

Nemanja Zdravković, PhD
Assistant Professor
Faculty of Information Technology
Belgrade Metropolitan University

BIOGRAPHY

PERSONAL INFORMATION	Place of birth	Petrovac na Mlavi, Republic of Serbia
	Date of birth email	Mar. 23rd, 1988 nemanja.zdravkovic@metropolitan.ac.rs nemanja.zdravkovic@ieee.org

EDUCATIONAL BACKGROUND	PhD Studies (Double PhD degree)	Oct. 2012 – Jun. 2017
	Field: Electronics and Telecommunications <ul style="list-style-type: none">• Department of Electronics Systems, Faculty of Information Technology and Electrical Engineering, Norwegian University of Science and Technology (NTNU), Trondheim, Norway• Department of Telecommunications, Faculty of Electronic Engineering, University of Niš, Niš, Serbia	

PhD Thesis:
“Performance analysis for industrial wireless networks”
http://bit.do/zdravkovic_thesis
PhD Thesis Supervisors:
Kimmo Kansanen, Full Professor, NTNU
Goran T. Đorđević, Full Professor, University of Niš

MSc Studies (5 years integrated studies)	Oct. 2007 – Jul. 2012
Field: Electrical Engineering and Computer Science Module: Telecommunications, ICT GPA: 9.50/10.00 Faculty of Electronic Engineering, University of Niš, Niš, Serbia	

MSc Thesis:
“Software implementation of Viterbi algorithm for decoding convolutional codes and error probability determination by simulations”
MSc Thesis Supervisor: Goran T. Đorđević, Full Professor, University of Niš

Additional Certifications

CCNA Exploration by CISCO Networking Academy University of Niš
Machine Learning by Stanford University on Coursera
<https://www.coursera.org/account/accomplishments/verify/RG3V9DMC3RXY>
IBM Blockchain Essentials by IBM
<https://www.credly.com/badges/02359c2f-0ca2-4748-8ae1-096d23705ca7>

WORK EXPERIENCE	<i>Head of Laboratory</i>	Oct. 2020 – present
	Blockchain Technology Laboratory, Faculty of Information Technologies, Belgrade Metropolitan University, Belgrade, Serbia	
	<i>Assistant Professor</i>	Oct. 2019 – present
	Faculty of Information Technologies, Belgrade Metropolitan University, Belgrade, Serbia	
	<i>Research Fellow</i>	Oct. 2012 – Nov. 2016
	Department of Electronics Systems, Faculty of Information Technology and Electrical Engineering, Norwegian University of Science and Technology (NTNU), Trondheim, Norway	
	<i>Graduate engineer for research activities</i>	Oct. 2012 – Nov. 2016
	Faculty of Electronic Engineering, University of Niš, Serbia	
RESEARCH EXPERIENCE	Public Researcher profile	
	Google Scholar:	
	https://scholar.google.com/citations?user=yduYBg4AAAAAJ	
	ORCID:	
	https://www.orcid.org/0000-0002-2631-6308	
	Research Gate:	
	https://www.researchgate.net/profile/Nemanja_Zdravkovic3	
LinkedIn:		
	https://www.linkedin.com/in/nemanjazdravkovic	
	h-index (Google Scholar):	5
	Citations (Google Scholar):	79
PROFESSIONAL SOCIETIES	IEEE Member	2012 – present
EDITORIAL EXPERIENCE	<i>International Conference Editor:</i>	
	The Twelfth International Conference on Business Information Security - BISEC 2021	
	<i>International Conference TCP Member:</i>	
	International Conference on Business Information Security - BISEC International Conference on Information Society and Technology - ICIST	
	<i>Journal and Conference reviewer:</i>	
	EURASIP Journal on Wireless Communications and Networking (Springer), Photonic Network Communications (Springer), GLOBECOM (IEEE), ICC (IEEE), WCNC (IEEE), PIMRC (IEEE)	
COMPUTER SKILLS	<i>Languages & Software:</i>	
	C/C++, MATLAB, LaTeX, Python, Wolfram Mathematica	
LANGUAGES SPOKEN	Serbian (Native speaker)	
	English (Full professional proficiency)	
	Norwegian (Elementary proficiency)	

