

Stefan Ristevski, PhD

Mechanical Engineer with a PhD specializing in event-triggered adaptive control of multi-agent systems, leveraging cutting-edge AI, machine learning, and autonomous systems technologies. Equipped with a strong technical and mathematical foundation, proficient in multiple programming platforms, and focused on driving innovation to address complex, real-world challenges in smart systems and IoT applications.

Always looking for exiting new challenges.

EDUCATION

University of South Florida, Tampa, Florida

Jun. 2018 – Jun. 2021

PhD in Mechanical Engineering

Thesis: *Event-Triggered Control Architectures for Scheduling Information Exchange in Uncertain and Multiagent Systems*

Note: *Multiple journal publications and approved patent in USA*

Bilkent University, Ankara, Turkey

Sep. 2012 – Jun. 2015

MSc in Mechanical Engineering

Thesis: *Mechanical and controller design of a modular mechatronic device - mechacell*

Note: *Multiple journal publications and approved patent in USA and Turkey*

Middle East Technical University, Ankara, Turkey

Sep. 2008 – Jun. 2012

BSc in Mechanical Engineering

Graduation project: *Smart helical conveyor for sorting two types of small bottle caps - design, control, and manufacturing*

WORK EXPERIENCE

Borgwarner, Sweden

Sep. 2021 – Present.

Controls & Systems Engineer

- Design of novel control algorithms for electric drive of hybrid vehicles.
- Design of novel control algorithms for torque transfer systems and all wheel drive.
- Perform test drives with vehicle and analyze data.
- Products integrated in Audi, BMW, BYD.

Study.com, Remote

Sep. 2018 – Jun. 2022

Academic writer & Tutor

- Tutor undergraduate students in Math/Physics/Statics/Dynamics.
- Write academic questions in Math/Physics with professional formatting and graphics.
- Write articles helping students to prepare them for next steps in professional life.

ARC Automotive, Skopje Macedonia

May. 2017 – Apr. 2018

Maintenance and PLC Engineer

- Maintenance of production line for air-bag inflators.
- Maintain PLC code (AB) in production line.
- Integrate new features in production machines.
- Integrate Yaskawa industrial robot in production line.

Mikrosam AD, Prilep, Macedonia

May. 2016 – Apr. 2017

R & D Engineer

- Research and production of automated tape layup and automated filament layup machines.
- Integrating KUKA robots in production line with Siemens and Beckhoff PLCs.
- Develop PLC (Beckhoff) code for production machines of composite materials.

SKILLS

Programming: Docker, Python, C, C++, C#, PLC, Matlab/Simulink, Regexp, Homelabbing, KUKA programming language, Yaskawa robot programming, L^AT_EX

Tools: Copilot, ChatGPT, Git, Excel VBA, Matlab/Simulink, Visio, MS Office suite, Canalyzer, Canapea, Arduino, Raspberry Pi

Methods: Optimization, Automation, Smart solutions, Data analysis, Drones

Languages: Macedonian (Native), English (Fluent), Turkish (Fluent), Swedish (Basic)

Interests: TV Shows, DIY projects
