



Assoc. Prof. Dr. Jasminka Hasić Telalović
jasminka.hasic@ssst.edu.ba
+387 61 899 448

Sarajevo School of Science and Technology
Hrasnicka cesta 3a
71000 Sarajevo, Bosnia and Herzegovina

EDUCATION

Degree	Faculty/Program	University	Year
Ph.D.	Engineering Interdisciplinary research-based degree that resulted in several scientific publications	University of Warwick, UK	2010
M.Sc.	Computer Science (Research project in Algorithms resulted in scientific publication whose results are currently utilized for crypto currency algorithms, the following courses were taken: Introduction to Artificial Intelligence, Information Retrieval and Datamining, Natural Language Understanding and Processing, Machine Vision and Learning, Probabilistic methods, Information Theory/Statistics/Probability, Combinatorial optimization, Database Management Systems, Design and Analysis of Computer Networks, Topic in parallel and distributed computing, Cryptography)	Brown University, USA	2002
B.Sc.	Interdisciplinary Mathematics: Computer Science Option	University of New Hampshire, USA	1998

ACADEMIC EXPERIENCE

Title	Faculty/Program	University	Period
Associate Professor	Computer Science	University Sarajevo School of Science and Technology	January 2019 - present
Rector's advisor for project Horizon2020	Rectorate	International University of Sarajevo	June 2017 – December 2018
Assistant Professor Head of Engineering Department Computer Science and Engineering program coordinator Software engineering program coordinator	Faculty of Engineering and Natural Sciences / Computer Sciences and Engineering program / Software Engineering program	International University of Sarajevo	February 2012 – June 2017 / June 2012 – February 2017 / September 2014 – June 2017
Assistant Professor	Computer Science	Sarajevo School of Science and Technology	March 2011 – January 2012
Senior Assistant / Lecturer	Computer Science	Sarajevo School of Science and Technology	October 2004 – February 2011
Teaching Assistant	Computer Science	Brown University, USA	February 2000 – June 2000

In addition to the academic work where I lead the development of numerous IT development projects, I also have an extensive experience of working in IT industry both in the USA and Bosnia and Herzegovina ranging from the position of software engineer to IT Director. In the more recent years, I lead several development teams, but I also participate in the development of advanced Artificial Intelligence algorithms.

FUNDED PROJECTS

<p>Ongoing:</p> <ul style="list-style-type: none"> - BUDGET_IT Building Gender Equality through gender budgeting for Institutional Transformation (Jan 2023 – Jan 2026) HORIZON Europe project - Partner - EDIRE Equality, Diversity, and Inclusion for Research Enhancement (Sept 2021- Sept 2024) HORIZON Europe project – The Coordinator (the first Horizon Europe project coordinated by an institution from Bosnia and Herzegovina) <p>Implemented:</p> <ul style="list-style-type: none"> - Using data science for medical decision making (2019) A scientific research project funded by the local ministry of education. I am the participant in this project that is in charge of the data science analysis. - GendeR Equality Accelerator: A Roadmap to Excellence in research – GREAT (2019)
--

Local government grant to increase BiH participation in the European Commission's Horizon2020 and Europa programs. Role: project lead

- Horizon2020 Systemic Action for Gender Equality Call H2020-GERI-2015-1, European Commission (2016-2019)

The ultimate objective of the structural change process was to work towards improved decision-making and enhanced research capacity by:

- incorporating gender-sensitive practices, processes and procedures in research, and;
- developing balanced representation of both women and men in institutional decision-making.

- Partnership for Innovation, donor: USAID, Sarajevo region partner (2014-2016)

Project Coordinator and author of the project proposal

Project activities included design and organization of the non-formal education activities for IT students in the Sarajevo region with the purpose to raise their employability. As these activities included internships at IT companies, I have developed and maintained a connection network with over 20 IT companies in the Sarajevo region.

- BITCamp, donors: EBRD, MarketMakers (2015)

This was a project lead by BITAlliance (association of IT companies that, at that time, employed over 600 engineers, nowadays it has grown significantly) with the aim to, through intensive (6 months full time) non-formal education, provide talented but currently unemployed individuals with skills that would secure them employment at one of the BITAlliance companies. I have been involved in the creation of this project since it first started to develop as an idea. Later, I acted as an External Associate Expert at BIT Camp.

