

Boris Damjanović

PhD Organizational Sciences

1. Biographical data

Boris Damjanović was born on June 2, 1965. in Banja Luka. He graduated from the High School of Electrical Engineering in Prijedor in 1983. On the College of Economics and Informatics in Prijedor he finishes its basic studies, after which he enrolled in graduate academic studies - Master's at the Faculty of Organizational Sciences in Belgrade, study program Information Systems and Technologies, study area Information Systems. Master's thesis entitled "Implementation and extension of the AES algorithm" under the mentorship of prof. Dr. Simić Dejana defended his thesis and finished his studies. Boris Damjanović registered on 05.10.2010. year of doctoral studies, elective area Information Systems, at the Faculty of Organizational Sciences, University of Belgrade. On July 13, 2016. Boris Damjanović defended his doctoral dissertation entitled "ADAPTABLE APPLICATION OF AES ALGORITHM IN MODERN OPERATING SYSTEMS" at the Faculty of Organizational Sciences of the University of Belgrade, which earned him the scientific title DOCTOR OF SCIENCE - ORGANIZATIONAL SCIENCES.

He has been engaged in programming and development of information systems since 1988. Since 1991, he has been employed at ITC Kozarski Vijesnik - Radio Prijedor, first as a program producer, and later as head of technology department. Since 1998, he has been working at the company Esprit Radio in Prijedor, first as head of technology department, and then as manager. He is employed in the company Commercial D.O.O. as developer and co-owner, and at the company Cidoine D.O.O. and in the company Sinapsa programming S.P. as co-owner or owner, respectively. He is the author of a large number of multimedia, ERP solutions, and Internet applications. In parallel with his work in the IT, starting from the 2008/2009 academic year, Boris Damjanović first worked as a teaching assistant, and then as a lecturer at the Prijedor College of Economics and Informatics, where he participated in the preparation, performance of exercises and lectures, as well as exams at the higher number of subjects. From the academic year 2014/2015, Boris Damjanović, as a teaching assistant at the University of Business Engineering and Management in Banja Luka, participated in the preparation, performance of exercises and lectures, as well as the exam at the Computer Faculty of the said university. From 2016 until today, Boris Damjanović is employed as a professor at Banja Luka College.

During his previous scientific research work, Boris Damjanović has published, as the first author, 2 papers in journals of international importance (SCIE list with Impact factor), two as second author (SCIE list with Impact factor), and close to 40 papers at scientific conferences and in various scientific journals. The mentioned scientific articles were created based on the following research:

Investigating the possibility of parallelizing the OFB cryptographic mode of operation; design and implementation of the Adaptable virtual cryptographic file system; performance research of the cryptographic algorithm AES (Advanced Encryption Standard) on the Linux operating system; expansion and implementation of the cryptographic algorithm AES; research of parallelization and extension of the AES algorithm on CUDA graphics cards; research of parallelization and extension of the AES algorithm on Android devices; investigation of the internal structure of the DBMS Firebird database with low-level access; research of applied

approaches for data encryption in different operating systems; investigating XSS attacks and defending against them; works in the field of digital identities; works on the implementation of Ecore metamodel serialization; research on the implementation of cryptocurrencies - blockchain, Merkle and Patricia trees, cryptographic hash functions.

2. Teaching and pedagogical work

In September 2008, Boris Damjanović was employed by the Senate of the College of Economics and Informatics in Prijedor first as a teaching assistant, and then in 2010 he was elected to the position of lecturer. By the decision of the Senate of the University of Business Engineering and Management in Banja Luka in September 2014, Boris Damjanović was first elected to the position of lecturer, and then from 2016 to the position of assistant professor for the scientific field of Information Science and Bioinformatics. In September 2016, Boris Damjanović was elected to the position of professor of the college by the decision of the Senate of the Banja Luka College in Banja Luka. On March 28, 2018, at the Pan-European University Apeiron, he was elected to the position of assistant professor for the scientific field of Computer Science, and on March 18, 2021, at the Independent University of Banja Luka, he was elected to the position of associate professor for the scientific field of Information Science and Bioinformatics. Boris Damjanović was a mentor on a large number of bachelor theses in the field of computer science, information systems and technologies, some of which were highly rated both for their theoretical and applied components.

3. Scientific and professional activity

The candidate focused a significant part of his engagement on scientific research and professional activities. Dr. Boris Damjanović built his scientific, professional and professional profile on the foundations of modern, dynamic and developmental achievements, primarily in the field of cryptography and cryptocurrencies, and then also in the fields of databases, development of information systems, algorithms and data structures, programming and operating systems. He was a participant in the Erasmus Plus project as a coordinator. During his career, he became a member of the IEEE (Institute of Electrical and Electronics Engineers), ACM (Association for Computing Machinery), and the Japanese IEICE Institute (Institute of Electronics, Information and Communication Engineers). He holds Oracle's Java foundations and Database design and programming with SQL certificates.