tools for digital signal processing

EDUCATION

2020 – 2025 **PhD Electrical Engineering - AI in Medicine** at University of Montenegro, GPA: 10 (5-10)
 2018 - 2019 **MSc Electronics, Telecommunication & Computers** at University of Montenegro, GPA: 10
 2017 - 2018 **Spec. Electronics, Telecommunication & Computers** at University of Montenegro, GPA: 10
 2014 - 2017 **BSc Electronics, Telecommunication & Computers** at University of Montenegro, GPA: 9.25

VOLUNTEERING

2018 – Present **Lecturer** at American Corner (Montenegro)
 • Creator and lecturer of the educational programs supported by the US Embassy
 2018 – Present **Researcher** at Montenegrin Science Promotion Foundation-PRONA (Montenegro)
 • Leader of the physics, and electronics department, and Mentor at the Winter and Summer Schools of Science
 • Responsible for conducting research projects and popularization of science in Montenegro

CERTIFICATION & TRAINING

- **AI4Health Summer School**, PR[AI]RIE-PSAI and the Health Data Hub, Institut Necker (Université Paris Cité), Paris, 2025
- **Silicon Valley Fellow**, Meta, Google, Stanford University, Juniper Networks, VCs, San Francisco, 2024
- **Oxford Machine Learning Summer School**, University of Oxford, 2023
- Practical Machine Learning, dr Nenad Mijatović, 2022
- Elements of AI, The University of Helsinki and Reaktor Education, 2021
- How AI Can Support Healthcare, EIT Health, Universities of Groningen, Tartu & Medical Center, 2021
- Deep Learning Specialization, Coursera, 2021
- Andrew Ng's Coursera Machine Learning, Coursera, 2021
- Official Siemens Healthineers courses: CT Basic Knowledge; Syngo.via System and Installation - VB50; AI-Rad Companion Software Overview; Cios Flow Hardware Overview, Siemens Healthineers, 2021
- Official Siemens Healthineers courses: X-Ray Basic Knowledge; DICOM; Medical Basics for Customer Service Engineers; Native / Syngo User Interface; SYNGO incl. Multi-Modality Workplaces; US Basic Knowledge, Siemens Healthineers, 2020
- Summer Camp, Ericsson Nikola Tesla Zagreb, Croatia, 2019
- Workshop on Design, Deployment and Testing of Internet of Things Technologies (DDT-IoT), 2018
- Summer School, Institute for Marine Biology in Kotor, 2017
- Modern Mechatronic Systems, Summer School, University of East Sarajevo, Sarajevo, BiH, 2016
- School of Entrepreneurship and Innovation for Young People, Podgorica, Montenegro, 2014

PUBLICATIONS

Monography:

- **Martinović I.**, Nikolić G. (2026), *Development and applications of radiology in Montenegro: from the First steps to modern achievements*, Montenegrin Academy of Sciences and Arts, review done

Lexicon:

- Editor: Nikolić G., The Montenegrin Health Lexicon; **Martinović I.**, author of entries: Digitalization of Montenegrin Healthcare, Application of Artificial Intelligence in Montenegrin Healthcare

Journal articles:

- **Martinović I.**, Dousty M., Li W., Đukanović M., Coyle L. J., Sejdić E. (2025), *Leveraging Ensemble on Self-Supervised Techniques to Enhance Model Performance: A Regime Analysis*, Journal of Imaging Informatics in Medicine, <https://doi.org/10.1007/s10278-025-01600-9>

- **Martinović I.**, Shitong M., Dousty M., Li W., Đukanović M., Colak E., Sejdić E. (2025), *X-ray Modalities and Self-Supervised Learning: Tackling Small Sample Sizes and Uncurated Datasets*, FACTS, <https://www.facetsjournal.com/doi/10.1139/facets-2024-0229>
- **Martinović I.**, Sanguino T., Jovanović J., Jovanović M., Djukanović M. (2025), *One Possible Path Towards a More Robust Task of Traffic Sign Classification in Autonomous Vehicles Using Autoencoders*, Electronics-MDPI, <https://doi.org/10.3390/electronics14122382>
- Martinović A., **Martinović I.**, Mora D., Arioli S. (2024), *Uncovering the Probiotic Supplement Landscape: Market Offerings, Sales Patterns, and Future Forecasts using ML approach - A Case Study of Montenegro*, Springer Nature - Probiotics and Antimicrobial Proteins, <https://doi.org/10.1007/s12602-024-10400-6>
- Đukanović M., Kaščelan Lj., Vuković Rogić S., **Martinović I.**, Čalasan M (2023), *A machine learning approach for time series forecasting with application to debt risk of the Montenegrin electricity industry*, Energy report
- **Martinovic I.** (2019), *Representation of the negative resistance realized with negative impedance converter*, Tehnika