- geekFEST2013, geekFEST2014, geekFEST2015, geekFEST2017, geekFEST2018 donors: Ministry of Civil Affairs BiH, USAID, local IT companies, Embassy of United States of America in Bosnia and Herzegovina

Project coordinator and proposal author

The summer school of innovation is a non-formal training for high school students. Most often, we utilized mobile application development for Android operating systems. The students also listened to inspirational lectures about personal life stories of successful entrepreneurs in the Sarajevo region. The idea is to raise creativity and encourage youth to pursue careers in modern technologies. All activities are designed using gender mainstreaming principles.

- Strategic Development of Higher Education and Qualification Standards in Bosnia and Herzegovina, Council of Europe project (2015)

Member of the ICT group and participant in the training of trainers

I participated in the group for ICT where we developed a Qualification Standard (out of total five in the country) for 1st cycle higher education Computer Science degree. We also developed the Occupation Standard (total two in the country) for the Software Engineer position. I was also been selected for the training of trainers for the development and implementation of Qualifications Standards and Occupational Standards (within EQF). I completed the training as of April 24th, 2015 and I am regarding as a trainer for trainers in these topics.

- Positioning level V in BiH, donor: European Union Delegation in BiH(2013-2015)

Project Coordinator and proposal author

Project activities include design and verification of the 5th level (by the European Qualification Framework) formal education curricula. The program has been verified by the

three Cantonal Ministries of Education (Sarajevo, Zenica, and Tuzla). I participated in the curricula development process and managed the verification process.

- COST Action TN1201 Gender, Science, Technology and Environment - genderSTE, European Commission project (2013-2016)

Member of the Management Committee

The aim of this project is to coordinate gender issues in science, technology and environment in Europe.

- COST Action IC1005 HDRi: The digital capture, storage, transmission and display of real-world lighting, European Commission project (2012-2015)

Outreach coordinator and member of the Management Committee

As the outreach coordinator, I was in charge of organizing 7 different gender imbalance meetings at 7 different European locations (FYRoMacedonia, France, Portugal, Bosnia and Herzegovina, Austria, Czech Republic, Greece). These events aimed to encourage underrepresented gender (female) to take a more active role in the development and usage of the new HDR technology.

- Project coordinator for the “Computer Graphics for the Media Industry” project of the European Commission TEMPUS Grant.(2006-2009)

Project coordinator and proposal author

Within this program, we developed and piloted the formal curriculum of the 2nd higher education interdisciplinary curricula “Computer Graphics for the Media Industry”. The consortium was an international team of professors from the following EU countries: the United Kingdom, Spain and the Slovak Republic.

- Curriculum development of 1st, 2nd, and 3rd cycle higher education (2004 – ongoing)
While employed at universities in BiH, I participated in the development and update of curricula in Computer Science and Software Engineering study programs.

REFEREED INDEXED JOURNAL ARTICLES

D'Elia D, Truu J, Lahti L, Berland M, Papoutsoglou G, Ceci M, Zomer A, Lopes MB, Ibrahim E, Gruca A, Nechyporenko A, Frohme M, Klammsteiner T, Pau ECS, Marcos-Zambrano LJ, Hron K, Pio G, Simeon A, Suharoschi R, Moreno-Indias I, Temko A, Nedyalkova M, Apostol ES, Truică CO, Shigdel R, Telalović JH, Bongcam-Rudloff E, Przymus P, Jordamović NB, Falquet L, Tarazona S, Sampri A, Isola G, Pérez-Serrano D, Trajković V, Klucar L, Loncar-Turukalo T, Havulinna AS, Jansen C, Bertelsen RJ, Claesson MJ. *Advancing microbiome research with machine learning: key findings from the ML4Microbiome COST action*. Front Microbiol. 2023 Sep 25;14:1257002. doi: 10.3389/fmicb.2023.1257002. PMID: 37808321; PMCID: PMC10558209.

