

DRAGUTIN OSTOJIĆ

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EDUCATION

Faculty of Science • University of Kragujevac, Serbia 2020 –
Ph.D. in Computer Science • Department of Mathematics and Informatics

Faculty of Science • University of Kragujevac, Serbia 2018 – 2020
M.Sc. in Informatics • Department of Mathematics and Informatics

Faculty of Science • University of Kragujevac, Serbia 2013 – 2018
B.Sc. in Informatics • Department of Mathematics and Informatics

First Kragujevac Gymnasium • Kragujevac, Serbia 2009 – 2013
Specialized mathematics class

WORK EXPERIENCE

Research Internship • Center for Data Analytics and Biomedical Informatics, College of Science and Technology • Temple University, Philadelphia, USA 2023 –
Scheduling problems

Research Internship • Math. Inst. of the Serbian Academy of Sciences and Arts • Belgrade, Serbia 2021 –
Scheduling problems

Teaching Assistant • Master 4.0 • University of Kragujevac, Serbia 2020 –
3D Computer Graphics

Teaching Assistant • Faculty of Science • University of Kragujevac, Serbia 2019 –
Data Structures and Algorithms 1 • Information Theory • Teaching Methodology for Programming • Intelligent Systems • Computer Graphics • Parallel Programming • Algorithm Strategies • Data Structures and Algorithms 2 • Operating Systems 2 • Object-Oriented Programming Practicum

Teacher • First Kragujevac Gymnasium • Kragujevac, Serbia 2018 – 2022
Programming and Programming Languages (SM and SI) • Advanced Programming Techniques (SI)

Teacher • IT Azbuka • Kragujevac, Serbia 2017 – 2019
Web Programming • Scratch Programming • Robotics

Software Engineer • Technomedia Ltd. • Kragujevac, Serbia 2017 – 2018
IoT

Software Engineer • Beson Distributie BV • Amsterdam, Netherlands 2016 – 2017
Information Systems

Software Engineer • Centrebuild Ltd. • Kragujevac, Serbia 2016
Web Development

System Administrator • Global Connect Agency • Kragujevac, Serbia 2013 – 2014
Technical Support

Teacher • Preparing for competitions for elementary and high school students 2013 –
Mathematics • Programming

PROJECTS

- DEEPTECH-2M, Deep Tech Materials and Manufacturing Talent Development for an Improved EU Economy and Climate, EIT Higher Education Initiative, 2023.
- SMART-2M, Innovation Capacity Building for in Industry 4.0 and Smart Manufacturing, EIT Higher Education Initiative, 2021-2023.
- Extreme Science, Center for the Promotion of Science, Ministry of Education, Science and Technological Development of the Republic Serbia, 2022.
- AI4TrustBC - Advanced Artificial Intelligence Techniques for Analysis and Design of System Components Based on Trustworthy Blockchain Technology, Science Fund Republic of Serbia, 2021-2022.

