



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Crnkić Aladin**
Address(es) Srebrenička 115, 77000 Bihać, BiH
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E-mail aladin.crnkic@hotmail.com; aladin.crnkic@unbi.ba
Nationality BiH
Date of birth 23.4.1987.
Gender Male

Desired employment / Occupational field

Work experience

Dates 6.10.2011. →
Occupation or position held Senior teaching assistant
Main activities and responsibilities Coordination of activities for the next classes:
Mathematics I, Mathematics II, Mathematics III, Probability and Statistics, Operational Research
Name and address of employer Faculty of Technical Engineering, University of Bihać, Ljubijankičeva bb, 77000 Bihać
Type of business or sector Education and Research

Dates 27.3.2010. →26.3.2011.
Occupation or position held High school teacher
Main activities and responsibilities Teaching mathematics
Name and address of employer Gymnasium „Bihać“, Safvet bega Bašagića 40, 77000 Bihać
Type of business or sector Education

Dates 16.3.2009. →26.3.2010.
Occupation or position held Middle school teacher
Main activities and responsibilities Teaching mathematics and informatics
Name and address of employer Primary school „Gata Ilidža-Bihać“, Gata bb, 77000 Bihać
Type of business or sector Education

Education and training

Dates 12.11.2013. → 2.7.2019.
Title of qualification awarded Doctor of Science in Mathematics
Principal subjects/occupational skills covered Mathematical Physics
Name and type of organisation providing education and training Faculty of Natural Sciences and Mathematics, University of Montenegro
Level in national or international classification PhD study (III cycle)

Dates 22.4.2010. – 16.5.2013.
 Title of qualification awarded Master of mathematics and informatics
 Principal subjects/occupational skills covered Difference equations
 Name and type of organisation providing education and training Faculty of Philosophy, University of Zenica
 Level in national or international classification Masters study (II cycle)

Dates 16.9.2005. – 4.9.2009.
 Title of qualification awarded Professor of mathematics and informatics
 Principal subjects/occupational skills covered
 Name and type of organisation providing education and training Faculty of Education, University of Bihać
 Level in national or international classification Bachelor study (I cycle)

Personal skills and competences

Mother tongue(s) **Bosnian**

Other language(s) **English and German**

Self-assessment
European level ()*

English

German

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user

(*) *Common European Framework of Reference for Languages*

List of published scientific papers:

Scientific papers in international journals (SCI/SCIE list):

1. Vladimir Jaćimović & Aladin Crnkić, "The general non-Abelian Kuramoto model on the 3-sphere", *Networks & Heterogeneous Media* 15(1), 111--124 (2020).
2. Aladin Crnkić & Vladimir Jaćimović, "Data clustering based on quantum synchronization", *Natural Computing* 18, 907--911 (2019).
3. Aladin Crnkić & Vladimir Jaćimović, "Swarms on the 3-sphere with adaptive synapses: Hebbian and anti-Hebbian learning rule", *Systems & Control Letters* 122, 32--38 (2018).
4. Aladin Crnkić & Vladimir Jaćimović, "Consensus and balancing on the three-sphere", *Journal of Global Optimization*, 1--12 (2018).
5. Vladimir Jaćimović & Aladin Crnkić, "Low-dimensional dynamics in non-Abelian Kuramoto model on the 3-sphere", *Chaos: An Interdisciplinary Journal of Nonlinear Science* 28(8), 083105 (2018).
6. Vladimir Jaćimović & Aladin Crnkić, "Modelling mean fields in networks of coupled oscillators", *Journal of Geometry and Physics* 124, 241--248 (2018).
7. Vladimir Jaćimović & Aladin Crnkić, "Characterizing complex networks through statistics of Möbius transformations", *Physica D: Nonlinear Phenomena* 345, 56--61 (2017).
8. Vladimir Jaćimović & Aladin Crnkić, "Collective motions of globally coupled oscillators and some probability distributions on circle", *Physics Letters A* 381(24), 1989--1994 (2017).

Scientific papers in international journals or conferences (indexed in Scopus)

1. Aladin Crnkić & Vladimir Jaćimović, "Exploring complex networks by detecting collective dynamics of Kuramoto oscillators", VIII International Conference on Optimization and Applications (OPTIMA-2017), Petrovac, Montenegro, 2017.

Papers presented on conferences (not published in proceedings)

1. Aladin Crnkić & Vladimir Jaćimović, "Swarms on spheres for unsupervised learning", IX International Conference on Optimization and Applications (OPTIMA-2018), Petrovac, Montenegro, 2018.

Scientific and review papers in other journals and conferences:

1. Aladin Crnkić, Husein Rošić: „Kuramoto model i njegovo uopštenje na više dimenzije“, RIM, Sarajevo, 2019.
2. Aladin Crnkić: „Simulacija problema laganog slijetanja letjelice u programskom paketu Mathematica“, RIM, Sarajevo, 2017.
3. Fatka Kulenović, Aladin Crnkić: " Application of the location set-covering problem", ZRZZ, Zadar, 2016.
4. Aladin Crnkić, Fatka Kulenović: „Primjena programskog paketa Mathematica u analizi linearizirane stabilnosti ekvilibrijuma jednog sistema diferentnih jednačina“, RIM, Dubrovnik, 2015.
5. Fatka Kulenović, Aladin Crnkić: „Metode matematičkog programiranja za rješavanje otvorenog problema alokacije“, RIM, Dubrovnik, 2015.
6. Aladin Crnkić, Fatka Kulenović: „Dinamika jednog kompetitivnog sistema diferentnih jednažbi u ravni“, RIM, Budva, 2013.
7. Fatka Kulenović, Aladin Crnkić: „Primjena nekapacitativnog problema lokacije“, RIM, Budva, 2013.
8. Fatka Kulenović, Aladin Crnkić: „ Optimizacija lokacija u sistemu integralnog upravljanja otpadom u regiji Bihać“ , ZRZZ, Zadar, 2012.
9. Aladin Crnkić, Bernadin Ibrahimpašić: „Opće metode faktorizacije“, Matematičko – fizički list, Zagreb, 3, 2012.
10. Fatka Kulenović, Milovan Vinčić, Ramo Halilagić, Aladin Crnkić: „Lokacijski problem pokrivanja korisnika“, RIM, Velika Kladuša, 2011.
11. Aladin Crnkić, Milovan Vinčić, Fatka Kulenović, Edin Pašić: „Primjena eliptičkih krivulja u digitalnom potpisu“, RIM, Velika Kladuša, 2011.

Research projects:

- COSTNET: European Cooperation for Statistics of Network Data Science. COST Action CA15109, MC substitute.
- ImAppNIO: Improving Applicability of Nature-Inspired Optimisation by Joining Theory and Practice. COST Action CA15140, MC substitute.

Social skills and competences

Good social and communication skills thanks to direct interaction with students through teaching. Devoted to teamwork.

Organisational skills and competences

Member of the Organizing Committee of the International Conference „DEVELOPMENT AND MODERNIZATION OF PRODUCTION“

Computer skills and competences

- good command of Microsoft Office™ tools
- good command of the word processor LaTeX
- good command of the numerical computing environments like WOLFRAM MATHEMATICA, R, MATLAB

Driving licence

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