

PERSONAL INFORMATION



Assoc. Prof. Dr. Kanita Karađuzović-Hadžiabdić

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Replace with type of IM service Replace with messaging account(s)

Sex Female | Nationality Bosnian

WORK EXPERIENCE

June 2022 – Present

Vice Rector for International Cooperation and Research, Computer Sciences and Engineering Program, Faculty of Engineering and Natural Sciences, International University of Sarajevo.

April 2022-Present

Associate Professor, Computer Sciences and Engineering Program, Faculty of Engineering and Natural Sciences, International University of Sarajevo.

April 2022 – June 2022

Program Coordinator of Computer Sciences and Engineering, Faculty of Engineering and Natural Sciences, International University of Sarajevo.

2017- 2022

Assistant Professor, Computer Sciences and Engineering Program, Faculty of Engineering and Natural Sciences, International University of Sarajevo.

2017-2020

Acting Head of Department of Engineering and Program Coordinator of Computer Sciences and Engineering, Faculty of Engineering and Natural Sciences, International University of Sarajevo.

2017-2018

Software Engineering Program Coordinator, Faculty of Engineering and Natural Sciences, International University of Sarajevo.

2016-2017

Lecturer, Computer Sciences and Engineering, IUS.

2011-2016

Senior Assistant, Faculty of Engineering and Natural Sciences, IUS

2008-2010

Teaching Assistant, Faculty of Engineering and Natural Sciences, IUS

2006 – 2008

Director, InfoBee Agency, Sarajevo, Bosnia and Herzegovina.

2004 – 2006

Software Engineer, Cost Engineering Software, Zwijndrecht, The Netherlands.

2003 – 2004

Software Engineer, Unet, Almere, The Netherlands.

2001-2002

Software Engineer, Zira, Sarajevo, BiH

2000

Software Engineer, Hermes SoftLab, Sarajevo, Bosnia and Herzegovina.

1999

Software Engineer, Saint Mary's University, Halifax, Nova Scotia, Canada

EDUCATION AND TRAINING

2016

PhD in Computer Science and Engineering, International University of Sarajevo, Sarajevo, Bosnia and Herzegovina.

2001

MSc. in Computer Science, Oxford University, Oxford, United Kingdom.

1999

BSc. in Applied Mathematics and Computer Science, Eastern Mediterranean University, Famagusta, Turkish Republic of Northern Cyprus.

PERSONAL SKILLS

Mother tongue(s)

Bosnian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Dutch	Enter level	Enter level	Enter level	Enter level	Enter level
Turkish	A1	A1	A1	A1	A1

Communication skills

- Excellent

Organisational / managerial skills

- Leadership as Vice-Rector for International Cooperation and Research overseeing strategic initiatives, coordinating International Relations Office, Office of Sponsored Projects, Library, and facilitating inter-institutional agreements.
- Leadership as Programme Coordinator of Computer Sciences and Software Engineering study programmes at IUS, including curriculum development, staff coordination and student support.
- Strong project and team management skills highlighted by my role as Project Coordinator of IUS team for Horizon 2020, an EU-funded project.

Programming languages

- Java, C++, R, Python

Research interests

Data Science, Machine Learning, Artificial Intelligence with the focus on applications in biomedical data,

Teaching experience

Lectured following courses: Advanced Programming, Software Engineering, Programming Languages, Machine Learning, Human Computer Interaction, High Dynamic Range Imaging, User Interface Design, Social Legal and Ethical Issues in Computer Science

Driving licence

Replace with driving licence category/-ies. Example:

- B

Publications

1. [Long noncoding RNAs and machine learning to improve cardiovascular outcomes of COVID-19](#) K Karaduzovic-Hadziabdic, M Adilović, L Zhang, A Lumley, et al. Circulation, Lippincott Williams & Wilkins, vol 150, issue Suppl_1, pp:A4117883-A4117883, 2024
2. [Prediction of COVID-19 severity using machine learning](#) K Karaduzovic-Hadziabdic, M Adilovic, L Zhang, Al Lumley, et al. Clinical and translational medicine 14 (10), 2024
3. [Machine learning for catalysing the integration of noncoding RNA in research and clinical practice](#), D de Gonzalo-Calvo, K Karaduzovic-Hadziabdic, LT Dalgaard, et al. EBioMedicine, Elsevier, Vol. 106, 2024.
4. [Development of a long noncoding RNA-based machine learning model to predict COVID-19 in-hospital mortality](#), Y Devaux, L Zhang, Al Lumley, K Karaduzovic-Hadziabdic, V Mooser, et al. , Nature communications 15 (1), 2024.
5. M. Sopic, K Karaduzovic-Hadziabdic et al. "Transcriptomic research in atherosclerosis: Unravelling plaque phenotype and overcoming methodological challenges", Journal of Molecular and Cellular Cardiology Plus, Elsevier, 2023, DOI: <https://doi.org/10.1016/j.jmccpl.2023.100048>
6. LJ Marcos-Zambrano, VM Lopez-Molina, B Bakir-Laura Judith Marcos-Zambrano, Víctor Manuel López-Molina, Burcu Bakir-Gungor, Marcus Frohme, Kanita Karaduzovic-Hadziabdic, Thomas Klammersteiner, Eliana Ibrahim, Leo Lahti, et al. "A toolbox of machine learning software to support microbiome analysis", Frontiers in Microbiology, Frontiers, vol. 14, 2023. DOI: <https://doi.org/10.3389/fmicb.2023.1250806>
7. K. Karaduzovic-Hadziabdic, R. Spahic, E. Tahirovic, "Evaluation of IBM Watson Natural Language Processing Service to predict influenza-like illness outbreaks from Twitter data", Periodicals of Engineering and Natural Sciences, vol. 10, no. 1, pp. 122-137, 2022, DOI: <http://dx.doi.org/10.21533/pen.v10i1.2454> , url: <http://pen.ius.edu.ba/index.php/pen/article/download/2454/1037>
8. A. Hromic-Jahjefendic, D. Ler, Dz. Medjedovic, E. Tahirovic, E. Karamehmedovic, K. Karaduzovic-Hadziabdic, M. Suljagic, M. Hadziabdic, N. Rabiei, R. Palalic, B. Durakovic, "Master studies in Bioanalytical technologies – Instructions for lecturers. " International University of Sarajevo, ISBN: 978-9958-896-49-1, January 2021 <https://doi.org/10.3389/fmicb.2023.1250806>
9. K. Karaduzovic-Hadziabdic, A. Peters, "Artificial intelligence in clinical decision-making for diagnosis of cardiovascular disease using epigenetics mechanisms", in "Epigenetics in Cardiovascular Disease", Y. Devaux, E. L. Robinson (Editors), Academic Press, Elsevier, Vol. 24 in Translational Epigenetics, pp 327-345, 2021, url: <https://www.sciencedirect.com/science/article/pii/B9780128222584000201>
10. L.J. Marcos-Zambrano, K. Karaduzovic-Hadziabdic, T. Loncar Turukalo et al., "Applications of machine learning in human microbiome studies: a review on feature selection, biomarker identification, disease prediction and treatment ", Frontiers in Microbiology, Vol. 12, 2021, <https://doi.org/10.3389/fmicb.2021.634511>
11. L. Badimon, E.L. Robinson, A. Jusic, I. Carpusca, L.J. deWindt, C. Emanueli, P. Ferdinandy, W. Gu, M. Gyongyosi. M. Hackl, K. Karaduzovic-Hadziabdic et al. "Cardiovascular RNA Markers and Artificial Intelligence May Improve COVID-19 Outcome: a position paper from the EU-CardioRNA COST Action CA17129", Cardiovascular Research, Oxford Academic, Oxford University Press, 117(8), pp. 1823-1840, 2021, <https://doi.org/10.1093/cvr/cvab094>
12. E. Džaferović, K. Karaduzovic-Hadziabdic "Quality Prediction in Sarajevo using Machine Learning Methods, A Case of Bjelave Neighbourhood, Sarajevo, BiH", Springer, Advanced Technologies, Systems, and Applications V, IAT 2020. Lecture Notes in Networks and Systems, Vol. 142, pp. 423-434, 2020, https://doi.org/10.1007/978-3-030-54765-3_29,
13. CPC Gomes, B. Agg, A. Andova, S. Arslan, A. Baker D. Beis, et al. "Catalyzing transcriptomics research in cardiovascular disease: the CardioRNA COST Action CA17129", Non-Coding RNA, MDPI Open Access Journals, Vol. 5, Issue 2, <https://doi.org/10.3390/ncrna5020031>

