CURRICULUM VITAE

prof. dr Marko Šarac
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PERSONAL:

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Scholar profile:	https://scholar.google.com/citations?user=FYwOQpYAAAAJ&hl=en

DEGREES AND DIPLOMAS:

2006   Bs.c. Graduate degree, Faculty of Organizational Sciences, Belgrade University, Serbia

2008   M.Sc, Informatics and Computing, Modern information technology, Singidunum University, Belgrade, Serbia

2013   Ph.D., Faculty of Informatics and Computing, Singidunum University, Belgrade Serbia

EMPLOYEMENT:

2006 -   Singidunum University, Belgrade

CONFERENCE COMITTIES:

2013 – 2021   Sinteza, International Scientific Conference on Information Technology and Data Related Research, Chairman and Scientific & Organizing committee member

PROJECTS:

2011 - 2019   TR32054 - Digital signal processing in synthesis of information security systems, Serbian Ministry of Science and Education

2013 – 2017   Information and Communication Technologies COST Action IC1303, Algorithms, Architectures and Platforms for Enhanced Living Environments (AAPELE), Substitute

2016 – 2019   ERASMUS+ KA2 Projects: DBBT, PESHES, ELEMEND

Full time employed at Singidunum University since 2006.

He graduated B.S. Management on Faculty of Organizational Sciences (FON), Belgrade University, he obtained Ms.C. title for Informatics and computing on Faculty of Informatics and Computing, at Singidunum University. His Ph.D. thesis title was:

„ Increase of the reliability for SSL protocol by using multiple channels for authentication ", at Faculty of Informatics and Computing, Singidunum University. Hi is Head of IT department on Singidunum University from November of 2006. His areas of expertise are Informatics and computing, Electrical engineering and computing, E-Business and Internet marketing. He is certified by many major IT companies such as Cisco, Microsoft, Mikrotik, Google, SAP, IBM,HP, Solidworks, Oracle. He is the author of three University books and a number of journals and conference scientific papers. His current research interests include security, computer networks, databases, e-business and Internet marketing.

2006 – 2013: Teaching assistant on the subjects of Fundamentals of computer science and Computers Networks. Responsible for subject exercises, preparation of testing materials, grading based on test fulfilment.

2013- 2017: Assistant professor on subjects of Fundamentals of computer science, Computer Networks, Internet marketing, E-Business. Responsible for subjects curriculum preparation, lectures, testing materials, tests and grading.

2017 - 2022: Associate professor on subjects of Distributed computer systems, IDS in computer networks, Digital forensics

2023 - : Full professor on subjects of Distributed computer systems, Computer Networks, Computer Systems, E-Business

SPECIALIZATION:

1. Cisco CCNA - certification,
2. SAP IT - certification,
3. ORACLE - certification,
4. Google AdWords Certification
5. Mikrotik MTCNA, MTCRE - certification,
6. Microsoft MOS - certification,
7. Palo Alto PCNSA - certification,
8. Juniper Networks JNCDA - certification
9. Microsoft Azure AZ-104 Azure Administrator – certification
10. AZ-204 : Microsoft Certified Azure Developer - certification

SELECTED PUBLICATIONS:

MONOGRAPH:

1. M. Šarac, N. Pavlović, S. Adamović, M. Saračević, D. Rradovanović, Blockchain implementation for IoT devices: Blockchain of Things, Elsevier chapter, paper 9, Feb, 2022

BOOKS:

1. M. Šarac, D. Radovanović, A. Jevremović, M.Mravik, Internet marketing, Univerzitet Singidunum, Beograd, 2020
2. Jevremović, M. Veinović, M. Šarac, G. Šimić, Zaštita u računarskim mrežama, Univerzitet Singidunum, 2014
3. R. Popović, I. Branović, M. Šarac, Operativni sistemi, Univerzitet Singidunum, 2011

JOURNALS:

