Lara Laban, M.Sc.M.E.

Personal data

Address:
University of Belgrade
Faculty of Mechanical Engineering,
Kraljice Marije 16,
11120 Belgrade 35, Serbia

Phone:
+381 60 419 39 06

E-mail:
llaban@mas.bg.ac.rs

Nationality:
Serbian

Date of birth:
July 28th, 1994

Research or academic title

Junior Research Assistant

Research field/area

Mechanical engineering /
Artificial intelligence and neural networks, deep learning, convolutional neural networks, machine learning, control systems, fuzzy logic and control, nonlinear systems, digital systems, computer control, automatic control, control in the fields of fluid mechanics, mechanical robotics and thermodynamics.

Languages

Serbian, English, French, Spanish

Education

Oct. 2019 - Present	**Doctoral academic studies (Ph.D., Dr.-Eng.)** University of Belgrade - Faculty of Mechanical Engineering, Department of Automatic Control Dissertation title (initial): Deep Neural Network for Classification, Recognition of Objects, Prediction, Identification and Control of Nonlinear Systems
2019	**Master of Science (M.Sc.) in Mechanical Engineering** University of Belgrade - Faculty of Mechanical Engineering, Department of Automatic Control Thesis title: Convolutional Neural Networks
2017	**Bachelor of Science (B.Sc.) in Mechanical Engineering** University of Belgrade - Faculty of Mechanical Engineering, Department of Automatic Control Thesis title: Advanced Temperature Measureme Trainer

Employment

Dec. 2019 - Sep. 2021	**Junior Research Assistant** University of Belgrade - Faculty of Mechanical Engineering, Department of Automatic Control Laboratory for Intelligent Control Systems

Awards and prizes

- Commendations for the Faculty of Mechanical Engineering Day for excellent grades each year.
- The recipient of a scholarship from the Ministry of Education, Science and Technological Development.

Publications

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Skills

- Python,
- C++,
- MATLAB & Simulink,
- SolidWorks,
- CATIA (generative shape design),
- AutoCAD,
- Pascal,
- LaTeX,
- Gimp,
- Adobe Photoshop,
- MS Office (Word, Excel, Power Point).

Number of citations (excluded self-citations)

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Hirsch index

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Project and activities

2019 Babić, B., Miljković, Z., Laban, L., et al.
An Innovative, Ecologically Based Approach to the Implementation of Intelligent Manufacturing Systems for the Production of Sheet Metal Parts,
Grant: TR-35004,
Project funded by Ministry of Education, Science and Technological Development of the Government of the Republic of Serbia

2019 **Internship at the Institute "Mihajlo Pupin"**
Department of Hydraulics and Pneumatics
Hydraulic schemes and control systems for hydraulic turbines of mini-hydro power plants. Developing of codes used for turbine braking, and hydraulic based calculations.

2018 - 2019 **Formula Student Team Electric Arrow**
Team Member for Aerodynamics and Composites
Development and coding for active aerodynamics (DRS), implementation of various control systems, as well as, aero package surface design for the first electric vehicle FSAE. Composite materials manufacturing, hand lamination, resin infusion; creation of cost and design reports.

Products, services (datasets, software)

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Certificates

- Customer Excellence Program TIA - MICRO1 certificate from Siemens.