



Prof Sanja Bauk

CV and References

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Bio

Born in Kotor (Montenegro, South-East Europe) in 1972, I was an excellent student and claimed academic awards during both primary and high school. I graduated in 1997 from the Maritime Faculty in Kotor, University of Montenegro where I once again gained recognition as one of the best students, having received the University Plaque.

In 2001, I earned my master's degree at the Faculty of Traffic and Transportation Engineering, University of Belgrade (Serbia), defending the thesis Information and Communication Technologies in Optimising the Ship Navigation. In 2005, I finished my doctoral studies at the same faculty, defending the doctoral dissertation Intelligent Information Systems in Route Optimisation in Maritime and Port Transportation.

Later, during 2013, I completed the post-doctoral studies in the field of didactic informatics at the Academy for New Media in Knowledge Transfer, at Karl Franzens University Graz (Austria). In 2017, I completed further post-doctoral studies in the field of wireless sensors' network optimisation at the RWTH Aachen University (Germany).

I have received several international academic awards as a visiting researcher and lecturer at the universities of: Coimbra (Portugal), Barcelona (Spain), Pittsburgh (Pennsylvania, the USA), Bologna (Italy), Odessa (Ukraine), Graz (Austria), Lund (Sweden), Aachen and Marburg (Germany), City, London (England) and others.

With varied and vast research interests, I have developed a broad background in informatics and management science (operations research) including some computational aspects. In addition, I have an established interest in digital transformation, innovation management, education, economics, data analytics and optimization. More recently, I have expanded my research interests to physical internet, biological versus virtual intelligence, convergent technologies, cybersecurity, including other technologically and socially advanced developments.

I am motivated to undertake further research that links some of these concepts while simultaneously helps strengthen communication between academia, industry, and wider community.

As a prolific writer, I am the author of several scientific monographs and university textbooks. Acting in the capacity of author and co-author, I have published over 150 papers in various international scientific journals. In addition, I have contributed many articles to the proceedings of international scientific conferences.

My well-established credibility in my field has earned me the honour to sit on the editorial boards and as a reviewer on several international scientific journals. I am also a member of the scientific boards of several international scientific conferences. Additionally, I have actively participated in the realisation of numerous international research and development projects.

I worked for more than 20-years at the Maritime Faculty Kotor (University of Montenegro, Southeast Europe) as a lecturer in Operations Research and Maritime IT/OT at undergraduate and postgraduate levels. After that, in 2018, I was employed as an associate professor at Faculty of Applied Sciences at Durban University of Technology (South Africa). I used to lecture several subjects as Electronic and Information Systems in Navigation (ECDIS & Radar/ARPA at simulation level), Logistics, Research Methodology and Research Project. Currently, I am with Estonian Maritime Academy, Tallinn University of Technology (Estonia) as a research professor and besides research work, I lecture Introduction to Computer Systems for Maritime Specialists and Maritime Industry's Digital Transformation at postgraduate level.

In my spare time, I read (non-)fiction and write essays. Up to now, I have successfully published six collections of short stories in my native Serbo-Croatian language, that aim to reflect my perception of some of the challenges that modern societies currently grapple with.

Education

- **PostDoc**, Institute for Theoretical Information Technology, RWTH Aachen University, Aachen, Germany, *Wireless Sensor Network Optimization* (2016-2017)
- **PostDoc**, Karl Franzens University Graz, Graz, Austria, *Didactic Pedagogy* (2012-2013)
- **DSc**, Faculty of Traffic and Transportation Engineering, University of Belgrade, Belgrade, Serbia and Montenegro, *Intelligent Information Systems in Route Optimization in Maritime Transportation* (2001-2005)
- **MSc**, Faculty of Traffic and Transportation Engineering, University of Belgrade, Belgrade, Serbia and Montenegro, *Information and Communication Technologies in Ship Route Optimization* (1997-2001)
- **Diploma**, Honor Maritime Engineer, Faculty of Maritime Studies, Kotor, University of Montenegro, Serbia and Montenegro, *Bidirectional Time Comparison of Multimodal Transportation Systems* (1993-1997)

Master Thesis

Bauk S., *Information and communication technologies in ship route optimization*, Master thesis, Faculty of Traffic and Transportation Engineering, University of Belgrade, Belgrade, Serbia & Montenegro, 2001.

Doctoral Dissertation

Bauk S., *Intelligent information systems for some route optimization problems in sea and port transportation*, Doctoral dissertation, Faculty of Traffic and Transportation Engineering, University of Belgrade, Belgrade, Serbia & Montenegro, 2005.

Programming skills (basis)

Python, Matlab, Mathematica, VBA, (D)HTML, PHP, SQL, Cobol, Fortran, Pascal, Basic

Graphical Design (certificate, University of Cape Town)

Teaching Technology (certificate, University of Cape Town)

Languages

Serbo-Croatian (native)
English (fluent)
German (fair reading and writing)
Italian (basis)
Estonian (basis)
Russian (basis)

Working experience

2026 - : *Tenured Associate Professor in Maritime Cybersecurity*, Estonian Maritime Academy, Tallinn University of Technology (Tallinn, Estonia)

2023 - 2026: *Research Professor*, Estonian Maritime Academy, Tallinn University of Technology - TalTech (Tallinn, Estonia)

2018 - 2023: *Associate Professor*, Durban University of Technology (Durban, South Africa)

