**NAME AND SURNAME: Almir Badnjevic**

**Work experience:**

* 2023 - Present - Director of the „Agency for Identification Documents, Registers, and Data Exchange of Bosnia and Herzegovina“
* 2022 - Senior Research Associate at „Verlab Research Institute for Biomedical Engineering, Medical Devices, and Artificial Intelligence“, Sarajevo, Bosnia and Herzegovina
* 2022 - Present - Full Professor in the field of Bioengineering  
  Department of Genetics and Bioengineering, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo
* 2019 - Present - Assistant Professor in the field of Pharmaceutical Informatics  
  Department of Pharmaceutical Informatics, Faculty of Pharmacy, University of Sarajevo
* 2018 - Associate Professor in the field of Bioengineering  
  Department of Genetics and Bioengineering, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo
* 2018 - Associate Professor in the field of Electrical Engineering and Electronics  
  Department of Electrical Engineering and Electronics, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo
* 2014 - Director of „Verlab d.o.o.“, Sarajevo, Laboratory for Medical Device Verification of the National Metrology Institute (NMI) of Bosnia and Herzegovina
* 2016 - Assistant Professor in the field of Electronics and Automation  
  Faculty of Engineering, University of Bihać
* 2015 - Assistant Professor in the field of Bioengineering  
  Department of Genetics and Bioengineering, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo
* 2015 - Assistant Professor in the field of Electrical Engineering and Electronics  
  Department of Electrical Engineering and Electronics, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo
* 2013 - Expert Advisor for Biomedical Engineering and Medical Measurements, „Micom BH d.o.o.“, Sarajevo, Bosnia and Herzegovina (Fluke representative company for the Balkan region)

**Education:**

* 2015 - PhD:  
  *PhD Thesis: Integrated Software System for Classification of Asthma and Chronic Obstructive Pulmonary Disease  
  University of Zagreb, Faculty of Electrical Engineering and Computing, Zagreb, Croatia  
  Grade Average: 10*

• 2010 - Master:  
*Master's Thesis: Remote Reading and Control of Electrical Meters Using a MORSE Network  
University of Sarajevo, Faculty of Electrical Engineering, Sarajevo*Grade Average: 9.16

• 2008 - Bachelor:  
*University of Sarajevo, Faculty of Electrical Engineering, Sarajevo, Bosnia and Herzegovina  
Bachelor's Degree in Electrical Engineering*  
Grade Average: 8.91

**Study abroad:**

* 2018. MDH University Vasteras, Sweden
* 2018. University of Pitsburgh, USA
* 2014. University of Zagreb, Faculty of Electrical Engineering and Computing Zagreb, Croatia
* 2010. Carefusion Wurzburg, Germany
* 2010. Radiometer Copenhagen, Denmark

**Academic/teaching work:**

**Undergraduate Studies**

2019 - Present - Assistant Professor in the field of Pharmaceutical Informatics  
Department of Pharmaceutical Informatics, Faculty of Pharmacy, University of Sarajevo

• Informatics  
• Health Informatics

2016 - 2018 - Visiting Professor, Faculty of Engineering, University of Bihać, Bosnia and Herzegovina

• Electrical Engineering 1  
• Electrical Engineering 2  
• Intelligent Systems  
• Artificial Intelligence and Expert Systems

2015 - Present - Professor at the Department of Genetics and Bioengineering, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo, Bosnia and Herzegovina. Elected as Associate Professor in December 2018, and Full Professor in 2022.

• Biomedical Instrumentation  
• Biomedical Signals and Systems  
• Biosensors  
• Intelligent Systems

2010 - 2012 - Industrial Expert, Department of Automation and Electronics, Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina

• Sensors and Converters

**Master's Studies**

2015 - Present - Professor, Faculty of Engineering and Natural Sciences, International Burch University Sarajevo, Bosnia and Herzegovina. Elected as Associate Professor in December 2018, and Full Professor in 2022.

• Laboratory Quality Management System  
• Nanotechnology and Nanosensors  
• Seminar II

2010 - Present - Assistant Professor (Industrial Expert), Department of Automation and Electronics, Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina

• Biomedical Signals and Systems

**Projects:**

1. Measurement in Medicine: Introduction of Medical Devices with Measuring Function into Legal Metrology Framework of Bosnia and Herzegovina. Contributors (with H. Memić, D. Franjić, A. Šabeta, O. Šibonjić). Institute of Metrology of Bosnia and Herzegovina. (2013-2014.
2. Mutual future based on mutual interests. Project leader (Bosnia and Herzegovina Medical and Biological Engineering Society). United Nations in Bosnia and Herzegovina. Program Dialogue for the Future: Promoting Coexistence and Diversity in B&H. (2014-2017).
3. QSAR and neural network in design pharmacological active xanthenes. Contributor (with E. Veljovic, D. Zavrsnik, S. Spirotovic – Halilovic, S. Muratovic, A. Osmanovic, S. Filipic, K. Novakovic, T. Bego, M. Malenica). Federal Ministry of Education and Science Bosnia and Herzegovina. Financing /co-financing of scientific research and research- development projects in FBiH in 2016 (2016 – Present).
4. Bosnia and Herzegovina MC Member at COST Action BM1309, Biomedicine And Molecular Biosciences  
   European network for innovative uses of EMFs in biomedical applications (EMF-MED) (2014 – 2018).
5. Bosnia and Herzegovina MC Member at COST Action CA15120, COST Association Open Multiscale Systems Medicine (OpenMultiMed) (2016-2020).
6. Bosnia and Herzegovina MC Member at COST Action CA15110, COST Association Harmonising standardisation strategies to increase efficiency and competitiveness of European life-science research (CHARME) (2016-2020).
7. Co-financing the organization of scientific conferences in the Sarajevo Canton in 2016. „International Conference on Medical and Biological Engineering – CMBEBIH 2017“. Ministry of Education, Science and Youth of Sarajevo Canton.
8. Support to technical culture and innovation in Bosnia and Herzegovina for 2017. “Development of telemetry system for diagnostic patients with asthma and COPD in rural areas of Bosnia and Herzegovina”. Ministry of Civil Affair of Bosnia and Herzegovina grant. (January to April 2018).
9. Programs for preparing projects and potential applicants for H2020 funding for 2017., *“SRT-r03MedUlt: Development of expanded metrological capability for medical ultrasound".* Ministry of Civil Affair of Bosnia and Herzegovina
10. Co-financing science projects. „CMBEBIH 2017“. Ministry of Education and Science of Federation of Bosnia and Herzegovina.
11. Support to technical culture and innovation in Bosnia and Herzegovina in 2018., *“Development of expert system based on neural networks for performances predication and preventive maintenance planning of medical devices*". Ministry of Civil Affair of Bosnia and Herzegovina
12. Co-financing the organization of scientific conferences in the Sarajevo Canton in 2018. “*Regional school of Biomedical Engineering*”. Ministry of Education, Science and Youth of Sarajevo Canton.
13. Programs for preparing projects and potential applicants for H2020 funding for 2018., “H2020 TraceHTA - Evidence-based multivariable Health Technology Assessment (HTA) method for improving diagnosis and treatment of patients“. Ministry of Civil Affair of Bosnia and Herzegovina
14. TAIEX Regional Workshop on Biomedical Engineering (Biomedical Signals, Medical Physics, Nanotechnology, Biosensors, Genetics, Renewable Energy Sources). European Commission. (February – December 2018)
15. Introduction of international ISO standards and penetration testing (PEN test). Czech Development Agency and IDDEEA (2024).

**Selected publications (up to 10):**

1. Badnjevic A, Cifrek M, Koruga D, Osmankovic D. „Neuro-fuzzy classification of asthma and chronic obstructive pulmonary disease,“ BMC Medical Informatics and Decision Making Journal (2015) 15 (Suppl 3):S1; doi: [10.1186/1472-6947-15-S3-S1](https://doi.org/10.1186/1472-6947-15-S3-S1)
2. Gurbeta L, Badnjević A., „Inspection process of medical devices in healthcare institutions: software solution,“ Health Technol. (2017) Volume 7, [Issue 1](https://link.springer.com/journal/12553/7/1/page/1), pp 109–117, doi:10.1007/s12553-016-0154-2
3. Badnjevic A, Gurbeta L, Jimenez E.R., Iadanza E. „Testing of mechanical ventilators and infant incubators in healthcare institutions“ Technology and Health Care (2017) vol. 25, no. 2, pp. 237-250
4. Dogan S, Nalcaci N, Dogan S, Badnjevic A, Kurtovic A, et al. (2017) Changes in Blood Pressure and Heart Rate Measurement Undergraduate Students During Exam Period. J Biom Biostat (2017) 8:347. doi: 10.4172/2155-6180.1000347
5. Gurbeta, L., Dzemic, Z., Bego, T., Sejdic, E., Badnjevic, A. „Testing of Anesthesia Machines and Defibrillators in Healthcare Institutions“, J Med Syst (2017) 41: 133. <https://doi.org/10.1007/s10916-017-0783-7>
6. Hodzic J, Gurbeta L, Omanovic-Miklicanin E, Badnjevic A. „Overview of Next-generation Sequencing Platforms Used in Published Draft Plant Genomes in Light of Genotypization of Immortelle Plant (Helichrysium Arenarium)“, MED ARCH. (2017) 71(4): 288-292, doi: 10.5455/medarh.2017.71.288-292
7. Catic A., Gurbeta L., Kurtovic-Kozaric A., Mehmedbasic S., Badnjevic A. “Application of Neural Networks for classification of Patau, Edwards, Down, Turner and Klinefelter Syndrome based on first trimester maternal serum screening data, ultrasonographic findings and patient demographics”, BMC Medical Genomics (2018) 11:19, DOI: 10.1186/s12920-018-0333-2
8. Lejla Gurbeta, Almir Badnjevic, Mirjana Maksimovic, Enisa Omanovic-Miklicanin, Ervin Sejdic; A telehealth system for automated diagnosis of asthma and chronical obstructive pulmonary disease,  Journal of the American Medical Informatics Association Volume 25, Issue 9, 1 September 2018, Pages 1213–1217, <https://doi.org/10.1093/jamia/ocy055>
9. A. Badnjevic, L. Gurbeta, E. Custovic. An Expert Diagnostic System to Automatically Identify Asthma and Chronic Obstructive Pulmonary Disease in Clinical Settings. Nature Scientific Reports 8, 11645 (2018), <https://doi.org/10.1038/s41598-018-30116-2>
10. Almir Badnjević, Lejla Gurbeta Pokvić, Mehrija Hasičić, Lejla Bandić, Zerina Mašetić, Živorad Kovačević, Jasmin Kevrić, Leandro Pecchia; “Evidence-based clinical engineering: Machine learning algorithms for prediction of defibrillator performance”, Biomedical Signal Processing and Control, Volume 54, 2019, 101629, ISSN 1746-8094, <https://doi.org/10.1016/j.bspc.2019.101629>.