Hasic Telalovic, J., Pillozzi, S., Fabbri, R., Laffi, A., Lavacchi, D., Rossi, V., Dreoni, L., Spada, F., Fazio, N., Amedei, A. and Iadanza, E., 2021. *A Machine Learning Decision Support System (DSS) for Neuroendocrine Tumor Patients Treated with Somatostatin Analog (SSA) Therapy. Diagnostics, 11(5), p.804.*

Marcos-Zambrano, L.J., Karaduzovic-Hadziabdic, K., Loncar Turukalo, T., Przymus, P., Trajkovic, V., Aasmets, O., Berland, M., Gruca, A., Hasic, J., Hron, K. and Klammsteiner, T., 2021. *Applications of machine learning in human microbiome studies: a review on feature selection, biomarker identification, disease prediction and treatment. Frontiers in microbiology, 12*, p.313.

Iadanza, E., Fabbri, R., Bašić-Čičak, D., Amedei, A. and Telalovic, J.H., 2020. *Gut microbiota and artificial intelligence approaches: a scoping review. Health and Technology*, pp.1-16.

Telalovic, J.H. and Music, A., 2020. *Using data science for medical decision making case: role of gut microbiome in multiple sclerosis. BMC Medical Informatics and Decision Making*, 20(1), pp.1-11.

K. Karaduzovic-Hadziabdic, J. Hasic Telalovic and R. Mantiuk, *Assessment of multi-exposure HDR image deghosting methods*, Computers & Graphics, Elsevier, Volume 63, April 2017, Pages 1–17

Hasic J., Chalmers A., *Perceptually-guided High-fidelity Rendering Exploiting Movement Bias in Visual Attention* Hasic J., Chalmers A., Sikudova E. In ACM Transactions on Applied Perception
Volume 8, Number 1, October 2010. (key topics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

ARTICLES PUBLISHED IN CONFERENCE PROCEEDINGS

Telalović Hasić, J., Salković, A. (2023). Breast Cancer Classification Using Support Vector Machines (SVM). In: Ademović, N., Kevrić, J., Akšamija, Z. (eds) *Advanced Technologies, Systems, and Applications VIII. IAT 2023. Lecture Notes in Networks and Systems*, vol 644. Springer, Cham. https://doi.org/10.1007/978-3-031-43056-5_16

J Hasic Telalovic, D Cicak Bašić, A Osmanovic (2023) Investigation of the Role of the Microbiome in the Development of Alzheimer's Disease Using Machine Learning Techniques
IAT 2022: *Advanced Technologies, Systems, and Applications VII* pp 639–649 DOI: 10.1007/978-3-031-17697-5_48

D Basic-Cicak, J Hasic Telalovic (2023) Data Science of Microbiome: Does Gender Matter
IAT 2022: *Advanced Technologies, Systems, and Applications VII* pp 650–663 DOI: 10.1007/978-3-031-17697-5_49

Musić A., Telalović J.H., Đulović D. (2021) The Influence of Stringency Measures and Socio-Economic Data on COVID-19 Outcomes. In: Hasic Telalovic J., Kantardzic M. (eds) *Mediterranean Forum – Data Science Conference. MeFDATA 2020. Communications in Computer and Information Science*, vol 1343. Springer, Cham. https://doi.org/10.1007/978-3-030-72805-2_3

Telalovic J.H., Pasic L., Cicak D.B. (2021) The Use of Data Science for Decision Making in Medicine: The Microbial Community of the Gut and Autism Spectrum Disorders. In: Hasic Telalovic J., Kantardzic M.

(eds) Mediterranean Forum – Data Science Conference. MeFDATA 2020. Communications in Computer and Information Science, vol 1343. Springer, Cham. https://doi.org/10.1007/978-3-030-72805-2_6

Hasic Telalovic J., Music Kilic A., *Using Data Science for Medical Decision Making Case: Role of Gut Microbiome in Multiple Sclerosis*, In proceedings of CMBEBIH 2019

Hasic Telalovic J., Rastoder M., *Gender equality plan in higher education institutions (Plan za rodnu ravnopravnost - GEP, u institucijama visokog obrazovanja)*, In proceedings of the conference “BH scientist and their research), book published by the Federal Ministry of Education and Science, 2019, ISBN 978-9958-11-148-8

Karadzovic-Hadziabdic K., Hasic J., Mantiuk R., *Subjective and Objective Evaluation of Multi-exposure High Dynamic Range Image Deghosting Methods*, In proceedings of EUROGRAPHICS2016.