- [Mil+26] A. Milenković, D. Ostojić, D. Rajković, and M. Milikić. STEM Workshops and Students' Interest in Mathematics, Physics, and Computer Science: Machine Learning Approach. *International Journal of Instruction* 19.1 (Jan. 2026). Pp. 367–386. ISSN: 1694-609X, 1308-1470. DOI: 10.29333/iji.2026.19118a.
- [Vor+25] T. Voruganti, F. Raza, M. Fahim, N. Sorokina, D. Ramljak, T. Davidović, and D. Ostojić. AI-Powered Recommender System for Opioid Recovery: A Personalized Approach to Behavioral Health Intervention. In: *Artificial Intelligence Conference*. Belgrade: Serbian Academy of Sciences and Arts, Oct. 2025, pp. 70–71.
- [Jov+25] M. Jovičić, D. Ostojić, N. Prodanović, N. Djordjević, and N. Janković. Graph-Based Modeling of Diabetic Patient Data for Readmission Risk and Care Pattern Analysis. In: *3rd International Conference on Chemo and Bioinformatics (ICCBi 2025)*. Kragujevac: University of Kragujevac, Sept. 2025, pp. 71–74. ISBN: 978-86-82172-05-5. DOI: 10.46793/ICCBiKG25.071J.
- [Neu+25] A. Neulinger, L. Sparer, M. Roshanaei, D. Ostojić, J. Kakka, and D. Ramljak. Is Blockchain the Future of AI Alignment? Developing a Framework and a Research Agenda Based on a Systematic Literature Review. *Journal of Cybersecurity and Privacy* 5.3, (50) (July 2025). Pp. 1–36. ISSN: 2624-800X. DOI: 10.3390/jcp5030050.
- [Ost+25] D. Ostojić, D. Ramljak, A. Urošević, M. Jolović, R. Drašković, J. Kakka, T. Jakšić Krüger, and T. Davidović. Systematic Literature Review of Optimization Algorithms for P||Cmax Problem. *Symmetry* 17.2, (178) (Jan. 2025). Pp. 1–68. ISSN: 2073-8994. DOI: 10.3390/sym17020178.
- [Ost+24a] D. Ostojić, C. Zarges, T. Davidović, and D. Ramljak. Polynomial Regression Model for Standardizing Large Precision Instances for P||Cmax problem. In: *Artificial Intelligence Conference*. Belgrade: Serbian Academy of Sciences and Arts, Dec. 2024, pp. 69–70.
- [Joj+24] R. Jojić, N. Randelović, I. Šuša, M. Todorović, D. Ramljak, D. Ostojić, and T. Davidović. Balancing Efficiency and Fairness in Blockchain: A Proof-of-Useful-Work-Based Blockchain Consensus Protocol. In: *Artificial Intelligence Conference*. Belgrade: Serbian Academy of Sciences and Arts, Dec. 2024, pp. 65–66.
- [Dav+24a] T. Davidović, D. Stevanović, L. Radanović, A. Fellague, and D. Ostojić. Maximizing Spectral Radius of Graphs is an Optimization Problem. In: *51st International Symposium on Operational Research (SYM-OP-IS 2024)*. Tara: Faculty of Technical Sciences, Novi Sad, Sept. 2024, pp. 638–643. ISBN: 978-86-6022-703-6. DOI: 10.24867/SYMOPIS-2024-51-102.
- [Dav+24b] T. Davidović, D. Stevanović, L. Radanović, A. Fellague, and D. Ostojić. Metaheuristics for finding threshold graphs with maximum spectral radius. In: *The 1st Chinese-SouthEastEuropean Conference on Discrete Mathematics and Applications (CSEE-CDMA-2024)*. Belgrade: Serbian Academy of Sciences and Arts, June 2024, p. 32.
- [Mil+24] A. Milenković, A. Maksimović, D. Rajković, and D. Ostojić. How High School Students Assess the Importance of STEM Workshops for Acquiring New Knowledge. In: *STEM/STEAM/STREAM Approach in Theory and Practice of Contemporary Education*. Special Issue No. 30. Jagodina: Faculty of Education, University of Kragujevac, May 2024, pp. 135–145. ISBN: 978-86-7604-242-5. DOI: 10.46793/STREAM25.135M.
- [Ost+24b] D. Ostojić, M. Jolović, R. Drašković, and A. Fellague. Efficient Generation of Diverse Instances for P||Cmax Solver Evaluation. In: *Book of Abstracts of 1st Deep Tech Open Science Day Conference*. Kragujevac: Faculty of Engineering, Apr. 2024, p. 45. ISBN: 978-86-6335-113-4.
- [OG23] D. Ostojić and T. Golonek. Indirect Method for Identification of Electric Power Generated by Means of Panel of Thermoelectric Modules. In: *Book of Abstracts of Artificial Intelligence Conference*. Belgrade: Serbian Academy of Sciences and Arts, Dec. 2023, p. 91.
- [Ost+23] D. Ostojić, A. Urošević, T. Davidović, T. Jakšić-Krüger, and D. Ramljak. Decomposition-Based Efficient Heuristic for Scheduling. In: *Proceedings of the 50th International Symposium on Operational Research (SYM-OP-IS 2023)*. Tara: Odrbrana Media Center, Belgrade, Sept. 2023, pp. 1027–1034. ISBN: 978-86-335-0836-0.
- [MOM23] A. Milenković, D. Ostojić, and A. Maksimović. Using Logistic Regression to Explain Enhancing Adolescent Students' Interest in Mathematics, Physics and Computer Science through STEM Workshops. Poster presented at the international research-practical conference *Transformations in Education Policy and Culture: Teacher Education and School Creation in the Anthropocene*. Vilnius, May 2023. DOI: 10.13140/RG.2.2.35007.07842.
- [Mal+23] U. Maleš, D. Ramljak, T. Jakšić Krüger, T. Davidović, D. Ostojić, and A. Haridas. Controlling the Difficulty of Combinatorial Optimization Problems for Fair Proof-of-Useful-Work-Based Blockchain Consensus Protocol. *Symmetry* 15.1, (140) (Jan. 2023). Pp. 1–32. ISSN: 2073-8994. DOI: 10.3390/sym15010140.
- [Ost+22a] D. Ostojić, B. Arsić, T. Stojanović, and N. Miletić Vidanović. Efficient Model for English to Serbian Neural Machine Translation. In: *Book of Abstracts of the First Serbian International Conference on Applied Artificial Intelligence (SICAAI)*. Kragujevac: University of Kragujevac and Serbian Academy of Sciences and Arts, May 2022, (15), pp. 1–4. ISBN: 978-86-81037-71-3.