2013 - 2019: *Associate Professor*, University of Montenegro (Kotor, Montenegro)

2008 - 2013: *Assistant Professor*, University of Montenegro (Kotor, Montenegro)

2001 - 2017: *Visiting Professor and Researcher at RWTH Aachen University* (Aachen, Germany), *London, City University* (London, UK), *University of Marburg* (Marburg, Germany), *Lund University* (Lund, Sweden), *Karl Franzens University* (Graz, Austria), *University of Odessa* (Odessa, Ukraine), *University of Tirana* (Tirana, Albania), *University of Zagreb* (Zagreb, Croatia), *University of Ljubljana* (Portoroz, Slovenia), *University of Barcelona* (Barcelona, Spain), *University of Coimbra* (Coimbra, Portugal), and *University of Pittsburgh* (Pittsburgh, Pennsylvania, USA)

1998-2008: *Teaching and research assistant*, University of Montenegro (Kotor, Montenegro)

Teaching experience

- Introduction to Computer Systems for Maritime Specialists (with basic programming in Python and advanced AI-co-programming in Python)
- Maritime Industry's Digital Transformation
- Informatics
- Management Science (Operations Research)
- Electronic and Information Systems in Sea Navigation
- Different maritime IT/OT applications (PCS, MSWE, ICS, etc.)
- ECDIS at simulation level
- RADAR/ARPA at simulation level
- Logistics
- Research Methodology
- Research Projects
- Critical Thinking

Awards

- **Certificate of Excellence - Faculty Researcher of the Year**, Durban University of Technology, Faculty of Applied Sciences, 2022.
- **Top Researcher at the Department of Maritime Studies**, Durban University of Technology, Faculty of Applied Sciences, 2022.
- **Book Publication Recognition Award**, Research and Postgraduate Support Directorate, Durban University of Technology, 2022.
- **Teaching and Learning Excellence**, Durban University of Technology, 2021.
- **Research Rewards from Research Outputs**, Durban University of Technology, 2021.
- **Top Researcher of the Department of Maritime Studies**, Durban University of Technology, 2020
- **Teaching and Learning Excellence**, Durban University of Technology, 2020.
- **Best Collaborative Online International Learning Initiative**, Durban University of Technology, 2020.
- **One of the top publishers** (among 30 first) at Durban University of Technology, 2019.
- **Researcher of the year at Maritime Studies Department**, Durban University of Technology, 2019.
- **Award to Prof Sanja Bauk**, PhD, on the 30th anniversary of **Journal PROMET-Traffic & Transportation** for continuous support, dedication, attention and open-minded thinking, and help in making the Journal such success in the field of transportation science and technology; Editor-in-Chief, Zagreb, Croatia, 2019.
- **Award to Prof Sanja Bauk in recognition of being one of the Top Book Publishers in 2017**, Durban University of Technology, 2018.
- **Acknowledgment of achieved results and contribution to the development of scientific and professional work at the Faculty of Maritime Studies**, University of Montenegro, 2018.

- **HERIC-INVO National Award of Excellence for Postdoctoral Studies** (at RWTH Aachen University Germany, 2016/2017), Montenegrin Ministry of Science, 2016.
- **Sigma, Erasmus Mundus Action 2, Grant for an academic visit** to Cass Business School, City, University of London, UK, 2016.
- **Alexander von Humboldt – Georg Forster Research Fellowship (HERMES)** scholarship for experienced researchers, Goethe Institute in Bonn and RWTH University in Aachen, Germany, 2015 & 2016.
- **Basileus V, Erasmus Mundus Action 2, Grant as a visiting staff member** at Lund University, Lund, Sweden, 2014 & 2015
- **Sigma, Erasmus Mundus Action 2, Grant for a visiting researcher and guest lecturer** for three months at Lund University, Lund, Sweden, 2013 & 2014.
- **Join EU SEE Erasmus Mundus grant** as post-doctorate researcher and guest lecturer at the Karl Franzens University, Graz, Austria, 2012 & 2013.
- **JFDP Department of State Grant** as a visiting scholar for five months within the Junior Faculty Development Program at the University of Pittsburgh, Pennsylvania, USA, 2005 & 2006.
- **Coimbra Group Hospitality Scheme grant** as a visiting scholar at the University of Barcelona, Spain, 2006.
- **Ministero degli Affari Esteri grant** for attending master course in the sustainable development of Adriatic-Ionian region, within the Virtual University of Bologna, Italy, 2004.
- **Coimbra Group Hospitality Scheme grant** as a visiting scholar at the University of Coimbra, Portugal, 2001.
- **Award for the best student**, University of Montenegro, 1998.
- **Luča I**, Montenegrin national award for excellence in the secondary school, Montenegro, 1991.