1. M. Šarac, N. Pavlović, S. Adamović, M. Saračević, D. Radovanović, Blockchain implementation for IoT devices: Blockchain of Things - Elsevier Press Chapter, Fostering security in IoT Healthcare using Blockchain Technology - Elsevier Press Chapter, pp. 1 - 18, Jul, 2022
2. R. Punithavathi, M. Kowsigan, R. Shanthakumari, M. Zivkovic, N. Bacanin, M. Sarac, Protecting Data Mobility in Cloud Networks Using Metadata Security, COMPUTER SYSTEMS SCIENCE AND ENGINEERING, Vol. 42, No. 1, pp. 105 - 120, 2022
3. G. R. Sreekanth, S. Ahmed Najat Ahmed, M. Sarac, I. Strumberger, N. Bacanin, M. Zivkovic, Mobile Fog Computing by Using SDN/NFV on 5G Edge Nodes, COMPUTER SYSTEMS SCIENCE AND ENGINEERING, Vol. 41, No. 2, pp. 751 - 765, 2022
4. M. Mravik, M. Šarac, M. Veinović, N. Pombo, Teaching in conditions of difficult knowledge transfer due to the state of emergency caused by the pandemic, Vojnotehnički glasnik, Vol. 69, No. 4, pp. 852 - 870, Oct, 2021
5. El-sadai, S. Adamović, M. Šarac, M. Saračević, S. Sharma, New Approach for Fingerprint Recognition Based on Stylometric Features with Blockchain and Cancellable Biometric Aspects, MULTIMEDIA TOOLS AND APPLICATIONS, pp. 1 - 14, Oct, 2021
6. M. Šarac, N. Pavlović, N. Bačanin Džakula, F. Al-Turjman, S. Adamović, Increasing privacy and security by integrating a Blockchain Secure Interface into an IoT Device Security Gateway Architecture, Energy Reports , pp. 7 - 17, Aug, 2021
7. N. Pavlović, M. Šarac, S. Adamović, M. Saračević, K. Ahmad, N. Maček, D. Kumar Sharma, An approach to adding simple interface as security gateway architecture for IoT device, MULTIMEDIA TOOLS AND APPLICATIONS, pp. 1 - 16, Jul, 2021
8. M. Šarac, S. Adamović, M. Saračević, Interactive and Collaborative Experimental Platforms for Teaching Introductory Internet of Things Concepts, INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION, Vol. 37, No. 4, pp. - - -, Jul, 2021
9. M. Šarac, S. Adamović, D. Stamenković, Experimental Analysis of Energy Efficiency of Server Infrastructure in University Datacenters, Technical Gazette, Vol. 27, No. 5, pp. 1 - 8, Oct, 2020
10. S. Adamović, V. Miškovic, N. Maček, M. Milosavljević, M. Šarac, M. Saračević, M. Gnjatović, An Efficient Novel Approach for Iris Recognition Based on Stylometric Features and Machine Learning Techniques, FUTURE GENERATION COMPUTER SYSTEMS, Vol. 107, pp. 144 - 157, Feb, 2020
11. S. Adamović, V. Miškovic, M. Šarac, M. Milosavljević, M. Veinović, Automated Language-Independent Authorship Verification (for Indo-European Languages), Journal of the Association for Information Science and Technology (JASIST), Vol. 70, No. 8, pp. 858 - 871, Aug, 2019
12. M. Saračević, S. Adamović, V. Miškovic, N. Maček, M. Šarac, A novel approach to steganography based on the properties of Catalan numbers and Dyck words, FUTURE GENERATION COMPUTER SYSTEMS, Vol. 100, pp. 186 - 197, May, 2019

13. T. Dabić, S. Adamović, R. Suzić, M. Šarac, An Integrated Approach for Developing Showcase Profiles of Information Technology Students, INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION, Vol. 35, No. 3, pp. 1 - 11, Feb, 2019

14. Strumberger, M. Sarac, D. Markovic, N. Bacanin, Hybridized Monarch Butterfly Algorithm for Global Optimization Problems, International Journal of Computers , Vol. 3, pp. 63 - 68, Apr, 2018