Karadžović-Hadžić K, Hasic Telalovic J., Mantiuk R., *Evaluation of noise suppression and luminance reconstruction in High Dynamic Range image deghosting methods*, 2015 XXV International Conference on Information, Communication and Automation Technologies (ICAT)

Karadzovic-Hadziabdic K., Hasic J., Mantiuk R., *Expert evaluation of deghosting algorithms for multi-exposure high dynamic range imaging*, In Proceedings of Second International Conference and SME Workshop on HDR imaging. (HDRi2014) (key topics: HDR)

Karadzovic-Hadziabdic K., Hasic J., Mantiuk R., *Comparison of Deghosting Algorithms for Multi-exposure High Dynamic Range Imaging*, In Proceedings of Spring Conference on Computer Graphics 2013, pp. 1-8, (SCCG 2013) (key topics: HDR)

Karadzovic-Hadžić K., Hasic J., *State-of-the-art deghosting algorithms for high dynamic range imaging*, In Proceedings of European Conference in Technology and Society, (EuroTecS 2013) (key topics: HDR)

Stevic I., Supervised by Hasic Telalovic J., *Learning OpenGL and shader programming*, CESCg 2013 (key topics: Real-time graphics)

Hasic J., Chalmers A., Sikudova E., *Perceptually-guided High-fidelity Rendering Exploiting Movement Bias in Visual Attention*, In ACM Transactions on Applied Perception Volume 8, Number 1, October 2010. (key topics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Hasic J., Chalmers A., *Saliency in Motion: Selective Rendering of Dynamic Virtual Environments*, In Spring Conference on Computer Graphics 2009 Proceedings (SCCG2009). (key topics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Hasic J., Chalmers A., Sikudova E., *Exploiting Movement in Midperipheral Vision to Direct Attention for Selective Rendering*, In Spring Conference on Computer Graphics 2008 Proceedings - a shortpaper (SCCG2008). (key topics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Hasic J., Chalmers A., Debattista K., Mastoropoulou G., *Movement Bias in Visual Attention for Perceptually-Guided Selective Rendering of Animations*, In Spring Conference on Computer Graphics 2007 Proceedings (SCCG2007). (key topics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Ramic B., Chalmers A., Hasic J., Rizvic S., *Selective Rendering in a Multimodal Environment: Scent and Graphics*, In Spring Conference on Computer Graphics 2007 Proceedings (SCCG2007). (key topics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Hasic J.,Chalmers, A., *Visual Attention for Significantly Influencing the Perception of Virtual Environments*, In Winter School of Computer Graphics 2007 Proceedings (WSCG2007). (key topics:High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Hasic, J., Chalmers A., *Visual attention for Influencing the Perception of Virtual Environment*, InSpring Conference on Computer Graphics 2006 Proceedings – a short paper (SCCG2006). (keytopics: High Fidelity Computer Graphics, Visual Attention, Selective Rendering)

Goodrich M.T., Tamassia R., Hasic J., *An Efficient Dynamic and Distributed Cryptographic Accumulator*, In: Information Security Conference 2002 Proceedings (ISC2002). (key topics: Algorithms,Cryptography)

Dean T., Hasic J.,Hofmann T., Pandurangan G., Raghavan P., Upfal E., *Dynamics, Information, and the Web Environment*, In: DARPA TASK Proceedings, Santa Fe, NM, April 2001. (key topics:Graph Theory, Randomized Algorithms)

CONFERENCE PRESENTATIONS

10th European Conference on Gender Equality in Higher Education, Trinity College Dublin, Ireland, 2018.