14. A. Kutlay, K. Karaduzovic-Hadziabdic, "Static based classification of malicious software using machine learning methods", Springer, Advanced Technologies, Systems, and Applications IV, IAT 2019, Lecture Notes in Network and Systems, Vol 83, pp 621-628, 2019, ISBN: 978-3-030-24985-4, https://doi.org/10.1007/978-3-030-24986-1_49 ,
15. K. Karaduzovic-Hadziabdic, J. Hasic Telalovic, R. K. Mantiuk, "Assessment of multi-exposure HDR image deghosting methods", Computers and Graphics, Elsevier, Vol. 63, pp. 1-17, April 2017, <https://doi.org/10.1016/j.cag.2017.01.002>
16. K. Karaduzovic-Hadziabdic, R. Spahic, "Comparison of Machine Learning Methods for Code Smell Detection Using Reduced Features", 3rd International Conference on Computer Science and Engineering, (Proceedings of IEEE), pp. 670-672, <https://doi.org/10.1109/UBMK.2018.8566561>, 2018
17. R. Spahic, K. Karaduzovic-Hadziabdic, "Class Level Code Smell Detection using Machine Learning Methods", Conference on Computational Methods and Telecommunication in Electrical Engineering and Finance, Sarajevo, BiH, 2018
18. Ahmet Oguz Akyuz, Okan Tarhan Tursun, Jasminka Hasić Telalović, Kanita Karađuzović-Hadžiabdić, "High Dynamic range Video, Concepts, Technologies and Applications" (Book chapter "Ghosting in HDR video", Elsevier, 2017.)
19. Kanita Karađuzović-Hadžiabdić, Jasminka Hasić Telalović, Rafal Mantiuk, "Subjective and objective evaluation of multi-exposure high dynamic range image deghosting methods", In Proceedings of EG 2016-Short Papers, The Eurographics Association", 2016. ISSN: 1017-4656, DOI: 10.2312/egsh.20161007,
20. Kanita Karađuzović-Hadžiabdić, Jasminka Hasić Telalović, Rafal Mantiuk, "Evaluation of Noise Suppression and Luminance Reconstruction in High Dynamic Range Image Deghosting Methods", In Proceedings of IEEE, 2015 XXV International Conference on Information, Communication and Automation Technologies (ICAT 2015), 2015. DOI: 10.1109/ICAT.2015.7340511
21. Kanita Karaduzovic-Hadziabdic, Jasminka Hasić Telalović, Rafal Mantiuk, "Expert evaluation of deghosting algorithms for multi-exposure high dynamic range imaging", In Proceedings of HDRi2014-Second International Conference and SME Workshop on HDR imaging, 2014.
22. Kanita Karađuzović-Hadžiabdić, Rasit Koker, "Diagnosis of Heart Disease using a Committee Machine Neural Network", In Proceedings of the 9th International Conference on Applied Informatics, (ICAI 2014), 2014 pp. 351-360, DOI: 10.14794/ICAI.9.2014.1.351
23. Kanita Karađuzović-Hadžiabdić, Sadina Gagula Palalić, "Chromosome Polarity Determination Based on the Total Length and Centromere Location Using Machine Learning Algorithms ", Southeast Europe Journal of Soft Computing, 3(2), 2014. pp 1-5, ISSN 2233 – 1859