- [Ost+22b] D. Ostojić, T. Davidović, T. Jakisić-Krüger, and D. Ramljak. Comparative Analysis of Heuristic Approaches to P||Cmax. In: *Proceedings of the 11th International Conference on Operations Research and Enterprise Systems (ICORES 2022)*. INSTICC. virtual: SciTePress, Feb. 2022, pp. 259–266. ISBN: 978-989-758-548-7. DOI: 10.5220/0011008500003117.
- [Ost20] D. Ostojić. Application of Recurrent Neural Networks in Natural Language Processing. Supervisor: Stojanović, T. MA thesis. Kragujevac: Faculty of Science, University of Kragujevac, Sept. 2020.
- [Ost18] D. Ostojić. Advanced Parallel Programming Techniques. Supervisor: Ivanović, M. BA thesis. Kragujevac: Faculty of Science, University of Kragujevac, Oct. 2018.

ADDITIONAL EDUCATION

- *Sustainable Product Design in a Digital Age*, A-SIDE, EIT Higher Education Initiative, (virtual), 2025.
- *Neo4j Graph Data Science Certification*, Neo4j Graph Academy, 2025.
- *Neo4j Certified Professional*, Neo4j Graph Academy, 2025.
- *International Internet Security School for Youth*, Kutafin Moscow State Low University, Youth Digital Ombudsman, The Russian Association for Electronic Communications, Senezh, Russia, 2025.
- *Research internship*, Erasmus+ Mobility Program, Department of Information Engineering, Electrical Engineering, and Applied Mathematics (DIEM), University of Salerno, Salerno, Italia, 2025.
- *Short cycle course in Data Science and Artificial Intelligence*, Erasmus+ WICT, University of Kragujevac, University of Rijeka, Ionian University, Pázmány Péter Catholic University, Krakow University of Economics, (virtual), 2024.
- *LiveCase Simulation: Horizon Ventures - Innovation Accelerator*, Harvard Business Publishing Education, EIT Digital, University of Ljubljana, (virtual), 2024.
- *SPIN: Rise*, EIT Digital, University of Ljubljana, Ljubljana, Slovenia, 2024-2025.
- *Research internship*, The British Scholarship Trust, Advanced Reasoning Research Group, Aberystwyth University, Aberystwyth, UK, 2024.
- *Expert2Mentors - Training Program for Teachers*, Route2Launch, USAID, Digital Serbia Initiative, University of Belgrade – Faculty of Organizational Sciences, Kragujevac, Serbia, 2023-2024.
- *Research internship*, Erasmus+ Mobility Program, Computational Cognition Lab, Open University of Cyprus, Nicosia, Cyprus, 2024.
- *InteRussia Fellowship Program in Engineering and Artificial Intelligence*, New Generation, Rossotrudnichestvo, The Gorchakov Fund, Novosibirsk State University, Moscow and Novosibirsk, Russia, 2024.
- *Deeptech and Innovation*, EIT Higher Education Initiative, DEEPTech-2M, Dublin City University, Ireland, University of Kragujevac, Serbia, (virtual), 2024.
- *Carbon Management - Calculation of Corporate Carbon Footprint*, Center for Green Economy, University of Kragujevac, Kragujevac, Serbia, 2024.
- *Carbon Management - Training for Consultants*, Center for Green Economy, University of Kragujevac, Kragujevac, Serbia, 2024.
- *Deeptech and Innovation*, EIT Higher Education Initiative, DEEPTech-2M, Dublin City University, Ireland, University of Kragujevac, Serbia, (virtual), 2023.
- *Summer School for the Future (STEM) Leaders*, Western Balkans Fund, University of Montenegro, Mathematical Institute of the Serbian Academy of Sciences and Arts, University of East Sarajevo, University of Mostar, Ss. Cyril and Methodius University, Ismail Qemali University of Vlorë, Petrovac, Montenegro, 2023.
- *Research internship*, Ministry of Education, Science, Research and Sport of the Slovak Republic, Recovery and Resilience Plan, NextGenerationEU, Faculty of Informatics and Information Technologies, Slovak University of Technology in Bratislava, Bratislava, Slovakia, 2023.
- *Research internship*, Erasmus+ Mobility Program, Faculty of Mathematics and Computer Science, University of Science and Technology of Oran Mohamed-Boudiaf, Oran, Algeria, 2023.
- *Research internship*, IT makes S(ci)ENSE Program, French Embassy Serbia, French Institute in Serbia, ICube Laboratory, University of Strasbourg, Strasbourg, France, 2022.
- *Innovation and Smart Manufacturing*, EIT Higher Education Initiative, SMART-2M, Dublin City University, Ireland, University of Kragujevac, Serbia, (virtual), 2022.
- *Advanced Tools for Multidisciplinary Machine Learning and Big Data*, Erasmus+ Blended Intensive Program (BIP), Technical University of Liberec, Liberec, Czech Republic, 2022.
- *Research internship*, Erasmus+ Mobility Program, Institute of Electronics, Silesian University of Technology, Gliwice, Poland, 2022.
- *Practical Innovation & Entrepreneurship*, EIT Higher Education Initiative, SMART-2M, Dublin City University, Ireland, University of Kragujevac, Serbia, (virtual), 2022.
- *NVIDIA DLI Certificate – Fundamentals of Accelerated Computing with CUDA Python*, NVIDIA Deep Learning Institute, (virtual), 2022.