Projects

- **2023-2025:** ERA Chair of “Cybersecurity in Maritime (MariCybERA)” – European Research Area Project (European Commission ERA Chair project);
- **2020-2024:** “ePIcentar - Enhanced Physical Internet-Compatible Earth-frieNdly freight Transportation answer” (European Commission, Horizon 2020);
- **2018-2022:** “Euro-ZA Capacity building in the field of maritime education” (Erasmus+);
- **2020-2022:** “iKUDU – Transforming curricula through internationalization & virtual exchange” (Erasmus+);
- **2019-2020:** “COMPASS - Coordination Of Maritime assets for Persistent And Systematic Surveillance” (European Commission, Horizon 2020);
- **2018-2020:** “The development of intermodal transport, intermodal nodes and hinterland network in the Eastern Adriatic Region” (Slovenian and Montenegrin Ministries of Science);
- **2017:** “Modelling smart network for enhancing on port workers' safety” (Montenegrin Ministry of Science and German RWTH Aachen University);
- **2016:** “Montenegro as logistics (multimodal) platform between the Adriatic region and Danube region” (Montenegrin Ministry of Transport and Maritime Affairs);
- **2015:** “Recommendations for new structural funds directed to new transport infrastructures and services for the period 2014-2020” (Montenegrin Ministry of Transport and Maritime Affairs);
- **2013-2014:** “Distant learning implementation at the Faculty of Maritime Studies, University of Montenegro, as the additional mode of education” (Montenegrin Ministry of Science in collaboration with Academy for New Media and Knowledge Transfer, University of Graz, Austria);
- **2012-2013:** “Concerning the possibilities of applying distant learning for the seamen needs, supported by Montenegrin Ministry of Science” (Collaboration with Faculty of Maritime Studies and Transport in Portoroge, University of Ljubljana, Slovenia);
- **2011-2012:** “ICT and Innovative Strategies for Sustainable Development - Application in the West Balkans” (CEI – Central European Initiative, University Network Joint Programme – Serbia & Albania);
- **2011-2012:** “Developing an E-learning Module at Faculty of Maritime Studies (Kotor, Montenegro) for the Seamen Educational Needs” (Montenegrin Ministry of Science in collaboration with Academy for New Media and Knowledge Transfer, University of Graz, Austria);

- **2010-2011:** “Up-to-date Software Tools in the Maritime Traffic Optimal Managing” (Montenegrin Ministry of Science in collaboration with Faculty of Maritime Studies and Transport in Portorož, University of Ljubljana, Slovenia);
- **2009-2010:** “Trans-Regional Cooperation in Maritime Transport and Sustainable Development” (CEI – Central European Initiative, University Network Joint Programme – Ukraine & Montenegro)
- **2009-2010:** “Labour Market Oriented Curriculum – Advances in Marine Technologies” (World University Service (WUS), Austria), etc.

Patent

Džankić R. & **Bauk S.** (2023); Number of patent: 04527 (13) B; International patent classification code: G-06Q10/083(2023.01); Title of innovation: *Device for tracking container in road, rail and sea transport with backend info-communication system.*

Publications

Books

1. **Bauk S.** (Ed.), *Maritime Cybersecurity*, Springer Nature, Series Title: Signals and Communication Technology, 2025, <https://doi.org/10.1007/978-3-031-87290-7> (eISBN: 978-3-031-87290-7, p. 248)
2. **Bauk S.**, *Electronic Chart Display and Information System in Brief*, Sanja Bauk (self-published), Durban, South Africa (ISBN: 978-0-620-97267-3), 2021, p. 124.
3. **Bauk S.**, Dimov S.I. (Eds.), *The 1st International Conference on Maritime Education and Development ICMED*, Springer, Boston, USA (ISBN: 978-3-030-64087-3; eISBN: 978-3-030-64088-0), 2021, p. 452, DOI: <https://doi.org/10.1007/978-3-030-64088-0>
4. **Bauk S.**, *Quantitative Methods for Management*, ELIT – Economic Laboratory for Transition Research: Podgorica, Montenegro/SPH – Scientific Publishing Hub: Celje, Slovenia; Czestochowa, Poland; Kotor, Montenegro; Osijek, Croatia; Žilina, Slovakia (ISBN: 978-9940-673-14-7), 2019, p. 356.
5. **Bauk S.**, *Maritime Issues in Digital Age*, ELIT – Economic Laboratory for Transition Research: Podgorica, Montenegro / SPH – Scientific Publishing Hub: Celje, Slovenia; Czestochowa, Poland; Kotor, Montenegro; Osijek, Croatia; Žilina, Slovakia (ISBN: 978-9940-673-20-8; ISBN: 978-961-6948-20-3, eBk), 2018, p. 343.
6. **Bauk S.**, *Prilozi digitalizaciji u pomorstvu* [Contributions to digitalization in maritime affairs], ELIT – Economic Laboratory for Transition Research, Podgorica, Montenegro, 2017 (ISBN: 978-9940-673-08-6), p. 295.
7. **Bauk S.**, *Kvantitativne metode optimizacije u funkciji naučnog menadžmenta* [Quantitative optimization methods in the function of scientific management], ELIT – Economic Laboratory for Transition Research, Podgorica, Montenegro, 2011 (ISBN: 978-9940-9222-2-1), p. 321.
8. **Bauk S.**, *Metode optimizacije u menadžmentu* [Optimization methods in management], University of Montenegro, Podgorica, Montenegro, 2010 (ISBN: 978-86-7664-089-8), p. 230.
9. **Bauk S.**, *Intelligentni informacioni sistemi u pomorstvu* [Intelligent maritime information systems], Zadužbina Andrejević, Belgrade, Serbia, 2006 (ISBN: 86-7244-593-7), p. 88.