15. Strumberger, M. Sarac, D. Markovic, N. Bacanin, Moth Search Algorithm for Drone Placement Problem, International Journal of Computers, Vol. 3, pp. 75 - 80, Apr, 2018

16. S. Adamović, M. Šarac, D. Stamenković, D. Radovanović, The Importance of the Using Software Tools for Learning Modern Cryptography, INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION, No. 34(1), pp. 1 - 14, Jan, 2018

17. S. Adamović, M. Milosavljević, M. Veinović, M. Šarac, A. Jevremović, Information-Theoretic Analysis of Iris Biometrics for Biometric Cryptography, Acta Polytechnica Hungarica, Vol. 14, No. 4, pp. 47 - 62, Nov, 2017

18. S. Adamović, M. Milosavljević, M. Veinović, M. Šarac, A. Jevremović, Fuzzy Commitment Scheme for Generation of Cryptographic Keys Based on Iris Biometrics, IET Biometrics, No. 2, pp. 89 - 96, Feb, 2017

19. M. Tair, A. Mihajlović, N. Savanović, M. Šarac, A multi-layered image format for the web with an adaptive layer selection algorithm, Serbian Journal of Electrical Engineering, pp. 1 - 21, Jan, 2017

20. S. Adamović, M. Šarac, M. Milosavljević, M. Veinović, A. Jevremović, An Interactive and Collaborative Approach to Teaching Cryptology, Educational Technology & Society, Vol. 17, No. 1, pp. 197 - 205, Feb, 2014

21. Marko Šarac, Tijana Radojević, Nemanja Stanišić, Saša Adamović, Dalibor Radovanović, Safety of e-business Applications in Serbia: Applied Knowledge Based on SSL Traffic, Journal of Internet Banking and Commerce, Vol. 17, No. 3, pp. 1 - 18, Dec, 2012

22. M. Šarac, V. Mihailović, Integracija Video konferencijskih sistema u edukativne platforme, SEE Business Travel & Meetings magazine, pp. 34 - 37, Feb, 2011

23. Dalibor Radovanović, Marko Šarac, Saša Adamović, Rešavanje problema uskog grla virtuelnih servera, virtuelnim iSCSI uređajima za skladištenje podataka, Singidunum revija, Vol. 7, No. 2, pp. 193 - 198, Jan, 2010

24. Dalibor Radovanović, Mladen Veinović, Marko Šarac, Klasifikacija napada i ugrožavanje bezbednosti smart kartica, Singidunum revija, Vol. 6, No. 1, pp. 82 - 93, Sep, 2009

25. M. Šarac, M. Veinović, Analiza performansi i bezbednosti fizičkog i virtuelnog datacentra, Singidunum revija, pp. 50 - 54, Apr, 2009

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1. M. Mravik, M. Šarac, Teaching Approach in Difficult Knowledge Transfer Conditions Due to the Pandemic State of Emergency, Proceedings of the 11th International Conference on Information Society and Technology, pp. 163 - 167, Feb, 2021

2. N. Pavlović, M. Šarac, S. Adamović, M. Mravik, Enchantment of Magento CMS Security, Proceedings of the Sinteza 2019 International Scientific Conference on Information Technology and Data Related Research, pp. 223 - 228, Apr, 2019

3. M. Mravik, M. Šarac, S. Adamović, Implementacija microsoft SQL server baze podataka preko Hyper-V tehnologije, Proceedings of the Sinteza 2019 International Scientific Conference on Information Technology and Data Related Research, pp. 208 - 214, Apr, 2019

A. Jevremović, S. Adamović, G. Šimić, M. Šarac, M. Veinović, M. Milosavljević, An intelligent PBL-based tutoring system for cryptology domain, pp. 1 - 8, Jun, 2017

4. D. Marković, M. Tair, M. Šarac, D. Stamenković, N. Savanović, Content distribution in education support software, 4nd International Scientific Conference of IT and Business-Related Research SINTEZA 2017, Belgrade, Serbia, pp. 248 - 253, Apr, 2017

