Jelena Trišović

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EDUCATION

Swiss Federal Institute of Technology   Zurich, Switzerland
Prospective doctoral fellow at the ETH AI Center   September 2021 - present

Swiss Federal Institute of Technology   Zurich, Switzerland
M.S. in Electrical Engineering and Information Technology, GPA: 5.80/6.00   2018 - 2021

University of Belgrade, School of Electrical Engineering   Belgrade, Serbia
B.S. in Electrical Engineering and Computing, GPA: 10.00/10.00   2014 - 2018

INTERNSHIPS

Research in Industrial Projects for Students   Los Angeles, USA
Institute for Pure and Applied Mathematics, University of California Los Angeles   Summer 2017

— Performed research on automatic conflict detection in audio recordings produced by police body-worn cameras. The novel method was developed by combining adaptive noise removal, machine learning based speech segmentation and the measures of conflict based on the repetition and the intensity of phrases in speech.

Summer Internship   Belgrade, Serbia
University of Belgrade, School of Electrical Engineering   Summer 2016

— Developed an application that uses the output signal of the motor encoder to determine the rotation speed of the motor and to display its spectrum in real time; CompactRIO device was used for the signal acquisition and processing; the FPGA chip of the device was programmed using LabVIEW.

Summer Internship   Belgrade, Serbia
MikroElektronika D.O.O   Summer 2016

— During the development of an application for air quality control using "3G Click" and "AirQuality Click", I familiarized myself with embedded programming of PIC and ARM architectures.

PUBLICATIONS

[1] B. Ma, **J. Trišović**, and H. .-A. Loeliger, "Multi-image blind deblurring using a smoothed nuv prior and iteratively reweighted coordinate descent", in *2020 IEEE International Conference on Image Processing (ICIP)*, 2020, pp. 973–977.

[2] A. Letcher, **J. Trišović**, C. Cademartori, X. Chen, and J. Xu, "Automatic conflict detection in police body-worn audio", in *2018 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2018, pp. 2636–2640.

Working Experience

Student Teaching Assistant Zurich, Switzerland
Swiss Federal Institute of Technology Autumn 2019

  – Course name(s): Linear System Theory

Undergraduate Teaching Assistant Belgrade, Serbia
University of Belgrade, School of Electrical Engineering Autumn 2015 - Spring 2018

  – Course name(s): System Control 1, System Control 2, Nonlinear Control Systems 1, Systems and Signals, Fundamentals of Electrical Engineering - Laboratory Exercises

Skills

- **Programming languages:**
  - Python, MATLAB, C^{++}, C, $C^{\#}$, LabVIEW
- **Other tools and software:**
  - Latex, GIT, TIA Portal, LTSpice, SQL, RobotStudio

Languages

- **English:** fluent, C2
- Cambridge Proficiency Exam, grade A (226/230 points)
- **German:** intermediate, B1
- **Russian:** intermediate, B1
- **Serbian:** mother tongue

Projects

- **Global Localization in Semantic Building Models**, Master thesis at the Robotic Systems Laboratory at ETH Zurich, 2020
- **Image Quality Mapping with Explicit Modeling of Linear and Gamma Corrections**, Semester project at the Computer Vision Laboratory at ETH Zurich, 2019
- **Blind Image Deblurring Using Multiple Observations**, Semester project at Signal and Information Processing Laboratory at ETH Zurich, 2019
- **Semantic Image Segmentation**, Petnica Summer Institute for Machine Learning, 2018
- **Feedback Linearization and Fuzzy System Control**, Nonlinear Control Systems 2 coursework, 2017

Scholarships and Awards

- Excellence Scholarship and Opportunity Programme Scholar
- Award for the best unconference proposal at the Eastern European Machine Learning Summer School 2020
- Student valedictorian at the School of Electrical Engineering, University of Belgrade
- IEEE Signal Processing Society Travel Grant to attend the 2018 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2018)
- Outstanding Poster Award at Joint Mathematics Meeting 2018
- ETF BAFA 2016, the best student award
- European Girls' Mathematical Olympiad 2012, 2013, 2014 - three bronze medals
- 10th International Zhautykov Olympiad in Mathematics 2014 - silver medal
- International Mathematical Arhimede Contest 2013, 2012 - a gold and a silver medal

Extracurricular Activities

- Attended Eastern European Machine Learning Summer School 2020
- Attended Petnica Summer Institute for Machine Learning 2018
- Worked as a demonstrator at the Nikola Tesla Museum in Belgrade, 2016 - 2017