Book Chapters

1. **Bauk, S.**, Beskovnik, B., Gülmez, S. (2025). Ports of Tallinn and Koper Comparative Analysis Including Cybersecurity. In: Bauk, S. (eds) *Maritime Cybersecurity. Signals and Communication Technology*. Springer, Cham. https://doi.org/10.1007/978-3-031-87290-7_4
2. Astrov, I., **Bauk, S.** (2025). Simulating Cyber-Attacks on the Unmanned Sea-Surface Vessel's Rudder Controller. In: Bauk, S. (eds) *Maritime Cybersecurity. Signals and Communication Technology*. Springer, Cham. https://doi.org/10.1007/978-3-031-87290-7_5
3. Džankić, R., Bulatović, Z., **Bauk, S.** (2025). Improving Security and Privacy with Raspberry Pi Devices. In: Bauk, S. (eds) *Maritime Cybersecurity. Signals and Communication Technology*. Springer, Cham. https://doi.org/10.1007/978-3-031-87290-7_12
4. **Bauk S.**, Heering D., Gülmez Y. (2024). *Satelliitnavigatsioonisüsteemide haavatavused ja alternatiivsed lahendused* [Satellite navigation systems' vulnerabilities and alternative solutions]. Kreem, Enn (Toim.). *Meie meri*. (85–88). Sekstant. (Eesti Laevanduse Aastaraamat).

5. **Bauk S.**, On maritime digitalization in emerging environments. Chapter in *Logistics Engineering* (Eds. Dr. Samson Jerold Samuel Chelladurai, Dr. Suresh Mayilswamy, Dr. S. Gnanasekaran and Prof. Ramakrishnan Thirumalaisamy), IntechOpen, London, UK, (ISBN: 978-1-80355-751-9), 2022, DOI: <http://dx.doi.org/10.5772/intechopen.104185>.
6. **Bauk S.**, Pareto principle in assessing possibilities for ecological improvements at the Port of Bar, in *Sustainable Development: Crisis or Regulation?*, Chapter 12, Eds. Drašković M., Streimikiene D., ELIT, SPH & CSZ, Podgorica, Montenegro (ISBN:978-9940-673-10-9), 2017.
7. **Bauk S.**, Ivanović Ž., Multiphase approach to developing model of logistics for coastal tourist destinations, in *Management and Logistics – Selected Topics*, Ed. Drašković V., SHP Scientific Publishing Hub, Celje, Osijek, Czestochowa, Kotor (ISBN:978-961-6948-05-0), 2016.
8. **Bauk S.**, Kapidani N., Improving safety of navigation by implementing VTS/VTMIS: Experiences from Montenegro, in *Information, Communication and Environment: Marine Navigation and Safety of Sea Transportation*, Editors: Adam Weintrit, Tomasz Neumann, Chapter VII; pp. 253-258, CRC Press, Taylor & Francis Group, pages 284 (ISBN:978-1-138-02857-9 CAT#K26877), 2015.
9. **Bauk S.**, Radlinger R., Inciting the development of engaging screencasts in teaching ECDIS, in *Maritime Navigation and Safety of Sea Transportation: Advances in Marine Navigation*, Ed. Adam Weintrit, Chapter 2, pp. 29-36, CRC Press, Taylor & Francis, pages 312 (ISBN-13: 9781138001060), 2013.
10. Kulić R., **Bauk S.**, Autonomous Vehicle Path Planning Specially According to the Narrow Passage and Goal Position Reaching, in *Autonomous Robots Research Advances*, Chapter 7, Ed. Weihua Yang, Nova, Science Publisher, New York, pp. 179-222 (ISBN: 978-1-60456-185-2), 2008.
11. Lopez-Sanchez M., **Bauk S.**, Kovac N., Rodriguez-Aguilar J., Punishment Policy Adaptation in a Road Junction Regulation System, in *Frontiers in Artificial Intelligence and Applications*, Eds. Cecilio Angulo, Lluís Godó, IOS Press, pp. 112-119 (ISBN: 978-1-58603-798-7), 2007.

Collections of short stories

1. **Bauk S.**, Skice za nove istine [*Sketches for new truths*], Sanja Bauk (samoizdat), Podgorica, Montenegro, 2024 (ISBN: ISBN 978-9940-8753-2-9), p. 131.
2. **Bauk S.** (Ed.), *Life Stories of Women in Academia*, Sanja Bauk (self-published), Durban, South Africa, 2021 (ISBN: 978-0-620-97267-3), p. 185. / eBook available on Amazon
3. **Bauk S.** (Ed.), Lične priče žena iz akademske zajednice [*Life stories of women in academia*], Sanja Bauk (samoizdat), Podgorica, Montenegro, 2021 (ISBN: 978-9940-8753-1-2), p. 168.
4. **Bauk S.**, Što Google zna o meni... [*What Google knows about me...*], Sanja Bauk (samoizdat), Podgorica, Montenegro, 2021 (ISBN:978-9940-8753-0-5), p. 116.
5. **Bauk S.**, Sa granice dva okeana [*From the border of two oceans*], ELIT, Podgorica, Montenegro, 2018 (ISBN: 978-9940-673-21-5), p. 136.
6. **Bauk S.**, Lotove žene [*Lot's women*], Plavi jahač, Belgrade, Serbia, 2017 (ISBN: 978-86-481-00962-2), p. 204.