Conference articles:

- **Martinović I.**, Dousty M., Li W., Đukanović M., Coyle L. J., Sejdić E. (2025), *Automated Swallowing Analysis Using a Self-Supervised Learning Approach*, AI4Health Summer School (poster presentation)
- **Martinović I.** (2024), *Impact of Artificial Intelligence on Medical Practice: Current State, Challenges, and Perspectives*, Conference Days of electrical engineers
- Đukanović M., Kaščelan Lj., Vuković S., **Martinović I.**, and Čalasan M., *A machine learning approach for time series forecasting with application to debt risk of the Montenegrin electricity industry*, presented at the Tmrees23, France, <https://tmrees.org/index.php/archive/tmrees23>
- **Martinovic I.**, Mijanovic Z., Dragovic-Ivanovic R.(2022), *Implementation of a modern road traffic light using ESP8266 Wi-Fi microchip*, Conference Days of electrical engineers
- **Martinovic I.**, Mijanovic Z., Dragovic-Ivanovic R.(2020), *Implementation system for quality control*, Conference Days of electrical engineers
- **Martinovic I.** (2019), *Implementation of a digital combination lock*, Conference Days of electrical engineers
- **Martinovic I.**, Mijanovic Z., Dragovic-Ivanovic R.(2018), *Application of Arduino in Industry*, Conference Days of electrical engineers,
- **Martinovic I.**, MandicV.(2018),*Biomedical Signals Reconstruction Under the Compressive Sensing Approach*, 7th Mediterranean Conference on Embedded Computing (MECO)

Handbooks

- **Martinović I.**, Janković I. (2022), *Guide to micro: bit Equipment*, British Council
- **Martinović I.** (2025), *ARTIFICIAL INTELLIGENCE — Two sides of the same coin*, EU project-Media institute Montenegro

HONOURS AND AWARDS

- Award for the Best Scientific Paper in Artificial Intelligence for the Academic Years 2023/24 and 2024/25, MAIA - Montenegrin AI Association (the award committee-researchers affiliated with leading global universities and companies such as Meta and DeepMind)
- Award for scientific achievements in 2024-Special recognition for significant contributions to the promotion of scientific literacy, Ministry of Education, science, and innovation, 2024
- **WSIS Prize 2024 Champion** The project "Air Quality Monitoring System", which was conducted with the support of the US Embassy in Montenegro, has been honored with the WSIS Prize 2024 Champion award in the category of Action Line C7: ICT Applications - Benefits in all Aspects of Life — E-Environment by the International Telecommunication Union (ITU)
- 13th November Old Royal Capital Cetinje award for extraordinary success during studies, 2023
- The second place in the "I have an idea for smart city Kotor" competition, 2022

- Scholarship for the PhD studies, Ministry of Science, 2020
- Award for the best students in High schools, Old Capital Cetinje, 2014
- National "Luča" Award for the best students in High schools, Ministry of Education, 2014

CONFERENCES AND SEMINARS

- AI4Health, The Health Data Hub and PR[AI]RIE-PSAI, Paris, 2025
- Study Visit to the German Research Center for Artificial Intelligence GmbH (Robotics Innovation Center), WIDERA Horizon Europe, 2024
- T-CAIREM AI in Medicine Conference: Ideas to Impact, Toronto, 2023
- Collision, Toronto, 2023
- Artificial Intelligence for Europe: Results and future steps, EIT, 2022
- Wonderland AI Summit, 2021
- The 4th Western Balkan (WB6) Digital Summit, 2021
- Driving Improvement in Clinical Use of AI, Medical Alley, 2021
- Digitalization in Montenegro - Condition and Perspective, CANU, 2019
- The 2th Scientific Meeting – ICT - Condition and Perspective, CANU, 2019
- Interakt Conference - First Game Development Event, Logate and Digitalizuj.me, 2019
- INFOFEST 25th festival of information technology achievements, Budva, Montenegro, 2018
- Workshop at Electrical Engineering faculty - Open Science Day BIO-ICT, Podgorica, Montenegro, 2017
- XXII International Scientific-Professional IT Conference, Hackathon for students, Zabljak, 2017

