



## ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

### DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### 1. Basic information

Name, surname:	Ireneusz Jabłoński
Grade / Title:	Dr hab. inż.
Scientific discipline	<b>automatyka, elektronika, elektrotechnika i technologie kosmiczne / control, electronic, electrical engineering and space technologies</b>
Faculty:	W12 Wydział Elektroniki, Fotoniki i Mikrosystemów / Faculty of Electronics, Photonics and Microsystems
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Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	

#### 2. Publication record

*Up to 10 most important papers published over the period of previous 10 years.*

No.	Description (authors, publication title, journal / conference, DOI)	Publication year
1.	Szarek, D., Jabłoński, I., Zimroz R., Wyłomańska, A.: Non-Gaussian feature distribution forecasting based on ConvLSTM neural network and its application to robust machine condition prognosis, Expert Systems with Applications, 2023, in press	2023
2.	Panek M., Pomykała A., Jabłoński I., Woźniak M.: 5G/5G+ network management employing AI-based continuous deployment, Applied Soft Computing, 2023, vol. 134, p. 109984.	2023
3.	Szarek, D., Jabłoński, I., Krapf, D., Wyłomańska, A.: Multifractional Brownian motion characterization based on Hurst exponent estimation and statistical learning, Chaos, 2022, vol. 32, no. 8, p. 083148	2022
4.	Morello R., Ruffa F., De Capua C., Jabłoński I.: An IoT based ECG system to diagnose cardiac pathologies for healthcare applications in smart cities, Measurement, 2022, vol. 190, p. 110685	2022
5.	Jabłoński I., Morello R., Mroczka J.: The complexity and variability mapping for prediction and explainability of the sleep apnea syndrome. IEEE Sensors J., 2021, vol. 21. no. 13, 14203-14212	2021
6.	Lay-Ekuakille A., Massaro A., Singh S. P., , Jabłoński I., Rahman M. Z. U., Spano F.: Optoelectronic and nanosensor detection systems: a review, IEEE Sensors J., 2021, vol. 21, no. 11, 12645-12653	2021
7.	Szarek D., Sikora G., Balcerek M., Jabłoński I., Wyłomańska A.: Fractional dynamics identification via intelligent unpacking of the sample autocovariance function with deep learning methods, Entropy, 2020, vol. 22, e22111322	2020
8.	De Capua C., Morello R., Jabłoński I.: Active and eddy current pulsed thermography to detect surface crack and defect in historical and archaeological discoveries. Measurement, 2018, vol. 116, 676-684	2018



9.	Jabłoński I.: Graph signal processing in applications to sensor networks, smart grids and smart cities, IEEE Sensors J., 2017, vol.17, no. 23, 7659-7666	2017
10.	Jabłoński I.: Integrated living environment: Measurements in modern energy efficient smart building with implemented the functionality of telemedicine. Measurement, 2017, Vol. 101, 211-235	2017

### 3. Projects and grants

List of the most important 5 projects/grants with basic description including: title, source(s) of funding, name of the call, role in the project (e.g., principal investigator).

1.	Role in the project (e.g., principal investigator, work package leader, etc.)	Investigator
	Project title	Metody i algorytmy obserwacji struktur płuc i ich patofizjologii w modelu rekrutacji ostrej niewydolności oddechowej
	Sources of funding	NCN
	Name of the call	Opus 6
	Implementation period	2014-2017
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator
	Project title	Analiza danych pomiarowych w ocenie mechanicznych właściwości układu oddechowego techniką przerwaniową
	Sources of funding	MNiSW / NCN
	Name of the call	
	Implementation period	2009-2012
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	Investigator
	Project title	Rozproszony system pomiarowy do monitorowania pacjentów cierpiących na schorzenia układu oddechowego
	Sources of funding	NCBiR
	Name of the call	
	Implementation period	2007-2010
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	
	Project title	
	Sources of funding	
	Name of the call	
	Implementation period	
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	
	Project title	
	Sources of funding	



	Name of the call	
	Implementation period	

#### 4. International experience

*Brief description of international cooperation and experience (e.g., research stays, cooperation with foreign entities, coordination or participation in international projects or programmes, keynote speeches and presentations delivered at renowned international conferences, visiting professor stays, invited lectures).*

No.	Description	Year(s)
1.	Fraunhofer Institute for Photonic Microsystems, Germany, Associate Researcher, Team Lead for the AI-Based Systems	2022-2023
2.	Brandenburg University of Technology Cottbus-Senftenberg, Germany, Associate Researcher	2022-2023
3.	Bell Laboratories, Dept. of Algorithms, Analytics, Augmented Intelligence & Devices, Murray Hill (US), Cambridge (UK), Espoo (Finland) – research field: <i>Augmented Human Sensing</i>	2019-2022

#### 5. Experience in teaching doctoral students

*Brief description of experience in teaching doctoral students (e.g., courses in doctoral schools and PhD studies, summer/winter schools for doctoral students, tutorials, trainings, etc.).*

No.	Description	Year(s)
1.	<i>Analysis of experimental data – part I</i> (lecture), course in PhD studies programme (WUT)	2015-2021
2.	<i>Analysis of experimental data – part II</i> (lecture), course in PhD studies programme (WUT)	2015-2021
3.	Research skills – course in doctoral school (WUT) programme	2021-2023

#### 6. List of supervised doctoral students

*List of all supervised doctoral students that defended the PhD including: name of the student, dissertation title, year of awarding PhD.*

No.	Name, surname	Dissertation title	Year of awarding PhD
1.	Michał Panek	Zastosowanie metod sztucznej inteligencji w analizie stanu sieci telekomunikacyjnej	Ongoing
2.			
3.			

#### 7. Prizes and awards

*The most important national and international prizes and awards related to research, development and teaching activities.*

No.	Description	Year
1.	Silver Medal for Long Service	2022
2.	Laureate of the 'TOP 500 Innovators' programme	2012



3.	Prize of Chancellor of Wrocław University of Technology	2004, 2008, 2009, 2011, 2013, 2015
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## 8. Other significant achievements

*Information on other significant achievements related to research, development and teaching activities.*

1<sup>st</sup> Prize (category: business-oriented project) during 1<sup>st</sup> AI/ML Conference by Bell Labs, June 2018, Espoo, Finland