PROJECTS

ILEDA – Improving online and blended learning with educational data analytics, ERASMUS+ KA220-HED, project member, 2022 (ongoing)

NORBAS – Norwegian, Bosnian and Serbian cooperation platform for university and industry in ICT R&D, Norwegian Ministry of Foreign Affairs, The Kingdom of Norway, project member, 2012 - 2014.

SELECTED HONOURS

Award for special contribution to the work and development of the University, Faculty of Information Technologies, Belgrade Metropolitan University, 2022.

Award for special contribution to the work and development of the University, Faculty of Information Technologies, Belgrade Metropolitan University, 2021.

“Blažo Mirčevski” award for the best paper of a young author at *TELFOR 2015 Conference*, November 2016.

“Ilija Stojanović” award for the best graduated telecommunications student at University of Niš, December 2012.

“Exceptional Accomplishment during Academic Studies”, Faculty of Electronic Engineering, University of Niš, November 2012.

“Commendation for Best High School Students”, HRH Aleksandar II, June 2007.

OTHER SKILLS Driver’s licence

HOBBIES Bass guitar, Tabletop Roleplaying Games, Board Games, DIY Model Making

List of Publications

International journal papers

- a.1 Dušan J. Simjanović, **Nemanja Zdravković**, Nenad O. Vesić, “On the Factors of Successful e-Commerce Platform Design during and after COVID-19 Pandemic Using Extended Fuzzy AHP Method,” *Axioms*, vol. 11, no. 3, pp. 105, Feb. 2022.
DOI: 10.3390/axioms11030105
- a.2 Nikola Dimitrijević, **Nemanja Zdravković**, Vladimir Milićević, “An Automated Grading Framework For The Mobile Development Programming Language Kotlin,” *International Journal for Quality Research*, vol. 17, no. 2, 2022.
DOI: 10.24874/IJQR17.02-01
- a.3 Vladimir Milićević, **Nemanja Zdravković**, Jovana Jović, “On The Selection Of Suitable Blockchain Technologies For Supply Chain Management,” *International Journal for Quality Research*, vol. 11, no. 3, pp. 105, Feb. 2022.
DOI: 10.24874/IJQR17.03-02
- a.4 Vladimir Milićević, **Nemanja Zdravković**, Jovana Jović, Dušan Jagličić, “Model Development to Software Platform for Beehive Field Placement Optimization,” *Acta Agriculturae Serbica*, vol. 27, no. 53, 2022.
- a.5 P. Vijayakumar, S. Pavithraa, S. Harithaa, **Nemanja Zdravković**, “A Web Deployment of Secured ECG Signal Medical Record Transactions using Blockchain,” *Annals of the Romanian Society for Cell Biology*, vol. 25, no. 6, pp. 19937–19951, Sep. 2021.
- a.6 **Nemanja Zdravković**, Aleksandra Cvetković, Dejan Milić, Goran T. Đorđević, “Packet error rate analysis of decode-and-forward free-space optical cooperative networks in the presence of random link blockage,” *Journal of Modern Optics*, vol. 64, no. 16, pp. 1657–1668, 2017.
M23, DOI: 10.1080/09500340.2017.1310316
- a.7 **Nemanja Zdravković**, “Outage analysis of low-latency cooperative wireless networks with threshold-based protocol over composite fading,” *Facta Universitatis Series Automatic Control and Robotics*, vol. 16, no. 1, pp. 37–48, 2017.
M51, DOI: 10.22190/FUACR1701037Z
- a.8 **Nemanja Zdravković**, Aleksandra M. Cvetković, Kimmo Kansanen, Goran T. Đorđević, “Outage performance of low-latency decode-and-forward cooperative wireless networks,” *EURASIP Journal on Wireless Communications and Networking*, vol. 2016, no. 1, pp. 1–10, Apr. 2016.
M22, DOI: 10.1186/s13638-016-0592-6
- a.9 **Nemanja Zdravković**, Milica I. Petković, Goran T. Đorđević, Kimmo Kansanen, “Outage analysis of mixed FSO/WiMAX link,” *IEEE Photonics Journal*, vol. 8, no. 1, pp. 1–14, Feb. 2016.
M21, DOI: 10.1109/JPHOT.2016.2516250
- a.10 **Nemanja Zdravković**, “Outage analysis of clustered cooperative networks over generalized fading and shadowing,” *TEFLOR Journal*, vol. 8, no. 2, pp. 81–86, 2016.
M53, DOI: 10.5937/telfor1602081Z
- a.11 Jelena Anastasov, **Nemanja Zdravković**, and Goran T. Đorđević, “Outage capacity evaluation of extended generalized-K fading channel,” *Journal of the Franklin Institute*, vol. 352, no. 10, pp. 4610–4623, Oct. 2015.
M21a, DOI: 10.1016/j.jfranklin.2015.07.008