Journal papers

Selected journal papers (SCI, SCIE, SSCI, Scopus)

1. Nagi Nasr, Ahmed; Malhi, Avleen; **Bauk, Sanja**; Valdez Banda, Osiris; Kujala, Pentti; Soe, Ralf-Martin; Wang, Shan (2026). "Hybrid Physics–AI Digital Twin Framework for Shared Mooring Systems in Deepwater Floating Offshore Wind Farms." *Journal of Marine Science and Application*, 1–25 [forthcoming] (Scopus).
2. Oruc, A., **Bauk, S.**, Zhou, J., "A National Maritime Cyber Security Operations Center (M-SOC) Concept, " *Journal of Marine Science and Engineering*, 14(1), 2026, 17, <https://doi.org/10.3390/jmse14010017> (SCIE)
3. Yigit Gülmez, Olgun Konur, Muhammed Erbas, **Sanja Bauk**, "Identifying cyber attack vulnerabilities in the main lubricating oil system of marine propulsion units," *International Journal of Critical Infrastructure Protection*, Volume 51, 2025, 100810, ISSN 1874-5482, <https://doi.org/10.1016/j.ijcip.2025.100810> (SCI)
4. Nikčević, Gordana; **Bauk, Sanja**, "On transforming a traditional organisational culture to meet the needs of a global business," *Journal of Business Economics and Management*, 26 (4), 2025, 840–859. DOI: 10.3846/jbem.2025.24492. (SSCI)

5. Nikčević, Gordana; **Bauk, Sanja**, "Adapting a Traditional Organizational Culture to the Needs of a Global Business," *Journal of East European Management Studies*, 30, 3, 2025, 1–13. DOI: 10.31083/JEEMS39792. (SSCI)
6. Masuku M.B., **Bauk S.**, "Enhancing Maritime Higher Education through Technology in a Developing Context," *International Journal of Learning, Teaching and Educational Research*, Vol. 24, No. 3, March 2025: 75-93; [Link](#) (Scopus)
7. Astrov, I., **Bauk, S.**, & Kujala, P., "Exploring Simulation Methods to Counter Cyber-Attacks on the Steering Systems of the Maritime Autonomous Surface Ship (MASS)," *Journal of Marine Science and Engineering*, 13(8), 2025, 1470; [Link](#) (SCIE)
8. Astrov I., **Bauk S.**, "Simulating a Cyber-Attack on the MASS Thruster Controller at Low-Speed Motion," *Promet – Traffic & Transportation*, 36(6), 2024, pp. 1006-1021; [Link](#) (SCIE)
9. **Bauk S.**, Dzankic R., "Smart cargo container tracking and IT security management: Experimental results," *Journal of Maritime Research*, 21(2), 2024, pp. 128-134; [Link](#) (Scopus)
10. **Bauk S.**, Ntshangase L.H., "Blockchain Implementation Barriers in Maritime: A Case Study based on ISM and MICMAC Techniques," *Journal of Maritime Research*, 20(3), 2023, pp. 72-80; [Link](#) (Scopus)
11. **Bauk S.**, Mujalović R., Kapidani N., Paladin Z., "Maritime Blockchain Prospects and Concerns," *Journal of Maritime Research*, 20(2), 2023, pp. 97-105; [Link](#) (Scopus)
12. **Bauk S.**, "Analysis of Barriers in Maritime Blockchain Implementation," *High Technology Letters*, 29 (4), 2023, pp. 113-125; [Link](#) (Scopus)
13. **Bauk S.**, "Group Learning Online Platforms for Virtual Exchange: Positive Practices," *High Technology Letters*, 29(1), 2023, pp. 460-467; [Link](#) (Scopus)
14. **Bauk S.**, "Maritime Blockchain Principles and Concerns," *High Technology Letters*, 29(1), 2023, pp. 334-342; [Link](#) (Scopus)
15. Djurovic Z., **Bauk S.**, "Testing corpus linguistics methods in ESP vocabulary teaching," *Journal of Teaching English for Specific and Academic Purposes*, 10(2), 2022, pp. 319-337; [Link](#) (SSCI)
16. **Bauk S.**, Masuku M.B., Khumalo N., "Enhancing virtual simulator training at MHET institutions," *High Technology Letters*, 28(7), 2022, pp. 733-743; [Link](#) (Scopus)
17. **Bauk S.**, Masuku M.B., "Concerning international virtual exchange at the MHE institution in South Africa," *High Technology Letters*, 28(6), 2022, pp. 462-478; [Link](#) (Scopus)
18. **Bauk S.**, Masuku M.B., "On adopting e-learning in maritime higher education in South Africa," *High Technology Letters*, 28(5), 2022, pp. 98-113; [Link](#) (Scopus)
19. Kapidani N., **Bauk S.**, Davidson I.E.A., "Developing Countries' Concerns Regarding Blockchain Adoption," *Journal of Maritime Science and Engineering*, 9(12), 2021, 1326; [Link](#) (SCIE)
20. **Bauk S.**, "Performances of Some Autonomous Assets in Maritime Missions," *TransNav – International Journal on Maritime Navigation and Safety of Sea Transportation*, 14(4), 2020, pp. 875-881; [Link](#) (Scopus)
21. **Bauk S.**, "Modelling Radioactive Materials Tracking in Sea Transportation by RFID Technology," *TransNav – International Journal on Maritime Navigation and Safety of Sea Transportation*, 14(4), 2020, pp. 1009-1014; [Link](#) (Scopus)
22. **Bauk, S.**, Kapidani, N., Sousa, L., Lukšić, Ž., Spuža, A., "Advantages and disadvantages of some unmanned aerial vehicles deployed in maritime surveillance," *Journal of Maritime Research*, 17(3), 2020, pp. 81–87; [Link](#) (Scopus)
23. Kapidani N., **Bauk S.**, Davidson I.E., "Digitalization in Developing Maritime Business Environments towards Ensuring Sustainability," *Sustainability* 2020, 12(2), 2020, 9235; [Link](#) (SCIE; SSCI)
24. **Bauk S.**, Fajardo-Flores S., "Matching Interaction Design Principles and Integrated Navigation Systems in an Electronic Classroom," *Transactions in Maritime Science*, 9(1), 2020, pp. 90-98; [Link](#) (Scopus)
25. **Bauk S.**, Kapidani N., Lukšić Ž., Rodrigues F., Sousa L., "Autonomous marine vehicles in sea surveillance as one of the COMPASS2020 project concerns," *Journal of Physics: Conference Series*, Vol. 1357, 2020; [Link](#) (Scopus)
26. **Bauk S.**, "Collaborative Online International Learning Benefits Vis-A-Vis Concerns: An Empirical Study," *Montenegrin Journal of Economics*, 15(2), 2019, pp. 207-216; [Link](#) (Scopus)

