

Bartłomiej Aleksander Ufnalski

an academic born into a family of academics



birthday

16th January, 1975

contact

Institute of Control
and Industrial Electronics
Warsaw University
of Technology (WUT)
75 Koszykowa St.
Warsaw 00-662
Poland

mobile:
+48 501 124 714
office:
+48 22 234 6138
(room GE-401)
fax:
+48 22 234 6023

bartlomiej.ufnalski
@ee.pw.edu.pl
bartlomiej.ufnalski
@skype

languages

Polish mother tongue
English B2/C1

favourite tools

MATLAB & Simulink
PLECS from Plexim
L^AT_EX

education

- 2016 **D.Sc. in Automatic Control and Robotics from WUT**
application of computational intelligence techniques in power electronics and drives with a particular emphasis on repetitive process control
- 2005 **Ph.D. with honours in Electrical Engineering from WUT**
neural network based flux and speed estimators in AC drives

research

- currently **Dynamic optimization approach to repetitive process control**
optimal iterative learning control in power electronics and drives:
gradient-free plug-in direct particle/multi-swarm repetitive controller,
gradient-based repetitive neurocontroller with a global update rule and a disturbance dual feedforward path,
hybrid part-stochastic part-deterministic repetitive controllers
- recently **Multiresonant (multi-oscillatory) control systems**
repetitive control and offline evolutionary optimization in power electronics
- initially **Non-repetitive control systems**
artificial neural networks as estimators and online trained adaptive controllers

teaching

- since 2005 **Faculty of Electrical Engineering at WUT**
lecturer, tutor, instructor
- previously **Tadeusz Czacki High School in Warsaw**
math teacher

publishing

- 2016 **Handbook author (with two co-authors)**
Control in electric drives. ISBN 978-83-01-18318-9.
- since 2014 **MATLAB Central top 5% contributor**
34 published models with 500+ downloads a month
- since 2012 **Associate Editor for IEEE Trans. on Industrial Informatics (IF 4.708)**
- since 2003 **Co-author of 30 journal papers and 29 conference papers**
and a reviewer for several scientific journals included in JCR/WoS

interests

professional: computational intelligence, dynamic optimization problems, power electronics and drives, repetitive control, iterative learning control, electric vehicles
personal: enduro mountain biking, inspiring my 6-year-old daughter to experiment, typesetting beautiful documents, sociology, psychology, neuroscience, anthropology