

Curriculum Vitae



Kanita Karadžović-Hadžiabdic

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Education

- 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.

Work Experience

- 29 April 2022-
present **Associate Professor**, Computer Sciences and Engineering Program, Faculty of Engineering and Natural Sciences, International University of Sarajevo.
- 1 June 2022 -
present **Vice-Rector for International Cooperation and Research**, International University of Sarajevo, Sarajevo, BiH
- 15 April 2022 -
present **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

Languages

Mother tongue: Bosnian

Other languages: English: fluent, Dutch and Turkish: basic

Projects

1. 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 – ongoing. Project Coordinator at IUS. IUS Budget: 50,000.00 EUR.

2. 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 – ongoing. Project member.
3. Positioning Level V Qualification in BiH, EU Delegation to BiH, 2013-2015, Project member. IUS Budget: 90,000.00 EUR.

Research Interests

Data Science, Artificial Intelligence with the focus on applications in biomedical data, High Dynamic Range Imaging

Programming Languages

Java, C++, R , Matlab, PHP, JavaScript

Teaching Experience

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

Conference Organizations and Activities

- 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

Publications

1. 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>

2. 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 Klammsteiner, Eliana Ibrahimi, 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>
3. 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>
4. 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>
5. 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>
6. 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>
7. L. Badimon, E.L. Robinson, A. Jusic, I. Carpusca, L.J. deWindt, C. Emanuelli, 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>
8. 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,
9. 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>
10. 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 Networks 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,

11. 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>
12. 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
13. 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
14. Ahmet Oguz Akyuz, Okan Tarhan Tursun, Jasminka Hasić Telalović, Kanita Karadžović-Hadžiabdić, "High Dynamic range Video, Concepts, Technologies and Applications" (Book chapter "Ghosting in HDR video", Elsevier, 2017.)
15. Kanita Karadžović-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,
16. Kanita Karadžović-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
17. 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.
18. Kanita Karadžović-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
19. Kanita Karadžović-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
20. Kanita Karadžović-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.

21. Kanita Karadžuzović-Hadžiabdić, Jasminka Hasić Telalović, “State-of-the-art deghosting algorithms for high dynamic range imaging”, European Conference in Technology and Society, (EuroTecS 2013), 2013.
22. Kanita Karadžuzović-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.
23. Kanita Karadžuzović-Hadžiabdić, “Classification of chromosomes using nearest neighbor classifier”, Southeast Europe Journal of Soft Computing, 1(2), 2012.pp 12-15. ISSN: 2233 – 1859, 2012
24. Kanita Karadžuzović-Hadžiabdić, “Modelling and Analysing the TLS protocol using Casper and FDR”, Proceedings of IEEE 2012 IX International Symposium on Telecommunications, (BIHTEL), 2012.
25. Kanita Karadžuzović-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.
26. Haris Memić, Alma Husagić-Selman, Kanita Karadžuzović-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)
27. Kanita Karadžuzović-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.