5. S. Radovanović, S. Janićijević, D. Radovanović, M. Šarac, Internet exchange points, Apr, 2017

6. D. Marković, M. Šarac, S. Adamović, D. Stamenković, N. Savanović, Virtualization of workspace and its application in education, 3rd International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2016, Zlatibor, Serbia, Jun, 2016

7. N. Savanović, M. Šarac, D. Marković, D. Radovanović, A. Jevremović, Computer network security on physical layer, 3rd International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2016, Zlatibor, Serbia , Jun 2016, pp. 80 - 81, Jun, 2016

8. S. Adamović, M. Milosavljević, M. Veinović, M. Šarac, M. Tatović, Possibility of development biometric digital signature, Society for Electronics, Telecommunications, Computers, Automatic Control and Nuclear Engineering, Jun, 2016

9. N. Savanović, M. Šarac, D. Stamenković, S. Adamović, Unreal Engine platforma za razvoj edukativnih video igara, 16th International Scientific Conference SINERGIJA 2015, Bijeljina, Republika Srpska, pp. 118 - 121, Dec, 2015

10. T. Radojević, M. Šarac, D. Radovanović, N. Stanišić, The advantages of Serbia for foreign direct investments, 19th International Academic Conference Florence, pp. 718 - 729, Sep, 2015

11. Jevremović, M. Veinović, M. Šarac, N. Ristić, D. Stamenković, FatCookies: HTTP cookies based attack on Web sites availability, 2nd International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2015, Silver Lake, Serbia, Jun, 2015

12. G. Dobrijević, S. Stanišić, J. Boljanović, M. Šarac, Social Media and Education: Pros and Cons, pp. 19 - 30, May, 2015

13. S. Janićijević, S. Adamović, M. Šarac, D. Stamenković, Evaluacija bezbednosti Web servisa u Cloudu sa studijom slučaja - Dropbox, 2nd International Scientific Conference of IT and Business-Related Research SYNTHESIS 2015, Belgrade, Serbia, pp. 90 - 96, Apr, 2015

14. D. Stamenković, M. Šarac, D. Radovanović, A. Simićević, Privacy Policy and Data Archiving in Organizations of the Republic of Serbia and the Countries of the European Union, 2nd International Scientific Conference of IT and Business-Related Research SYNTHESIS 2015, Belgrade, Serbia, pp. 71 - 75, Apr, 2015

15. D. Stamenković, M. Šarac, S. Adamović, G. Šimić, Security Risk in Synchronization On-Premises Active Directory with Office 365 Cloud Platform, 1st International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2014, Vrnjačka Banja, Serbia, Jun, 2014

16. Jevremović, M. Šarac, M. Milosavljević, M. Veinović, ANALYZING BEHAVIOR OF STUDENTS DURING THE ELECTRONIC TESTING, Zbornik radova ETRAN 2014, Jun, 2014

17. T. Radojević, N. Stanišić, N. Stanić, M. Šarac, Measuring customer satisfaction in the hospitality industry: an empirical study of the hotels in the capital cities of Europe, pp. 788 - 795, Apr, 2014

18. N. Savanović, S. Adamović, A. Jevremović, M. Milosavljević, M. Veinović, M. Šarac, Konstruisanje generatora slučajnih brojeva preko fizičkog izvora informacija - TRNG,

Konstruisanje generatora slučajnih brojeva preko fizičkog izvora informacija - TRNG, pp. 248 - 252, Dec, 2013

19. M. Milosavljević, J. Jovanović, S. Adamović, M. Šarac, A. Jevremović, V. Miškovic, Protokol za generisanje i razmenu apsolutno tajnih kriptoloških ključeva putem javnih kanala u savremenim računarskim mrežama, Protokol za generisanje i razmenu apsolutno tajnih kriptoloških ključeva putem javnih kanala u savremenim računarskim mrežama, Jun, 2013

20. M. Veinović, M. Milosavljević, J. Jovanović, M. Šarac, S. Adamović, Analiza bežičnih računarskih mreža zasnovanih na WP2-PSK korišćenjem sopstvenog rešenja distribuiranog računarstva, Zbornik 57. konferencije, pp. VI2.8.1 - 2.8.6, Jun, 2013