- *Application of Machine Learning in Solving Global Challenges in Water and Energy Sectors*, UNESCO WSDAC, University of Kragujevac, Kragujevac, Serbia, 2021.
- *Business Communications and Entrepreneurial Skills*, Business Innovation Center, University of Kragujevac, Kragujevac, Serbia, 2021.
- *Strengthening Teaching Competences in in Natural and Mathematical Sciences (TeComp)*, Erasmus+, Ghent University, Belgium, (virtual), 2021.
- *Business Mentoring, Lean Canvas, Design Thinking, Business Capacity Assessment*, Business Development Center Kragujevac, EU PRO, UNOPS, Kragujevac, Serbia, 2020.
- *Media Literacy*, United States Embassy in Serbia, IREX, Serbia, (virtual), 2020.
- *User Experience in IoT World*, Comtrade Edit Summer School, Kragujevac and Belgrade, Serbia, 2017.

INTERNATIONAL COOPERATION

- *International Cooperation Project: Serbia, Let's Connect!*, Online International Collaboration Project, Telemost Serbia, Surgut District, Russian Federation, 2025.
- *International Conference: Dayton – 30*, Gorchakov Fund, Russian House in Belgrade, the Embassy of the Russian Federation in the Republic of Serbia, Belgrade, Serbia, 2025.
- *International Scientific and Technological Conference Russia-Republika Srpska - Technological Sovereignty: Strategic Partnership in an Era of Change*, International Forum-Exhibition Russian Industrialist, Saint Petersburg, Russia, 2025.
- *World Youth Festival - Regional Program*, Rosmolodezh+World, Ivanovo Region, Russia, 2025.
- *World Youth Festival - Assembly*, Rosmolodezh+World, Nizhny Novgorod, Russia, 2025.
- *Global Digital Forum*, CIPR, Nizhny Novgorod, Russia, 2025.

