



# Zoran Jasak

**Datum rođenja:** 24.10.1955. | **Državljanstvo:** bosansko-hercegovačko | **Telefonski broj:**

(+387) 61168056 (Mobilni telefon) | **E-adresa:** [jasak\\_z@bih.net.ba](mailto:jasak_z@bih.net.ba) | **researchgate:** <https://www.researchgate.net> |

**Adresa:** Mehmedalije Maka Dizdara 74/6, BA-75000, Tuzla, Bosna i Hercegovina (Kućna)

## ● RADNO ISKUSTVO

12.10.1981. – 14.9.1986. Tuzla, Bosna i Hercegovina

**PROFESSOR OF MATHEMATICS IN SECONDARY SCHOOL SCHOOL CENTER FOR MINING**

Professor of mathematics in secondary school

14.9.1986. – 30.10.1990. Tuzla, Bosna i Hercegovina

**PROGRAMER INFORMACIONO DOKUMENTACIONI I ANALITIČKI CENTAR**

Programming of applications in different areas

31.10.1990. – 30.1.1992. Tuzla, Bosna i Hercegovina

**PROGRAMMER ANALYST TUZLANSKA BANKA D.D. TUZLA**

During this period I was a leader of Data model team in Main project of Integral Information System, conducted in three phases. In last phase I was Project leader. SDM methodology is used for modeling. Bank applications during regular programming activities. In year 1991 bank changed name to Tuzlanska banka d.d. Tuzla. In September I was 1991 on education in NCR (Augsburg) for NCR system tools.

31.1.1992. – 30.12.2000. Tuzla, Bosna i Hercegovina

**ASSISTANT TO GENERAL MANAGER FOR ELECTRONIC DATA PROCESSING TUZLANSKA BANKA D.D. TUZLA**

Managing in area of application development, data processing (on daily and periodic basis) and internal information system support.

Until end of year 1995 microfilming of documentation was under jurisdiction of EDP department.

War time, in period from December 9<sup>th</sup> 1992 to November 17<sup>th</sup> 1993, I spent as a soldier of BH Army (soldier on front line, then clerk in batallion). After November 17<sup>th</sup> 1993 I was member of Department for renewal and development of Tuzla municipality. Since March 1995 I had work obligation in Tuzlanska banka d.d. Tuzla.

31.12.2000. – 29.6.2006. Tuzla, Bosna i Hercegovina

**CONSULTANT (ADVISOR) TUZLANSKA BANKA D.D. TUZLA**

Main task was as a team leader in first relational database implementation (Informix), accomplished in 4 months. In year 2006 this platform is changed by Oracle. Other tasks were in area of infrastructural development, ATM network and some important projects on bank level.

30.6.2006. – 13.3.2014. Tuzla, Bosna i Hercegovina

**AUDITOR OF INFORMATION SYSTEM NLB TUZLANSKA BANKA D.D. TUZLA**

Primary job was information system auditing, as a first information systems auditor in NLB Group outside the Slovenia. Beside of this primary task, audits on other business areas (bank's top management, document management, compliance management, physical security, card business, business continuity and some others) were conducted for the first time.

14.3.2014. – 30.3.2016. Tuzla, Bosna i Hercegovina

**CISO, CHIEF INFORMATION SYSTEMS OFFICER NLB TUZLANSKA BANKA D.D. TUZLA**



Main tasks during this period were: Implementation of information security measures; Implementation of physical security measures, management; Business continuity plans on bank level. This implies that my tasks were as a Chief Information Security Officer, Chief officer for physical security.

01.4.2016. – 24.10.2020. Tuzla, Bosna i Hercegovina

**PROFESSIONAL ASSOCIATE** NLB BANKA D.D. SARAJEVO

Main tasks during this period were Implementation of physical security measures, Risk management (information risks, outsourcing, ...); Business continuity plans on bank level; Document management; Paper archive assortment; Involvement in big projects on bank level (DMS, ...). This implies that my tasks were as Risk manager, Compliance manager, Document management manager, ...

## OBRAZOVANJE I OSPOSOBLJAVANJE

06.3.1982. – 29.12.2010. Beograd, Srbija

**BACHELOR OF MATHEMATICS** Faculty of mathematics and natural sciences

**Adresa** Studentski trg 1, SR-11000, Beograd, Srbija

29.12.2010. – 06.10.2017. Tuzla, Bosna i Hercegovina

**MAGISTER OF MATHEMATICAL SCIENCES** Univerzitet u Tuzli

Lessons: Statistics (Mirta Benšić), Number theory (Hasan Jamak), Data mining (Mehmed Kantardžić), Algorithms (Naser Prljača), Teorija aproksimacija (Fehim Dedagić), Operaciona istraživanja (Husein Pašagić), Teorija masovnog opsluživanja, Diferentne jednačine (Mehmed Nurkanović).

