Project proposal title (up to 200 characters): A bioinformatics approach to dairy cattle breeding using genomic selection

Acronym (up to 20 characters): BioITGenoSelect

Name, father's/mother's name and family name: Laslo, Tibor, Tarjan

Principal Investigator (PI) or Participant: Participant

Contact e-mail, phone and web page (if available): laci@uns.ac.rs, +381214852125, +381694660820 http://www.ftn.uns.ac.rs/1417835181/laslo-tarjan

Username in the base of researches of the Ministry responsible for scientific research: laci@uns.ac.rs

Name and address of the Scientific institution during the implementation of the Project and Scientific institution contact person: Faculty of Technical Sciences, University of Novi Sad, Trg Dositeja Obradovića 6, 21101 Novi Sad, prof. dr Rade Doroslovački, dean, ftndean@uns.ac.rs

BIOGRAPHY

- Date and place of birth: May 13. 1984. Novi Sad, Serbia
- Age: 35
- Citizenship: Serbia
- Research field and area/areas (at most five):

Mechatronics, Industrial Automation, Motion Control, Sensor Networks, Automatic Identification

Education:

University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia

- PhD in Mechatronics, 2015 (grade point average 10/10 max) "Increasing efficiency of linear actuators by applying FPGA based control"
- Integrated Bachelor and Master in Mechatronics, robotics and automation, 2003-2008 (grade point average 9.46/10 max) "Manipulator with Pneumatic and Electric Conduction of Axis"
- Name, family name and title of the Ph.D. thesis supervisor: Stevan Stankovski, full professor
- Dates of appointments (researcher and scientific titles, i.e., equivalent titles in higher education)
 - Assistant Professor, Mar. 2016. present, Chair of Mechatronics, Robotics and Automation, Department
 of Industrial Engineering and Engineering Management, Faculty of Technical Sciences, University of
 Novi Sad, Serbia
 - Research Associate, Aug. 2015. Feb.2016., Chair of Mechatronics, Robotics and Automation, Department of Industrial Engineering and Engineering Management, Faculty of Technical Sciences, University of Novi Sad, Serbia
 - Assistant Master, Sep. 2009. Aug. 2015., Chair of Mechatronics, Robotics and Automation, Department of Industrial Engineering and Engineering Management, Faculty of Technical Sciences, University of Novi Sad, Serbia
 - **Teaching Associate**, Dec. 2008. Sep. 2009., Chair of Mechatronics, Robotics and Automation, Department of Industrial Engineering and Engineering Management, Faculty of Technical Sciences, University of Novi Sad, Serbia
- Employment history (institutions and to/from dates up to the day of the proposal submission):
 From 2008 present: Chair of Mechatronics, Robotics and Automation, Department of Industrial Engineering and Management, Faculty of Technical Sciences, University of Novi Sad, Serbia
- List of selected publications (up to five most important publications in the research field of the Project).
 - 1. M21: **Tarjan L.**, Šenk I., Tegeltija S., Stankovski S., Ostojić G.: A readability analysis for QR code application in a traceability system (DOI: 10.1016/j.compag.2014.08.015), Computers and Electronics in Agriculture, 2014, Vol. 109, No November, pp. 1-11, ISSN 0168-1699 (IF: 1.761)
 - 2. M22: Milenković I., Šešlija D., **Tarjan L.**, Dudić S.: Wireless sensor system for monitoring of compressed air filters, Journal of Scientific and Industrial Research, 2012, Vol. 71, No 5, pp. 334-340, ISSN 0022-4456 (IF: 0.505)
 - 3. M22: Šenk I., Ostojić G., Jovanović V., **Tarjan L.**, Stankovski S.: Experiences in developing labs for a supervisory control and data acquisition course for undergraduate mechatronics education, DOI:10.1002/cae.21578, Computer Applications in Engineering Education, 2015, Vol. 23, No 1, pp. 54-62, ISSN 1061-3773 (IF: 0.935)