SPEAKER

- Automated Swallowing Analysis Using a Self-Supervised Learning Approach, AI4Health, Paris, 2025
- [Artificial Intelligence in Medicine](#): From Enthusiasm to Despair, Data Science Conference, 2024
- AI in radiology, Faculty of Electrical engineering, University of Montenegro, 2023
- Application of AI in medicine, Summer School "ICT application in tourism development", Faculty of Management Herceg Novi, 2022
- Application of technologies of the fourth industrial revolution in medicine, Summer School "Cyber week, future is here", Politehnika&Montenegro Robotics, 2022
- The application of state-of-the-art technologies, Summer school "The planet in your hands", Prona - Montenegrin Science Promotion Foundation, Lovćen- Ivanova korita, 2022
- [Session 1: Meaningful youth engagement – European Year of Youth](#), Mont Generation Connect – Europe Youth Group European Digital Youth Jam, The International Telecommunication Union, 2022
- Artificial intelligence in medicine, European Researchers' Night, 2021
- Application of Arduino in Industry, Montenegrin Engineering Summer School, 2020

SKILLS

- **Technical skills:** Microsoft Office • Matlab • Python • LaTeX • C • C++ • Linux • SQL • Machine Learning • Deep Learning • Tensorflow • Numpy • VHDL • Verilog • LTSpice • Maxima • Arduino IDE • Scratch • Java • PHP • Android Studio • MySQL • Wolfram Mathematica • Blender3D • Multisim • JavaScript • NodeJS • Keras • syngo • Siemens Syngo.via • syngo native • PyTorch
- **Soft skills:** Proactive • Problem-solving • Attention to detail • Communication • Adaptability • Teamwork • Creativity • Work Ethic • Flexibility • Analytical and Critical Thinking
- **Languages:** Montenegrin/Serbian/Croatian/Bosnian (native), English (fluent), Italian (basic)

MEMBERSHIPS

- Student member of IEEE,
- Member of The International Telecommunication Union's focus group "Artificial Intelligence for Health"

- Montenegrin Science Promotion Foundation-Prona
- Montenegro Makers

SCIENCE PROMOTION ACROSS MEDIA

- <https://www.youtube.com/watch?v=br17Hb99U58>, Cetinje Smart City – innovation concept created by Ivan Martinović, 2025
- <https://www.cdm.me/drustvo/nova-priznanja-ivan-martinovic-dobitnik-nagrade-za-najbolji-naucni-rad-iz-oblasti-vjestacke-inteligencije/>, CDM, 2025
- <https://cetinjskilist.com/ivan-martinovic-sa-cetinja-do-svjetskih-naucnih-priznanja/>, RTV Cetinje, 2025
- <https://www.youtube.com/watch?v=EKVBAeQT1zM>, Digitalni trougao, Institut za medije CG, 2025
- [WSIS Prize 2024 Champion, 2024](#)
- <https://kolektiv.me/220354/od-rodnog-cetinja-do-univerziteta-u-torontu-ioksforda-ivan-istrazuje-primjenu-vjestacke-inteligencije-u-medicini>, Kolektiv.me portal, 2023
- [M:tech](#), TV Vijesti, 2023
- [The best from Montenegro](#), Dnevno portal, 2023
- <https://www.youtube.com/watch?v=ow-AkA7SOOY>, Montenegro's national public broadcaster RTCG, Central News, 2023
- <https://www.youtube.com/watch?v=FNRWCrnvhiw>, Televizija E, 2023
- <https://fb.watch/odA7oO7xy2/?mibextid=vG3cyz>, Montenegro's national public broadcaster RTCG, 2023
- <https://fb.watch/odA7oO7xy2/?mibextid=vG3cyz>, Montenegro's national public broadcaster RTCG, 2023
- [M:tech](#), https://www.linkedin.com/posts/martinovic-ivan_mtech-ai-chatgpt-activity-7032484808828010496-8rSM?utm_source=share&utm_medium=member_desktop, TV Vijesti, 2023
- [We are talking about excellence](#), Montenegro's national public broadcaster RTCG, science and education program, 2022
- <https://www.youtube.com/watch?v=FbJkHrjRYwc>, TV Nikšić, 2021
- <https://www.youtube.com/watch?v=Hr09q7gOOLo>, Gradska RTV Podgorica, 2021