In year 2004 I applied on postgraduate studies 'Applied mathematics' on Faculty of mathematics and natural sciences in Tuzla. All obligations I finished on time, with average grade of 9.4 (on scale up to 10). Magisterial work titled **"Benford's law and reinforcement learning"** defended on December 29th 2010 and degree of **Magister of mathematical sciences** achieved.

**Adresa** Tihomila Markovića 1, BA-75000, Tuzla, Bosna i Hercegovina | **Područje studija** Mathematics, statistics, natural sciences |

**Konačna ocjena** 9,4 | **Diplomski rad** Benford's law and reinforcement learning

06.10.2017. Tuzla, Bosna i Hercegovina

**DOCTOR OF MATHEMATICAL SCIENCES** Univerzitet u Tuzli

Statistika. Mentor: Wilhelm Schappacher, Institut za primjenjenu matematiku, Graz, Austrija

In academic year 2010/2011 I applied on international doctoral studies in TEMPUS project 'SEE Doctorial Studies in Mathematical Sciences' on Faculty of mathematics and natural sciences in Tuzla. On October 6th 2017 doctoral thesis titled **"Sum invariance testing and some new properties of Benford's law"**, under mentorship of Wilhelm Schappacher, full-time professor on Karl-Franzen-Universität in Graz, Austria, defended and achieved degree **Doctor of mathematical sciences**.

**Adresa** Tihomila Markovića 1, BA-75000, Tuzla, Bosna i Hercegovina | **Područje studija** Mathematics, statistics, natural sciences |

**Diplomski rad** Sum invariance testing and some new properties of Benford's law

## JEZIČNE VJEŠTINE

Materinski jezik/jezici: **BOSANSKI**

Drugi jezici:

|                 | RAZUMIJEVANJE |         | GOVOR              |                     | PISANJE |
|-----------------|---------------|---------|--------------------|---------------------|---------|
|                 | Slušanje      | Čitanje | Govorna produkcija | Govorna interakcija |         |
| <b>ENGLESKI</b> | C1            | C1      | B2                 | B2                  | B2      |



|              | RAZUMIJEVANJE |         | GOVOR              |                     | PISANJE |
|--------------|---------------|---------|--------------------|---------------------|---------|
|              | Slušanje      | Čitanje | Govorna produkcija | Govorna interakcija |         |
| <b>RUSKI</b> | B2            | C1      | B1                 | B2                  | B1      |

Razine: A1 i A2: temeljni korisnik; B1 i B2: samostalni korisnik; C1 i C2: iskusni korisnik

## DIGITALNE VJEŠTINE

Internet | Microsoft PowerPoint | Microsoft Word | MS Office (Word Excel PowerPoint) | Rad na raunalu | Microsoft Excel | Komunikacijski programi (Skype Zoom TeamViewer) | Društvene mreže | Prilagodljivost | S lakom prihvaćam i rješavam nove izazove kroz koje napredujem | Timski rad | Priprema i oblikovanje prezentacija (MS PowerPoint)

## PUBLIKACIJE

2014

### Benford's law and invariances

Tekst o svojstvima invarijantnosti Benfordovog zakona

Journal of Mathematics and System Science, Vol. 4. Number 7, July 2014, ISSN 2159-5291, pp. 457 – 4

2015

### Benford's Law and Arithmetic Sequences

Tekst o vezi Benfordovog zakona i aritmetičkih nizova

Journal of Mathematical Sciences: Advances and Applications, Volume 32, 2015, p. 1-16

2016

### Benford's Law and Hosmer-Lemeshow test

Modifikacija Hosmer-Lemeshow testa za testiranje saglasnosti sa Benfordovim zakonom

Journal of Mathematical Sciences: Advances and Applications, Volume 41, 2016, p. 57-73

2018

### Benford's Law and Wilcoxon test

Modifikacija Wilcoxon testa za testiranje saglasnosti sa Benfordovim zakonom

Journal of Mathematical Sciences: Advances and Applications, Volume 52, 2018, p. 69 – 81

2021

### Benford's Law in Forensic Analysis of Registered Turnover

Primjena Benfordovog zakona u forenzičkoj analizi računovodstvenih izvještaja

Sciendo, Journal of Forensic Accounting Profession, Vol 1 No 1, 2021

2008

### Detecting anomalies by Benford's law

Korištenje Benfordovog zakona za detekciju anomalija. Suautorstvo sa Lejlom Banjanović Mehmedović

IEEE International Symposium on Signal Processing and Information Technology, 2008. ISSPIT 2008. IS

2013

### Benford's Law and Invariance Properties

Uključeno u Zbornik radova

2nd International Eurasian Conference on Mathematical Sciences and Applications, 26-29.08.2013, Sar



