# Václav Mácha

## Education

- *2017 – present* Ph.D. studies, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Prague. Specialization: Mathematical Engineering, Dissertation topic: Distributed stochastic optimization algorithms on large data.
- *2012 – 2017* Master's degree, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Prague. Specialization: Applied Mathematical Stochastic Methods, Defended Thesis: Parallel methods of gradient optimiza-tion for predictive control

## Research and Work Experience

- 2018 – present Ph.D. student, Department of Adaptive Systems, Institute of Information Theory and Automation, Czech Academy of Science, Prague.
- 2015 – 2016 Junior researcher, Regional Innovation Centre for Electrical Engineering, University of West Bohemia, Pilsen. Research of predictive control of electric drives and power electronics. Implementation and testing of control algorithms based on mathematical optimization techniques.

## Hobbies

- Playing trombone – member of Swing Band Dobříš and Black Jazz Band

## Publications


- V. Mácha, V. Šmídl, and Z. Peroutka. Implementation of predictive spectrum control of a lc filter using admm. In 2017 IEEE International Symposium on Predictive Control of Electrical Drives and Power
- Electronics (PRECEDE), pages 78 – 82, Sept 2017.
- V. Šmídl, V. Mácha, Š. Janouš, and Z. Peroutka. Analysis of cost functions and setpoints for predictive speed control of pmsm drives. In 2016 18th European Conference on Power Electronics and Applications
- (EPE'16 ECCE Europe), pages 1 – 8, Sept 2016.
- V. Šmídl, V. Mácha, Š. Janouš, and Z. Peroutka. Predictive current limiter for lq based control of ac drives. In 2015 IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics (PRECEDE) , pages 55 – 60, Oct 2015.