21. T. Radojević, M. Šarac, D. Radovanović, N. Stanišić, S. Adamović, J. Jovanović, Penetration analysis of security in wireless networks, Athens, Greece, May, 2013

22. T. Radojević, D. Radovanović, M. Šarac, J. Srejić, Uticaj uvođenja elektronskih servisa na poboljšanje kvaliteta usluga u lokalnoj samoupravi, Univerzitet Sinergija, Bjeljina, pp. 97 - 105, Mar, 2013

23. M. Šarac, E - Agenda as a tool for support of evaluation of ECTS, Feb, 2013

24. D. Radovanović, D. Lučić, S. Adamović, S. Adamović, What is IT Governance?, Unitech, Gabrovo, Bulgaria, Nov, 2012

25. M. Šarac, T. Radojević, S. Adamović, D. Radovanović, Safety of e-business applications, applied knowledge based on SSL traffic, Athens, Greece, Jul, 2012

26. M. Šarac, S. Adamović, M. Veinović, Bezbednosni problemi u zaštiti bežičnih komunikacija, Predavanje po pozivu u okviru manifestacije „Mesec dana matematike" u galeriji Srpske akademije nauke i umetnosti (SANU), May, 2012

27. T. Radojević, D. Radovanović, M. Šarac, N. Stanišić, N. Radović, The impact of franchising on the development of tourism in Serbia, Istanbul, Turkey, pp. 168 - 169, May, 2012

28. D. Stamenković, M. Šarac, S. Adamović, D. Radovanović, Energetska efikasnost u primeni virtualnog datacentra i upotreba ekoloških računara u edukativnim ustanovama, 10th International Scientific Conference SINERGIJA 2012, Bijeljina, Republika Srpska, ISBN 978-99955-26-25-2, pp. 145 - 150, Mar, 2012

29. M. Šarac, M. Veinović, S. Adamović, D. Radovanović, A. Jevremović, Analiza sigurnosti SSL saobraćaja u bežičnim računarskim mrežama, ISBN-99938-624-2-8, Vol. 11, pp. 760 - 765, Mar, 2012

30. J. Gavrilović, M. Šarac, B. Čavić, I. Kostić-Kovačević, Realizacija učenja na daljinu na Univerzitetu Singidunum, Zbornik radova, Jun, 2011

31. D. Radovanović, M. Šarac, S. Adamović, D. Lučić, Necessity of IT Service Management and IT Governance, IEEE, ISSN 1847-3938, Crotia, pp. 84 - 87, May, 2011

32. T. Radojević, D. Radovanović, M. Šarac, D. Lučić, Information technology governance - cobit model, Opatija, Croatia, ISSN 1847-3938, pp. 80 - 84, May, 2011

33. V. Mihailović, M. Šarac, S. Adamović, M. Šarac, Video konferencijski sistemi i njihova primena u obrazovnom sistemu, ISBN 978-99955-26-21-4, pp. 122 - 128, Mar, 2011

34. M. Šarac, M. Veinović, S. Adamović, Komparacija i analiza resursa fizičkog i virtualnog okruženja datacentra, Komparacija i analiza resursa fizičkog i virtualnog okruženja datacentra, pp. 131 - 134, Nov, 2010

35. S. Adamović, M. Šarac, D. Radovanović, T. Radojević, Secret key extraction over unauthenticated public channels, ISBN 1313-230X, Vol. I, Gabrovo, Bulgaria, pp. 472 - 476, Nov, 2010

36. T. Radojević, D. Radovanović, M. Šarac, S. Adamović, One concept for it audit, Gabrovo, Bulgaria, pp. I-477 - I-482, Nov, 2010

37. S. Adamović, M. Šarac, D. Radovanović, Generatori slučajnih brojeva i njihov uticaj na sigurnost, ISBN: 978-86-86385-07-9, Zlatibor, Jun, 2010