2019

## **Benford's Law and Sum Invariance Testing**

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Tekst na temu svojstva invarijantnosti

Proceedings of the International Symposium on Innovative and Interdisciplinary Applications of Adva

2021

## **Značaj i praktična primjena Benfordovog zakona u forenzičkom računovodstvu, 9. Međunarodni simpozij „Novo 'normalno' doba u finansijsko računovodstvenoj i menadžerskoj profesiji**

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Suautorstvo sa Edinom Glogićem

23. - 24.09.2021, Visoka škola za finansije i računovodstvo FINra, u organizaciji edukativno- konsu

2021

## **Simulacija analitičkog rješenja za topografske talase primjenom bazena oblika rotacijskog paraboloidea u okruženju Matlab**

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Suautorstvo sa Elvirom Čajićem

Simpozijum MATEMATIKA I PRIMENE, Matematički fakultet, Univerzitet u Beogradu, 2021 ,Vol. XI (1)

2011

## **Benfordov zakon u revizijskoj praksi**

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Poreski savjetnik, br. 3. Mart 2011

2021

## **Benfordov zakon i njegova primjena**

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Akademski pregled, Univerzitet Bijeljina, 2021

## **Matematika III**

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Zbirika zadataka iz Matematike III za studente II godine Mašinskog fakulteta

2021

## **Algoritmi i strukture podataka**

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Udžbenik za predmet Algoritmi i strukture podataka za studente FINra. Suautor Aldijana Omerović

2021

## **Numerička matematika**

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Udžbenik za predmet Numerička matematika na FINra Tuzla. Suautor Irma Ibrišimović

2021

## **Matematika 1**

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Udžbenik za predmet Matematika za studente Univerziteta u Bijeljini

2019

## **Benford's Law and Sum Invariance Testing**

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Advanced Technologies,  
Systems, and Applications III  
Proceedings of the International Symposium  
on Innovative and Interdisciplinary  
Applications of Advanced Technologies  
(IAT), Volume 1  
Editor: Samir Avdaković

Poveznica <https://doi.org/10.1007/978-3-030-02574-8>

2022

## "TOURISM DEVELOPMENT PERSPECTIVES OF BOSNIA AND HERZEGOVINA: POSSIBILITIES AND LIMITATIONS"

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Suautorstvo: Jamila Jaganjac, Merima Aljić

6th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Pres

2022

## Sum invariance property of Benford's law and possible use in forensic analyses

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Suautorstvo: Edin Glogić, FINra

Journal of Forensic Sciences & Criminal Investigation, Volume 16 Issue 1

## ● KONFERENCIJE I SEMINARI

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19.12.2008. – 19.12.2008. ISSPIT, IEEE Symposium on Signal Processing and Information Technology, Sarajevo

### Benfordov zakon i detekcija anomalija

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19.12.2008. – 19.12.2008. ISSPIT, IEEE Symposium on Signal Processing and Information Technology, Sarajevo, 2008

### Learning of Robotic Assembly based on Specially Adjustable Vibrations Parameters

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Suautorstvo: Lejla Banjanović-Mehmedović. S. Karić

15.7.2010. – 15.7.2010. Ljetni univerzitet Tuzla, 2010

### Benfordov zakon

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16.8.2012. – 16.8.2012. 7. Bosansko-Hercegovačka Matematička Konferencija, Sarajevo, BiH

### Benfordov zakon

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15.5.2015. – 15.5.2015. Institut internih revizora u BiH, Godišnja konferencija sa međunarodnim učešćem „Interna revizija –

### Benfordov zakon u funkciji forenzičke revizije

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04.6.2015. – 04.6.2015. BH Matematička konferencija, International University in Sarajevo

### Benfordov zakon i aritmetički nizovi

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09.6.2017. – 09.6.2017. BH Matematička konferencija, International University in Sarajevo

### Benfordov zakon i invarijantnost suma

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21.6.2018. – 21.6.2018. 10. Dani BHAAAS u Bosni i Hercegovini, 21.06.2018, Jahorina, Bosnia i Hercegovina

### Benford's law and sum invariance testing

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26.5.2022. – 29.5.2022. 1th International Conference, Conference on Advances in Science and Technology, Herceg Novi

### Benfordov zakon i Goutereau konstanta

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26.5.2022. – 29.5.2022. 1th International Conference, Conference on Advances in Science and Technology, Herceg Novi

### Out-Of-Kilter algoritam

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Suautorstvo sa Irmom Ibrišimović, Aldijanom Omerović i Elvirom Čajićem

28.5.2022. – 28.5.2022. MEĐUNARODNA STATISTIČKA KONFERENCIJA SSE 2022, Travnik

### Primjena Benfordovog zakona u ekonomskoj i drugoj praksi

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