Presented the following posters:

["GeekFEST - Engendering Computer Science and Innovation Training"](#)

["Engendering Higher Education At Private University"](#),

ORGANIZED CONFERENCES

- WiDS CEE (Women in Data Science Central and Eastern Europe) Sarajevo, organized a regional conference to support Women in Data Science conference at Stanford University, online March 2021
- MeFDATA2020 Mediterranean Forum Data Science conference (to be held October 2020)
- WiDS (Women in Data Science) Sarajevo, organized a regional conference to support Women in Data Science conference at Stanford University, Sarajevo March 2020
- US - SERBIA & WEST BALKAN DATA SCIENCE WORKSHOP, Belgrade September 2018
- Eurographics 2015 STAR International Program Committee
- Local organizer of the Eurographics Symposium on Rendering 2008 and Hardware Workshop 2008 Conferences (both organized by ACM and EUROGRAPHICS)
- On the International Program Committee of the Central European Symposium on Computer Graphics (CESCG)
- Organizer of Future of Computer Graphics Education 2009, Slovakia

COMPLETED SUPERVISED GRADUATE THESIS

MS

Namik Mešić defended on 2-2-2016 “Application Programming Interface Design and Implementation”

Bakir Husović defended on 28-9-2016 “Agile Software Development”

Azra Musić defended on 31-8-2018 “Using Data Science For Medical Decision Making Case: Role of Gut Microbiome In Multiple Sclerosis”

Džana Bašić defended on 31-8-2018 “Data Science for Microbiome: Does Gender Matter?”

PhD

Kanita Hadžiabdić defended on 10-12-2016 “Framework for Evaluation of Deghosting Algorithms for Multi-exposure High Dynamic Range Imaging”

INVITED TALKS

Equality in Higher Education in European Universities, Cartagena, 10-12 Nov 2021 – **Women in STEM** penalist

Invited speaker to the **EUROGRAPHICS 2019** conference, Genoa, Italy May 2019

Invited speaker to the 2018 **WOMEN AND LEADERSHIP IN A CHANGING WORLD CONFERENCE**, Queens University , Belfast May 2018

BOOKS

Hasic-Telalovic, J. (2023). **Using Machine Learning as Decision Making for Microbiome Data**

Publisher : Eliva Press 1

ISBN-13 : 978-9994987719

Sauvage, B., & Hasic-Telalovic, J. (2022). **EUROGRAPHICS 2022: Posters Frontmatter. In Eurographics 2022 - Posters. The Eurographics Association.**

ISBN 978-3-03868-171-7

DOI 10.2312/egp.20222002

JH Telalovic, M Kantardzic

Mediterranean Forum–Data Science Conference: First International Conference, MeFDATA 2020, Sarajevo, Bosnia and Herzegovina, October 24, 2020,

Revised Selected Papers, Springer Nature

ISBN 978-3-030-72804-5

DOI 10.1007/978-3-030-72805-2

„Razvoj programa V. nivoa obrazovanja u BiH“

Authors: Muhamed Hadžiabdić, Jasminka Hasić Telalović, Nermin Oruč

ISBN 978-9958-896-20-0

Publisher: International University of Sarajevo

Chapters:

High Dynamic Range Video, 1st Edition

Concepts, Technologies and Applications

Editors: Alan Chalmers Patrizio Campisi Peter Shirley Igor Olaizola
Publisher: Academic Press 2016
ISBN :9780128094778
(I coauthored Chapter 1: Ghosting in HDR Video chapter)

Adaptability & Breakthrough: Academic Reform and Innovation in the New Ecology of Higher Education

Editors: Corina Adriana Dumitrescu, Cristiana Cristureanu, Ramona Mihaila
Publisher: Addleton Academic Publishers, New York in 2019
ISBN 978-1-942585-42-8
Authored chapter: *Modernization of higher education in engineering from the perspective of Bosnia and Herzegovina (p.258.-267.)*

FELLOWSHIPS

British - BiH Fellowship programme by the British Embassy in Sarajevo, Bosnia and Herzegovina, Summer 2018

EMBO/EMBL Symposia fellowship, European Molecular Biology Laboratory, Summer 2018