**International
conference papers**

- b.1 Dušan J. Simjanović, Nenad O. Vesić, **Nemanja Zdravković**, Tatjana Šibalića, “Applying AHP to smart-city development: Mobility, Healthcare and Education,” in *Proceedings of the International Conference on Advanced Engineering Optimization Through Intelligent Techniques 2022 (AEOTIT 2022)*, 2022.
M14, DOI: obtaining
- b.2 Dušan J. Simjanović, **Nemanja Zdravković**, Branislav Ranđelović, Nenad O. Vesić, “Utilizing AHP for smart-city development with blockchain-based solutions for Healthcare, Government and Education,” in *Proceedings of the 12th International Conference on Information Society and Technology (ICIST 2022)*, 2022.
M33
- b.3 Nikola Dimitrijević, **Nemanja Zdravković**, Vladimir Milićević, “An overview on the possibilities of applying Blockchain in Software Engineering,” in *Proceedings of the 12th International Conference on Information Society and Technology (ICIST 2022)*, 2022.
M33
- b.4 **Nemanja Zdravković**, Milena Bogdanović, Miroslav Trajanović, Vijayakumar Ponnusamy, “Implementing Blockchain Technology for Health-related Early Response Service in emergency situations,” in *G. Manogaran, A. Shanthini, G. Vadivu, (eds.), Proceedings of International Conference on Deep Learning, Computing and Intelligence (ICDCI 2021)*, Springer International Publishing, 2021.
M14, DOI: 10.1007/978-981-16-5652-1_20
- b.5 Dušan Simjanović, Nenad Vesić, Branislav Ranđelović, **Nemanja Zdravković**, “A new cryptographic algorithm based on Affine Connection Coefficients,” in *Proceedings of the The Twelfth International Conference on Business Information Security (BISEC 2021)*, pp. 71–74, Dec. 2021.
M33
- b.6 Nikola Dimitrijević, Aleksandar Mesterovic, Milena Bogdanović, **Nemanja Zdravković**, “Fraud detection and malicious code injection analysis in auto-grading systems,” in *Proceedings of the The Twelfth International Conference on Business Information Security (BISEC 2021)*, pp. 81–85, Dec. 2021.
M33
- b.7 Jovana Jović, Nenad Vesić, Vijayakumar Ponnusamy, Vladimir Milićević, **Nemanja Zdravković**, “Securing Online Assessments in online educational systems using Blockchain,” in *Proceedings of the The Twelfth International Conference on Business Information Security (BISEC 2021)*, pp. 51–54, Dec. 2021.
M33
- b.8 **Nemanja Zdravković**, Nikola Dimitrijević, Dejan Cvijavnović, “A system for interactive learning of the Python programming language with autograding support,” in *Proceedings of the 12th International Conference on e-Learning*, pp. 131–136, Sep. 2021.
M33
- b.9 Nikola Dimitrijević, Vladimir Milićević, **Nemanja Zdravković**, Dejan Cvijavnović, “Learning the Kotlin programming language using an autograding system,” in *Proceedings of the 12th International Conference on e-Learning*, pp. 137–141, Sep. 2021.
M33