AWARDS

- *Diploma of Mathematical Institute of the Serbian Academy of Sciences and Arts for successfully completed project Implementation of Bee Colony Optimization Algorithm for Spectral Reconstruction of Graph*, Belgrade, 2021.
- *Annual Award of the Mathematical Institute of the Serbian Academy of Sciences and Arts in the field of computing for M.Sc. students*, Belgrade, 2021.
- *Social Impact Award*, finalist (team HAL), Razlivalište, Belgrade, 2021.
- *MIND Hackathon*, II place (team HAL), MIND Group, Kragujevac, 2021.
- *HAKATON KG*, finalist (team HAL), Business Innovation Center, Embassy of Israel in Serbia, Kragujevac, 2021.
- *IoT Hackathon Kragujevac*, I place (team HAL), UNDP, Kragujevac, 2020.
- *Comtrade Edit*, best individual, Comtrade, Kragujevac, 2017.
- *Microsoft Bubble Cup*, finalist, Microsoft, Belgrade, 2013.
- *Republic Center for Talents - Mathematics*, II place, Belgrade, 2013.
- *Republic Center for Talents - Mathematics*, special reward for research, Belgrade, 2013.
- *Award of Dositeja*, Belgrade, 2012.
- *Award of Fondation for 5+*, Belgrade, 2012.
- *National Competition in Informatics*, III place A category, Belgrade, 2012.
- *Serbian Olympiad in Informatics*, III place, Belgrade, 2011.
- *Republic Center for Talents - Mathematics*, III place, Belgrade, 2011.
- *National Competition in Informatics*, III place A category, Belgrade, 2011.
- *National Competition in Mathematics*, III place A category, Kragujevac, 2010.
- *Republic Center for Talents - Mathematics*, I place, Belgrade, 2010.
- *Award Vuk Karadžić*, Kragujevac, 2009.
- *International Kangaroo Mathematics Contest*, III place, Belgrade, 2008.
- *National Competition in Mathematics*, II place, Niš, 2008.

INVITED TALKS AND PANEL DISCUSSIONS

- *International Business Dialogue: Opportunities and Prospects*, International Scientific and Technological Conference Russia-Republika Srpska - Technological Sovereignty: Strategic Partnership in an Era of Change, International Forum-Exhibition Russian Industrialist, Saint Petersburg, Russia, October 30, 2025.
- *IT Education for the Future*, Global Digital Forum, Nizhny Novgorod, Russia, June 6, 2025.
- *Polynomial Regression Model for Standardizing Large Precision Instances for $P||C_{max}$ Problem*, Artificial Intelligence Seminar, The Math. Inst. of the Serbian Academy of Sciences and Arts, Belgrade, Serbia, April 2, 2025.

- *Generating Hard Instances for P||C_{max} Problem*, Center for Data Analytics and Biomedical Informatics, College of Science and Technology, Temple University, Philadelphia, USA, January 29, 2025.
- *Decomposition-based Iterative Stochastic Transformation Algorithm: P||C_{max} Case Study*, Advanced Reasoning Research Group, Aberystwyth University, Aberystwyth, UK, October 7, 2024.
- *Decomposition-based Iterative Stochastic Transformation Algorithm: P||C_{max} Case Study*, Sobolev Institute of Mathematics of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia, June 4, 2024.
- *DIST Algorithm*, Center for Data Analytics and Biomedical Informatics, College of Science and Technology, Temple University, Philadelphia, USA, November 22, 2023.
- *Comparative Analysis of Heuristic Approaches to P||C_{max}*, Department of Mathematics and Informatics, Faculty of Science, University of Kragujevac, Kragujevac, Serbia, Oct 15, 2022.
- *Efficient Machine Translation: English-Serbian Case Study*, Institute of Electronics, Silesian University of Technology, Gliwice, Poland, May 11, 2022.

LANGUAGES

- Serbian (native)
- English (B2)
- Russian (A2)

OTHER

- Elected Student Representative in the *Student Parliament of Faculty of Science, University of Kragujevac*, 2025 – .
- Member of *Mathematical Society of Serbia – the Branch of Kragujevac*, 2025 – .
- Member of *COST Action CA22137 (ROAR-NET)*, 2024 – .
- Member of *Google Dev Student Club Kragujevac*, 2024 – .
- Member of Organizing Committee of *First Deep Tech Open Science Day Conference*, 2024.
- Member of *Mensa*, 2021 – .
- Coordinator of *Youth Mathematics Workshop*, 2018 – 2020.
- Member of *AIESEC*, 2013 – 2015.
- Member of *Youth Mathematics Workshop*, 2003 – 2009.