- 4. M23: Stankovski S., Ostojić G., **Tarjan L.**, Oros D., Lazarević M.: IML Robot Grasping Process Improvement, Iranian Journal of Science and Technology, Transactions B, 2011, Vol. 35, No M1, pp. 197-207, ISSN 1028-6284 (IF: 0.375)
- M33: Šenk I., Ostojić G., Tarjan L., Stankovski S., Lazarević M.: Food Product Traceability by Using Automated Identification Technologies, 4. Doctoral Conference on Computing, Electrical and Industrial Systems DoCEIS, Lisabon: Springer, 15-17 April, 2013, pp. 155-163, ISBN 978-3-642-37290-2.
- Citation number (excluding self-citations) from SCOPUS: 76
- Hirsch index from SCOPUS: 4
- Participant in the following national and international projects:

Automated systems for identification and object tracking in industrial and nonindustrial systems, No. TR35001 Supported by Ministry of Science, Technologies and Development (Republic of Serbia), project period 2011 – 2019.

Creating wealth from the wealth of Serbia, No. II 46001 Supported by Ministry of Science, Technologies and Development (Republic of Serbia), project period 2011 – 2019.

Integration of identification technologies into packaging devices for food, chemical and medical products, No. 451-1948, Supported by Secretary of AP Vojvodina, project period 2011 – 2015.

RFID (internet of thing) based animal individual identification technology and its application on quality traceability system, No. 680-00-00557/2013-09/04, Bilateral project between University of Novi Sad, Faculty of Technical Sciences and China Agricultural University, 17ก Qinghua East Road, Haidian, Beijing, China, project period 2013 – 2015

Master Studies and Continuing Education Network for Product Lifecycle Management with Sustainable Production MAS-PLM Tempus JP, No: 144959-TEMPUS-2008-IT-JPRC, Supported by TEMPUS, project period 2009 - 2012.

Application of IoT technologies in order to increase the quality of identification and tracking of animals, No: 451-03-01414/2016-09/12, Bilateral project between University of Novi Sad, Faculty of Technical Sciences and University of Montenegro, Biotechnical Faculty, project period 2016 - 2018.

Use of Internet of Things (IoT) with low power consumption and distributed intelligence in conditions of natural disasters and catastrophic events, No. 142-451-3578/2017-01, Supported by Secretary of AP Vojvodina, project period 2017 – 2018.

- Reviewing scientific journals and grants.
 - Editorial board member at **Journal of Mechatronics**, **Automation and Identification Technology**, http://jmait.org/editorial-board/
 - Reviewer for **Food Control** scientific journal (SCI),

Ref. No.: FOODCONTD1501942, 2015.12.31.Ref. No.: FOODCONT-D-17-01741, 2017.11.14.

Reviewer for Computers and electronics in agriculture scientific journal (SCI),

Ref. No.: COMPAG_2017_1322, 2018.04.13.Ref. No.: COMPAG_2017_1322_R1, 2018.06.04.

Reviewer for International Journal of Electrical Engineering and Computing (IJEEC) scientific journal

Ref. No.: 108-1, 2018.05.11.

- Reviewer for International Symposium Infoteh Jahorina from 2012. until today.
- Skills and other facts relevant to the Project.

Programming languages: C, C++, Basic, VBA for MS Excel.

Other mathematical and programming tools:

Matlab (Simulink), LabView; PLC programing tools: Siemens TIA Portal, CoDeSys, Festo FST,

Microcontroller programing tools: AVR studio, CodeVision, MPLAB.

Web and related technologies: HTML, CSS, setting up server for sensor data acquisition.

Preparing and adjusting data to work in different programs.

Language:

Serbian, Hungarian, English

Other:

Solid grasp of parsing data and converting between formats as needed.

Experience working on a project to monitor cow nutrition parameters.

• Links for reasearch pages:

https://scholar.google.com/citations?hl=en&user=BK ssfcAAAAJ

https://orcid.org/0000-0001-9731-1304

https://www.scopus.com/authid/detail.uri?authorId=35178684000

http://istrazivaci.mpn.gov.rs/istrazivac/142433