- b.10 Vladimir Milićević, **Nemanja Zdravković**, Jovana Jović, “New Mathematical Model For Software Solution Of Modified Transportation Problem,” in *Proceedings of the 10th International Conference On Social And Technological Development (STED 2021)*, pp. 490–499, 2021.
M33
- b.11 Vladimir Milićević, Jovana Jović, **Nemanja Zdravković**, “An overview of Hyperledger blockchain technologies and their uses,” in *Proceedings of the 11th International Conference on Information Society and Technology (ICIST 2021)*, pp. 62–65, 2021.
M33
- b.12 Nikola Dimitrijević, **Nemanja Zdravković**, Dejan Cvijanović, “An Overview Of Developed Automatic Grading Teaching Tools For Learning Different Programming Languages,” in *Proceedings of the IAI Academic Conference*, pp. 20–25, 2021.
M33
- b.13 **Nemanja Zdravković**, Jovana Jović, Marina Damnjanović, “Secure Credentialing In E-learning Using Blockchain,” in *Proceedings of the 11th International Conference on e-Learning*, pp. 39–43, Sep. 2020.
M33
- b.14 Nenad Vesić, **Nemanja Zdravković**, Dušan Simjanović, “Securing Online Assessments using Christoffel symbols,” in *Proceedings of the 11th International Conference on e-Learning*, pp. 30–33, Sep. 2020.
M33
- b.15 Marina Damnjanović, Veljko Grković, **Nemanja Zdravković**, Dušan Simjanović, “Towards Secure Online Studies: Applying Blockchain to e-Learning,” in *Proceedings of the 11th International Conference on e-Learning*, pp. 39–43, Sep. 2020.
M33
- b.16 **Nemanja Zdravković**, Marina Damnjanović, Dragan Domazet, Vijayakumar Ponnusamy, and Miroslav Trajanović, “Implementing Blockchain Technology for Data Protection in Health-IoT and Diagnostic Devices: Overview, Potential, and Issues,” in *Proceedings of the 10th International Conference on Information Society and Technology (ICIST 2020)*, Mar. 2020.
M33
- b.17 Veljko Grković, Jovana Jović, **Nemanja Zdravković**, Miroslav Trajanović, Dragan Domazet, and Vijayakumar Ponnusamy, “Usage of Blockchain Technology for Sensitive Data Protection – Medical Records Use Case,” in *Proceedings of the 10th International Conference on Information Society and Technology (ICIST 2020)*, Mar. 2020.
M33
- b.18 **Nemanja Zdravković**, “Outage Analysis of Industrial Wireless Networks: Efficient Protocols and Trade-offs (*invited paper*),” in *Proceedings of the 25th Telecommunications Forum (TELFOR 2017)*, Nov. 2017, pp. 33–41.
M31, DOI: 10.1109/TELFOR.2017.8249280
- b.19 Aleksandra M. Cvetković, Jelena A. Anastasov, **Nemanja Zdravković**, “Outage performance of satellite-terrestrial multiuser networks with fixed gain AF relay,” in *Proceedings of the LI International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST 2016)*, Jun. 2016, pp. 131–134.
M33

