Dr Nikola Cmiljanic

8 marta bb, 81000 Podgorica, Montenegro

email: nikola.cmiljanic@unimediteran.net

PERSONAL PROFILE

Information System and Network professional with more than ten years of extensive and hands-on experience in information systems and network communication. A perfectionist delivering smooth operations and optimal architecture based on Microsoft, Linux, Cisco, VMware data centre technologies and industry-leading commercial, as well as open-source security solutions. In research focused in information systems, communication protocols and information security. Providing revision for important scientific journals such as IEEE Transactions on Signal Processing, IEEE Transactions on Wireless Communications, Electronics on MDPI and Sensors on MDPI.

WORK EXPERIENCE

03/2019 – Present

Mentor for Research, Innovation, ICT and New Technologies

United Nation Development Programme (UNDP), Podgorica (Montenegro)

- **Publishing IT scientific paper** in peer-reviewed journals.
- **Assess the capacity and needs** of existing and prospective entrepreneurs.
- **Developping the detailed mentorship program** and work with prospective entrepreneurs to make the incubated venture successful.
- **Guided students in using technology to support research.**

09/2014 – 11/2018

Research Technician

DeustoTech, Bilbao (Spain)

- **Designed and executed novel network** anti-collision protocols.
- Performed **statistical analysis** on the various deterministic network protocols.
- **Provided guidance to undergraduate students** researching term papers.
- **Managed network services** of the department independently.
- Assisted with the **planning and execution of tech-based research projects**.

06/2012 – 09/2013

IT Project Manager

Total Petrol, Podgorica (Montenegro)

- Attracted, motivated, coached and developed team members to improve performance.
- **Coordinated and managed implementation and maintenance of ORPAK Information system** aimed at raising transparency and control over all petrol station transactions in Montenegro.
- **Configuration, maintenance, automation and troubleshooting** of equipment based on Cisco, Juniper, and Nortel equipment, reaching efficiency improvement of 20% vs previous set-up.

05/2011 – 06/2012

IP Services Specialist

Deutsche Telekom Group (Crnogorski Telekom), Podgorica (Montenegro)

- **Team lead** in comprehensive problem analysis for all IP services in the Telekom system.
- **Designed, implemented, and maintained** all enterprise voice solutions, both domestic and international. Achieved an overall efficiency improvement of 15% based on reaction time statistics.
- **Project management** for all IT Infrastructure related projects.
- Assisted in the **design, development and delivery of Voice procedures and Standard**

Operating Procedures (SOP's) for the IT organization.

- Performed network maintenance and diagnostics work.
- **Collaborated with international cross-organizational teams** and engineering associates to provide technical support and ensure efficient problem resolution.

01/2006 – 10/2010 **IT and Network Administrator**
Digit Montenegro, Podgorica (Montenegro)

- **Analysed, planned and budgeted** of expenditures for IT and other business units.
- Designed and implemented data integrity measures as well as daily system backups.
- **Maintained data security and ensured integrity**, protection of all client information.
- Managed network connectivity and ensured its LAN/WAN infrastructure was operating according to prescribed best practices and technical standards.
- **Developed network access protocols** and maintained security documentation for various Information systems (Ministries of Defence and Internal Affairs, Central Bank, etc).

EDUCATION

09/2014 – 10/2018 **PhD in Engineering for Information Society and Sustainable Development**
Faculty of Engineering - University of Deusto, Bilbao (Spain)

09/2013 – 08/2014 **MSc in Information Technology Management**
Faculty of Economic - University of Montenegro, Podgorica (Montenegro)

09/2011 – 09/2012 **Information Technologies Specialist**
Faculty of Information Technologies - University Mediterranean, Podgorica (Montenegro)

09/2007 – 08/2010 **Bachelor of Information Technologies**
Faculty of Information Technologies - University Mediterranean, Podgorica (Montenegro)

OTHER

Languages
Native: Montenegrin
Proficient: English
Intermediate: Spanish, Russian

Certificates
Cyber Security: Security+, CEH, CISSP (in progress)
Networking: Network+, CCNA, CCNP, JNCP
Programming: PCEP (Python)
Other: Data Structures and Algorithms Certificate (University of Deusto), PSQL, Oracle Database SQL, MCSA, A+, MathWorks (MathLab)

Publications
[1] Doctoral thesis – "RFID Anti-Collision Protocol Based on the Window Methodology to Reduce the Energy Consumption and the Identification Time Regardless of the Tag ID Distribution", Bilbao, Spain, 2018
[2] N. Cmiljanic, H. Landaluce and A. Perallos, "A Comparison of RFID Anti-Collision Protocols for Tag Identification" Applied Science, vol. 8, July 2018
[3] N. Cmiljanic, H. Landaluce, A. Perallos and L. Arjona, "Influence of the Distribution of Tag IDs on RFID Memoryless Anti-Collision Protocols" Sensors, vol. 17, August 2017
[4] N. Cmiljanic, H. Landaluce, A. Perallos and L. Arjona, "Reducing Transmitted Bits in a Memoryless RFID Anti-Collision Protocol" WINSYS 2016; 13th International Conference of Wireless Networks and Mobile Systems; Lisbon, Portugal, 2016
[5] H. Landaluce, L. Arjona, A. Perallos, Lars Bengtsson and N. Cmiljanic, "A high throughput anti-collision protocol to decrease the energy consumption in a passive RFID system" Wireless Communications and Mobile Computing, vol 2017
[6] L. Arjona, H. Landaluce, A. Perallos and N. Cmiljanic, "Hardware based analysis of RFID anti-collision protocols based on the standard EPCglobal Class-1 Generation-2," 2015 International Wireless Communications and Mobile Computing Conference (IWCMC), Dubrovnik, 2015, pp. 226-231

[7] L. Arjona, H. Landaluce, A. Perallos, P. Lopez-Garcia and N. Cmiljanic, "Analysis of RFID anti-collision protocols based on the standard EPCglobal Class-1 Generation-2," European Wireless 2015; 21th European Wireless Conference; Proceedings of, Budapest, Hungary, 2015, pp. 1-6

[8] N. Cmiljanic and A. Markovic "Application of Temperature RFID Sensors in the Food Cold Chain in Montenegro", Telfor 2019, Belgrade, Serbia, 2019

[9] N.Cmiljanic and R. Sendelj "Segmentation of Information System using cloud distribution", Electronics, vol 2019 - under revision