38. M. Šarac, D. Radovanović, S. Adamović, Analiza poslovne vrednosti serverske virtuelizacije, ISBN: 978-86-86385-07-9, Zlatibor, Jun, 2010

39. D. Radovanović, M. Šarac, S. Adamović, Cobit pristup reviziji informacionih sistema, ISBN: 978-86-86385-07-9, Zlatibor, Jun, 2010

40. M. Šarac, D. Radovanović, S. Adamović, Secret Key Agreement and Privacy Amplification by Public Discussion, May, 2010

41. M. Šarac, D. Radovanović, S. Adamović, J. Raković, Smart Card Security, Kaunas & Vilnius - ELECTRONICS 2010, Lithuania, May, 2010

42. M. Šarac, S. Adamović, D. Radovanović, Analysis of Security and Safety Solutions in Network Environment of Virtual Datacenter, Kaunas & Vilnius - ELECTRONICS 2010, Lithuania, May, 2010

43. T. Radojević, D. Radovanović, M. Šarac, D. Lučić, It audit in accordance with cobit standard, Opatija, Croatia, ISSN 1847-3938, pp. 53 - 57, May, 2010

44. T. Radojević, D. Radovanović, M. Šarac, D. Lučić, Analysis of methodology for IT governance and information system audit, Vilnius, Lithuania, ISSN 2029-2441, pp. 943 - 949, May, 2010

45. M. Milenković, S. Adamović, M. Šarac, D. Radovanović, Upravljanje X.509 sertifikatima u PKI sistemu, CD Zbornik, COBISS.SR-ID 173688076, ISBN 978-86-90951111-6, Mar, 2010

46. M. Veinović, D. Radovanović, D. Radovanović, Analiza procesa virtualizacije, Sinergija, Bijeljina, pp. 131 - 137, Mar, 2010

47. M. Stanišić, D. Radovanović, M. Šarac, D. Lučić, Upravljanje informacionim tehnologijama i IT revizija, YUINFO, Kopaonik, Srbija, Mar, 2010

48. M. Šarac, S. Adamović, D. Radovanović, Analiza sigurnosti bežičnih mreža IEEE 802.11. na teritoriji grada Beograda, ISBN-99938-624-2-8, Vol. 10, Bosna i Hercegovina, pp. 191 - 194, Mar, 2010

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50. M. Šarac, D. Radovanović, S. Adamović, T. Radojević, Analiza bezbednosnih i sigurnosnih rešenja u mrežnom okruženju virtuelnih Datacentera, Vol.9, ISBN-99938-624-2-8, Bosna i Hecegovina, pp. 525 - 528, Mar, 2010

51. D. Radovanović, M. Šarac, D. Lučić, S. Adamović, Analiza metoda za kontrolu i reviziju informacionih sistema, Vol. 9, ISBN-99938-624-2-8, Jahorina, Bosna i Hercegovina, pp. 567 - 570, Mar, 2010

52. D. Radovanović, M. Šarac, M. Milenković, D. Lučić, Klasifikacija i analiza napada na sigurnost mikroprocesorskih smart kartica na fizičkom nivou, sa posebnim osvrtom na verovatnoću pogađanja PIN koda, Telfor, Srbija, pp. 1237 - 1240, Nov, 2009

53. S. Adamović, D. Radovanović, M. Šarac, M. Milenković, Data protection in databases at the local and server level, Gabrovo, Bulgaria, Nov, 2009

54. D. Radovanović, M. Šarac, S. Adamović, M. Milenković, Analysis and classification of attacks on the security of smart cards with additional emphasis on security pin code, Gabrovo, Bulgaria, Nov, 2009

55. S. Adamović, M. Veinović, M. Šarac, Uticaj virtualizacije na performanse pri zaštiti podataka u bazama podataka sa kriptografskim algoritmima, Uticaj virtualizacije na performanse pri zaštiti podataka u bazama podataka sa kriptografskim algoritmima, pp. 143 - 145, 2009

56. M. Šarac, Sigurnosna i bezbednosna rešenja u mrežnom okruženju virtualnog datacentra, Beograd, Srbija, Nov, 2008