- b.20 **Nemanja Zdravković**, “Outage analysis in clustered cooperative networks over \mathcal{K} fading channels,” in *Proceedings of the 23rd Telecommunications Forum (TELFOR 2015)*, Nov. 2015, pp. 95–98.
M33, DOI: 10.1109/TELFOR.2015.7377422
- b.21 **Nemanja Zdravković**, Aleksandra M. Cvetković, “Packet Error Rate Analysis of Decode-and-Forward Wireless Networks with Internode SR-ARQ Protocols,” in *Proceedings of the 12th International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS 2015)*, Oct. 2015, pp. 39–42.
M33, DOI: 10.1109/TELSIKS.2015.7357733
- b.22 **Nemanja Zdravković**, “Packet error rate of decode-and-forward cooperative wireless networks over composite fading channels,” in *Proceedings of 12th International Conference on Applied Electromagnetics – PES 2015*, Aug. 2015.
M33
- b.23 Milica I. Petković, **Nemanja Zdravković**, and Goran T. Đorđević, “Outage performance of switch-and-examine combining receiver over FSO Gamma-Gamma atmospheric turbulence with pointing errors,” in *Proceedings of the 22nd Telecommunication Forum (TELFOR 2014)*, Nov. 2014, pp. 383–386.
M33, DOI: 10.1109/TELFOR.2014.7034429
- b.24 Milica I. Petković, **Nemanja Zdravković**, Časlav M. Stefanović, and Goran T. Đorđević, “Performance analysis of SIM-FSO system over Gamma-Gamma atmospheric channel,” in *Proceedings of the XLIX International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST 2014)*, Jun. 2014, pp. 19–22.
M33
- b.25 **Nemanja Zdravković**, Aleksandra. M. Cvetković, Goran T. Đorđević, and Kimmo Kansanen, “Outage probability of Decode-and-Forward network with threshold based protocol over Rayleigh fading,” in *Proceedings of the 21st Telecommunication Forum (TELFOR 2013)*, Nov. 2013, pp. 315–318.
M33, DOI: 10.1109/TELFOR.2013.6716233
- b.26 Milica I. Petković, **Nemanja Zdravković**, and Goran T. Đorđević, “Error performance of uncoded and convolutional coded SC receiver over FSO channel with pointing errors,” in *Proceedings of the 21st Telecommunication Forum (TELFOR 2013)*, Nov. 2013, pp. 283–286.
M33, DOI: 10.1109/TELFOR.2013.6716226
- b.27 Milica I. Petković, **Nemanja Zdravković**, Bata V. Vasić, and Goran T. Đorđević, “BER performance of IM/DD FSO system with PIN photodiode receiver over Gamma-Gamma atmospheric turbulence channel,” in *Proceedings of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST 2013)*, Jun. 2013, pp. 99–102.
M33
- b.28 Dragana Radulović, **Nemanja Zdravković**, and Mirjana Perić, “Plan parallel problem analysis using finite element method,” in *Proceedings of 4th International PhD Seminar on Computing electromagnetics and bioeffects of electromagnetic fields (CEMBEF 2009)*, Aug. 2009, pp. 46–50.
M33

**National
conference papers**

- c.1 **Nemanja Zdravković**, Zvezdan Marjanović, and Goran T. Đorđević, “Analitički postupak određivanja funkcije gustine verovatnoće i funkcije raspodele verovatnoće greške u mobilnom telekomunikacionom kanalu (in Serbian),” in *Proceedings of 61st Conference on electronic engineering, Telecommunications, Computer Science, Automation and Nuclear Technology (ETRAN)*, Jun. 2017, pp. TE1.1–4.

M63

- c.2 **Nemanja Zdravković**, Jelena Anastasov, and Goran T. Đorđević, “Outage capacity analysis of Generalized-K fading channels,” in *Proceedings of 58th Conference on electronic engineering, Telecommunications, Computer Science, Automation and Nuclear Technology (ETRAN)*, Jun. 2014, pp. TE1.8.1–4.

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**Other published
papers**

- d.1 **Nemanja Zdravković** and Goran T. Đorđević, “Packet Error Rate of Decode-and-Forward Free Space Optic Network with Selfish Behaviour,” in *COST Action IC1101 Optical Wireless Communications — An emerging Technology (OPTICWISE)*, Jul. 2014.