27. **Bauk S.**, Leon Calvo, J. A., Schmeink A., Azam S., Mathar R., "On deploying vehicular communication at the developing seaport and related innovation success impediments," *Transport*, 34(1), 2019, pp. 126-134; [Link](#) (SCIE)
28. <https://doi.org/10.3846/transport.2019.7987> [Link](#) (SCIE)
29. Vitić Cetković A., **Bauk S.**, Potocnik Topler J., Assessing Caterers' Satisfaction with Cruise Tourists' Behaviour, *Transformations in Business and Economics*, Vol. 18, No. 1 (46), 2019, pp. 183-199; [Link](#) (SSCI)
30. Bešković B., Twardy E., **Bauk S.**, "Developing Higher Berth Productivity: Comparison of Eastern Adriatic Container Terminals," *PROMET–Traffic and Transportation*, 31(4), 2019, pp. 397-405; [Link](#) (SCIE)
31. **Bauk S.**, Schmeink A., Colomer J., "An RFID Model for Improving Workers' Safety at the Seaport in Transitional Environment," *Transport*, 33(2), 2018, pp. 353-363; [Link](#) (SCIE)
32. **Bauk S.**, "Some ICT Systems for Increasing Occupational Safety with Reference to the Seaport Environment," *Our Sea – International Journal of Maritime Science and Technology*, 65(2), 2018, pp. 94-102; [Link](#) (Scopus)
33. **Bauk S.**, Gonzalez D.G., Schmeink A., "A ZigBee/RFID safety system at the seaport," *Journal of Maritime Science and Technology*, 26(1), 2018, pp. 11-18; [Link](#) (SCIE)
34. Radović D., **Bauk S.**, Delibasić M., Institutional violence in the countries of Southeast Europe, *Transformations in Business & Economics*, Vol. 17, No. 2(44), 2018, pp. 42-59. [Link](#) (SSCI)
35. **Bauk S.**, "Moving Education to Cloud: A pilot Study in Montenegrin Higher Education," *The New Educational Review*, 50(4), 2017, pp. 165-198; [Link](#) (Scopus)
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PhD Students (Supervised)

1. **Margaret Baulungile Masuku:** *Digital Transformation of South African Maritime Higher Education and Training*, Durban University of Technology, Faculty of Accounting and Informatics, Department of Information Technology – ... (2025).
2. **Lindani Handsome Ntshangase:** *Blockchain Technology Adoption in Supply Chains with reference to maritime sector in South Africa*, Durban University of Technology, Faculty of Management Science, Public Management Department – Doctor of Philosophy in Management Sciences Specializing in Business Administration (2024).
3. **Nexhat Kapidani:** *Intelligent Use of Maritime Info-Communication Systems in Developing Environments*, Durban University of Technology, Faculty of Engineering and Built Environment, Electrical Power Engineering – Degree of Doctor of Engineering (2023).

Master Students (Supervised)

1. **Júlia Anna Grosschmid:** *Assessing the Economic Impact of Cyberattacks in the Maritime Sector: A Taxonomy-Driven Case Study and Data Analysis*, Tallinn University of Technology, School of Information Technology (2025). – Master Thesis awarded at TalTech, December 2025.
2. **Mihkel Abe:** *Web3 Protocols in Maritime Logistics: Current Role and Future Perspectives*, Tallinn University of Technology, Estonian Maritime Academy (2025).
3. **Jekaterina Šumilova:** *Enhancing port efficiency through Internet of Things technologies: Benefits and impediments in developing smart ports in Estonia*, University of Technology, Estonian Maritime Academy (2025).
4. **Mark Abner:** *Underwater surveillance and monitoring technologies for enhanced security and environmental management: an analysis of a hypothetical underwater data centre in the Baltic Sea*, Tallinn University of Technology, Estonian Maritime Academy (2024).
5. **Bojana Čabrić:** *Pomorstvo u Crnoj Gori kroz istoriju i u eri informatičke revolucije [Maritime affairs in Montenegro through history and in the era of information revolution]*, Univerzitet Crne Gore, Fakultet za pomorstvo, Kotor, Crna Gora (2016).
6. **Đuro Popović:** *Analiza pozitivnih uticaja informacionih tehnologija na nautički turizam u Crnoj Gori [Analysis of the positive impacts of information technologies on nautical tourism in Montenegro]*, Univerzitet Crne Gore, Fakultet za pomorstvo, Kotor, Crna Gora (2016).