24. Kanita Karađuzović-Hadžiabdić, Jasminka Hasić Telalović, Rafal Mantiuk, "Comparison of Deghosting Algorithms for Multi-exposure High Dynamic Range Imaging", In Proceedings of the 29th Spring Conference on Computer Graphics. ACM, pp 21-28, 2013.
25. Kanita Karađuzović-Hadžiabdić, Jasminka Hasić Telalović, "State-of-the-art deghosting algorithms for high dynamic range imaging", European Conference in Technology and Society, (EuroTecS 2013), 2013.
26. Kanita Karađuzović-Hadžiabdić, Jasminka Hasić Telalović, "Report: State-of-the-art deghosting algorithms for high dynamic range imaging", Southeast Europe Journal of Soft Computing, 2(2), pp 88-92, ISSN 2233 – 1859, 2013.
27. Kanita Karađuzović-Hadžiabdić, "Classification of chromosomes using nearest neighbor classifier", Southeast Europe Journal of Soft Computing, 1(2), 2012. pp 12-15. ISSN: 2233 – 1859, 2012
28. Kanita Karađuzović-Hadžiabdić, "Modelling and Analysing the TLS protocol using Casper and FDR", Proceedings of IEEE 2012 IX International Symposium on Telecommunications, (BIHTEL), 2012.
29. Kanita Karađuzović-Hadžiabdić, Nesibe Merve Demir, "Teaching Neural Networks to Detect Authors of Texts", Southeast Europe Journal of Soft Computing, 1(1), pp 73-80. ISSN: 2233 – 1859, 2012.
30. Haris Memić, Alma Husagić-Selman, Kanita Karađuzović-Hadžiabdić, "Triadic Patterns of Friendships in YouTube Groups", In Proceedings of the 12th IEEE International Symposium on Computational Intelligence and Informatics, (CINTI 2011), 2011. pp 501-506 DOI: [10.1109/CINTI.2011.6108558](https://doi.org/10.1109/CINTI.2011.6108558)
31. Kanita Karađuzović-Hadžiabdić, Rasit Koker, "Design and Implementation of a Vision System for Elderly-Feeding-Chair Robot", In Proceedings of The IV International Scientific and Technical Conference, Computer Science and Information Technologies, (CSIT'2009), pp 88-91, 2009.

Projects

1. The Impact of Innovations and Robotics on the Cognitive Thinking of High School Students, Ministry of Higher Education and Youth, Sarajevo Canton. Sept 2024 – Feb 2026. Project Coordinator, Budget: 18, 000 EUR.
2. A diagnostic test to improve surveillance and care in COVID-19 patients, H2020-SC1-PHE-CORONAVIRUS-2020-2B, Medical technologies, Digital tools and Artificial Intelligence analytics to improve surveillance and care at high Technology Readiness Levels, under the call "H2020-SC1-PHE-CORONAVIRUS-2020-2-CNECT". Nov 2020 – April 2023. Project Coordinator at IUS. IUS Budget: 50,000.00 EUR.
3. KUL project, a joint project with International University of Sarajevo and the Catholic University of Lublin (KUL) to establish Master study in the field of bioanalytical technologies. 2020. Project member.
4. Positioning Level V Qualification in BiH, EU Delegation to BiH, 2013-2015, Project member. IUS Budget: 90,000.00 EUR.

Conference Organization and Activities

- Organizer of COST Action AtheroNET, CA21125 Management Committee and Working Group Meeting, International University of Sarajevo, Sarajevo, BiH. 14-16 May, 2025,
- Organizer of CA18131 COST Action training school, International University of Sarajevo, BiH, September 2019.
- Member of organizing committee of 3rd International Conference on Computer Science and Engineering, (Proceedings of IEEE), Sarajevo, BiH, 2018
- Scientific Committee member of UBMK, an IEEE conference, 2018-present
- Member of editorial board for SouthEast Europe Journal of Soft Computing, as well as the organizer for the corresponding journal's conference organizer, 2012-present
- Organizer of Soft Computing Regional Conference, IUSSCRG, International University of Sarajevo, Sarajevo, BiH, 2012-2019
- Organizer of CA18131 COST Action training school, International University of Sarajevo, BiH, September 2019.
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