

Dr.-Ing. Pablo Zometa



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Pablo Zometa joined the German International University (GIU) in Berlin, Germany, as a full-time lecturer in 2021. After finishing his Ph.D. in 2017, he co-founded and led the development of embedded system of the award-winning IoT startup Embever. He has co-authored several papers in the most prestigious journals and conferences in control engineering.

Education

M.Sc. in Mechatronics, University of Siegen, 2007

Ph.D. (hons) from the Otto-von-Guericke University in Magdeburg, Germany, 2017.

The topic of his dissertation was automatic code generation for model predictive control of embedded systems.

Research Interests

His current research interests are in how state-of-the-art machine learning approaches can be applied to energy-efficient building climate control, and autonomous mobile robots using low-cost embedded hardware.

Selected Research

- S. Lucia, D. Navarro, O. Lucia, P. Zometa, and R. Findeisen., Optimized FPGA implementation of model predictive control for embedded systems using high-level synthesis tool. IEEE transactions on industrial informatics, 14(1):137–145, 2017
- Faulwasser, T. Weber, P. Zometa, and R. Findeisen. Implementation of nonlinear model predictive path-following control for an industrial robot. IEEE Transactions on Control Systems Technology, 25(4):1505–1511, 2016
- P. Zometa and T. Faulwasser. Quantized deep path-following control on a microcontroller. 2023 European Control Conference (ECC), 2023
- P. Zometa, M. Kögel, and R. Findeisen. μ AO-MPC: a free code generation tool for embedded real-time linear model predictive control. In 2013 American Control Conference, pages 5320–5325. IEEE, 2013

- P. Zometa, M. Kögel, T. Faulwasser, and R. Findeisen. Implementation aspects of model predictive control for embedded systems. In 2012 American Control Conference (ACC), pages 1205–1210. IEEE, 2012