7. **Nexhat Kapidani:** Implementacija sistema nadzora i upravljanja pomorskim saobraćajem u Crnoj Gori [*Implementation of maritime traffic control and management system in Montenegro*], Univerzitet Crne Gore, Fakultet za pomorstvo, Kotor, Crna Gora (2014).
8. **Radoje Džankić:** Napredne informaciono-komunikacione tehnologije u nadzoru i upravljanju pomorskim saobraćajem [*Advanced information and communication technologies in maritime traffic control and management*], Univerzitet Crne Gore, Fakultet za pomorstvo, Kotor, Crna Gora (2012).
9. **Ilija Andrić:** Informaciona podrška upravljanju otpadom na Crnogorskom primorju u cilju zaštite ekosistema [*Information support for waste management on the Montenegrin coast in order to protect ecosystem*], Univerzitet Crne Gore, Fakultet za pomorstvo, Kotor, Crna Gora (2012).
10. **Marija Kaluđerović:** Alati e-poslovanja u lukama na primjeru ERP softvera [*E-commerce tools in ports on the example of ERP software*], Univerzitet Crne Gore, Fakultet za pomorstvo, Kotor, Crna Gora (2012).

Master students (Co-supervised)

1. **Diego Garcia Gonzales:** *Wireless sensor network vs. mobile ad hoc networks*, RWTH-Aachen University, Aachen, Germany (2016).
2. **Joan Colomar Rodriugez:** *Development of a wireless network model for controlling environmental and work safety in ports in developing countries*, RWTH-Aachen University, Aachen, Germany (2015).

Maritime specialists (Supervised)

1. **Snežana Pavlović** (38/M-2017): Digitalna podjela i njen uticaj na pomorstvo [*The digital divide and its impact on shipping*] (Thesis defended on 24.09.2018)
2. **Božana Tešević** (09/M-2017): Korišćenje savremenih informacionih tehnologija u administrativnim i upravljačkim poslovima u pomorstvu [*The use of contemporary information technologies in administrative and management work in the maritime sector*] (Thesis defended on 11.07.2018)
3. **Krivokapić Miloš** (09/PN-2014): Praćenje korozionih oštećenja prilikom eksploatacije broda [*Monitoring corrosion damage during ship operation*] (Thesis defended on 27.12.2017.)
4. **Milica Bulajić** (10/PN-2016): Internet stvari sa osvrtom na pomorstvo [*Internet of Things with a focus on maritime*] (Thesis defended on 17.10.2017.)
5. **Nikoleta Franović** (05/PN-2016): E-navigacija i ECDIS [*E-navigation and ECDIS*] (Thesis defended on 14.09.2017.)
6. **Boris Buvač** (04/PN-2016): E-navigacija i pomorski klaud [*E-navigation and maritime cloud*] (Thesis defended on : 20.07.2017.)
7. **Ljiljana Vučetić** (09/PN-2015): E-navigacija i pomorski klaud u kontekstu Interneta svega [*E-navigation and maritime cloud in the context of the Internet of Everything*] (Thesis defended on 18.04.2017.)
8. **Maja Filipović** (33/M-2013), Elektronske nautičke karte i sistemi [*Electronic nautical charts and systems*] (Thesis defended on 21.02.2017.)
9. **Aleksandra Bošković** (14/PN-2014): Internet stvari [*Internet of Things*] (Thesis defended on 03.11.2016.)
10. **Stevan Lučić** (11/M-2013): Upravljanje promjenama u poslovanju sa osvrtom na e-poslovanje [*Change management in business with a focus on e-business*] (Thesis defended on 27.04.2016.)
11. **Petar Martinović** (18/M-2014), E-trgovina danas i u perspektivi [*E-commerce today and in perspective*] (Thesis defended on 27.04.2016.)
12. **Gordana Balšić** (31/M-2013), Internet kao medijum digitalne ekonomije [*Internet as a medium of digital economy*] (Thesis defended on 23.03.2016.)
13. **Saša Dragutinović** (5/PN-2013): Internet na plovilima [*Internet onboard vessels*] (Thesis defended on 23.03.2016.)
14. **Dražen Mihaliček** (20/M-2012): Facebook – za i protiv [*Facebook – pros and cons*] (Thesis defended on 29.10.2014.)
15. **Željko Krivokapić** (1/PN-2013): Savremene IT aplikacije u pomorstvu – ERP i RFID [*Contemporary IT applications in shipping - ERP and RFID*] (Thesis defended on 29.10.2014.)

16. **Danica Šaranović** (34/M-2013): Neki primjeri primjene linearnog programiranja u optimizaciji pomorskog transporta [*Some examples of the application of linear programming in the optimization of maritime transport*] (Thesis defended on 17.09.2014.)
17. **Helena Perović** (27/M-2013): Informacioni sistemi lučkih usluga u administrativnoj službi [*Information systems of port services in the administrative department*] (Thesis defended on 17.09.2014.)
18. **Miloš Popović** (18/M-2010): E-trgovina sa mogućnostima primjene u pomorstvu [*E-commerce with maritime application possibilities*] (Thesis defended on 05.06.2014.)
19. **Predrag Pajović** (23/M-2012): Informacioni sistemi u osiguranju [*Information systems in insurance*] (Thesis defended on 23.04.2014.)
20. **Danijela Komljenović** (11/M-2012): E-posovanje vs. e-trgovina [*E-business vs. e-commerce*] (Thesis defended on 09.11.2013.)
21. **Anita Pasković** (12/M-2012): Perspektive e-trgovine [*E-commerce perspectives*] (Thesis defended on 09.11.2013.)
22. **Dejan Buntić** (32/M-2010): Principi e-poslovanja sa mogućnostima primjene u pomorstvu [*Principles of e-business with possible applications in maritime affairs*] (Thesis defended on 09.10.2013.)
23. **Filip Popović** (18/M-2011): Osnovi e-poslovanja i mogućnosti primjene u pomorstvu [*Basics of e-business and its application in maritime affairs*] (Thesis defended on 09.10.2013.)
24. **Aleksandar Popović** (16/M-2012): Internet kao medijum e-poslovanja i mogućnosti primjene u pomorstvu [*Internet as a medium of e-business and possibilities of application in maritime*] (Thesis defended on 09.10.2013.)
25. **Aleksandar Ožegić** (18/M-2012): Internet i društvene mreže [*Internet and social networks*] (Thesis defended on 09.10.2013.)
26. **Milica Delibašić** (34/M-2012): Informacioni sistemi u poslovnim sistemima sa osvrtom na obrazovanje pomoraca [*Information systems in business systems with reference to the education of seafarers*] (Thesis defended on 25.09.2013.)

Guest lectures at other universities

1. Bauk S., *Maritime cybersecurity*, Training programme "Cybersecurity Educator - Implementing Behavioural Science Perspectives for Improved Cybersecurity Awareness Education in Organisations" organized by the European Security and Defence College in cooperation with TalTech, the University of Montenegro and the Albstadt-Sigmaringen University at the **University of Montenegro**, 9th April, 2025.
2. Bauk S., *Maritime digital transformation and cybersecurity*, Days of Scientific Diaspora, **University of Montenegro**, Podgorica, Montenegro, 18th October, 2024.
3. Bauk S., *Maritime cybersecurity – MariCybERA*, Meeting of ERA Chair holders/coordinators, Institute of Solid State Physics (ISSP), **University of Latvia**, Riga, Latvia, 13th November, 2024.
4. Bauk S., *Coordination of resources in maritime cybersecurity*, **German Federal Ministry for Digital and Transport** (BMDV) within the mFUND programme (online), 26th November, 2024.
5. Bauk S., *MariCybERA team, activities, achievements and research plans*, at the Critical Infrastructure Security and Resilience (CISaR) Research Centre with the **Norwegian University of Science and Technology** (NTNU), Gjøvik, Norway, 28th October, 2024.
6. Bauk S., *Cybersecurity in maritime – MariCybERA project*, **Pan European Apeiron University**, Banja Luka, Republic of Serpska, 28th September, 2024.
7. Bauk S., *Cyber resilience across borders – Lessons from international cyber incidents*, **University of Malta**, Valletta Campus, Valletta, Malta, 24th June, 2024.
8. Bauk S., *Estonian perspective on the EU cybersecurity landscape*, MARITIME Cybersecurity Centre of Excellence (MARCYSOCE) at the **Constanta Maritime University** (CMU), Constanta, Romania, 17th June, 2024.
9. Bauk S., *Multiphase approach to developing model of logistics for coastal tourist destinations*, **Hamburg University**, Institute for Operations Research, Hamburg, Germany, 9th May, 2017.
10. Bauk S., *Modeling smart network for enhancing safety at seaport*, **ZBW-Leibniz Informationszentrum Wirtschaft**, Forschungskolloquium, Kiel, Germany, 15th June, 2016.

11. Bauk S., *Developing an RFID model for improving workers' safety at the seaport in transitional environment*, **RWTH Aachen University**, Institute for Theoretical Information Technology, AG Kommunikationstheorie, Aachen, Germany, 25th January, 2016.
12. Bauk S., *On impediments in publishing research papers*, The 3rd International Conference - Principles of Transparency and Good Practice in Scholarly Publishing, **University of Montenegro**, Montenegro, 3rd-4th May, 2017. (plenary talk)
13. Bauk S., *Should we move education into Cloud?* – Keynote speaker at The 8th International Conference Information Technologies for e-Education, **Pan European APEIRON University**, Banja Luka, Republika Srpska, 30th September, 2016. (plenary talk)
14. Bauk S., *Feasibility Studies for Port Operators: Guidelines and Index for the Feasibility Studies*, TENECOPORT Project, The 5th PSC meeting, **Polytechnic University of Tirana, Sheshi Nene Teresa**, Tirana, Albania, 4th April, 2014.
15. Bauk S., *Developing blended learning capacities in maritime education: Experiences from projects in Montenegro*, SSAS – Social Science and the Sea – Joint Seminar on Sustainable Development in European Maritime Regions, **University of Zadar**, Croatia, 24th September, 2013.

Member/committee chair of the following international professional organizations

- **IMLA** – International Maritime Lecturers Association (member)
- **IMarEST** - Institute of Marine Engineering, Science and Technology (member)
- **PAEPI Global** - Information and Communication Technologies Committee Chair (<https://paepi-global.org/committee-chairs/>)
- **WISTA** - Women's International Shipping & Trading Association (member)

References - Links

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- ORCID: <https://orcid.org/0000-0003-2882-1321>
- Research Gate: https://www.researchgate.net/profile/Sanja_Bauk
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- Estonian Research Information System (ETIS): https://www.etis.ee/CV/Sanja_Bauk/eng/

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