15.03.22

Qualifications of the individual for defining area of expertise

Name/ Birth year	**Jaromir Przybylo** / 1975
Title (year degree obtained) / Prof. status	MSc. CS. (2000) research assistant Ph. D. CS. (2008) / associate professor
Address[1]	AGH University of Science and Technology, 30, Mickiewicza Ave. 30-059 Krakow, Poland phone: (+4812) 6173873 przybylo@agh.edu.pl, http://home.agh.edu.pl/przybylo/
Area of expertise[2]	biomedical signal and image processing, human-computer interaction, mixed-reality computer vision, machine and deep learning.
Relevant (best) publications[3]	1. Przybyło, J. (2022). A deep learning approach for remote heart rate estimation. Biomedical Signal Processing and Control, 74, 103457. **IF: 3.880** 2. Przybyło, J. (2019). Continuous Distant Measurement of the User's Heart Rate in Human-Computer Interaction Applications. Sensors, 19(19), 4205. **IF: 3.576** 3. Przybyło, J., Kańtoch, E., & Augustyniak, P. (2019). Eyetracking-based assessment of affect-related decay of human performance in visual tasks. Future Generation Computer Systems, 92, 504-515. **IF : 4.639** 4. Przybyło, J., & Jabłoński, M. (2019). Using Deep Convolutional Neural Network for oak acorn viability recognition based on color images of their sections. Computers and Electronics in Agriculture, 156, 490-499. **IF : 2.427** 5. Przybyło, J., Kańtoch, E., & Augustyniak, P. (2018). A concept of bimodal visual emotion recognition in computer users. AfCAI 2018 - proceedings of the 2nd workshop on Affective Computing and Context Awareness in Ambient Intelligence, ed. by Grzegorz J. Nalepa, [et al.]. ISSN 1613-0073 ; vol. 2166. 6. Jabłoński, M., & Przybyło, J. (2017). Evaluation of MoG video segmentation on GPU-based HPC system. Computing and Informatics, 35(5), 1141-1159. IF **0.488** 7. Przybylo, J., & Dobosz, P. (2017, September). Functional Endoscopic Sinus Surgery with Head Mounted Display and Video Analysis. In Polish Conference on Biocybernetics and Biomedical Engineering (pp. 182-191). Springer, Cham. 8. Przybyło, J., Kańtoch, E., Jabłoński, M., & Augustyniak, P. (2016). Distant Measurement of Plethysmographic Signal in Various Lighting Conditions Using Configurable Frame-Rate Camera. Metrology and Measurement Systems, 23(4), 579-592. **IF: 1.598** 9. Przybyło, J. (2012). Vision based facial action recognition system for people with disabilities. In Information Technologies in Biomedicine (pp. 577-588). Springer, Berlin, Heidelberg.
Publications statistics:	**Google Scholar:** Publications: 38, Citations: 194, H-index: 9 **Web of Science**: Publications: 14, Citations: 68, H-index: 5
Other[4]	*didactic responsibilities* 2000 - to date Lecturer at AGH-UST, " Human-computer Interfaces" Lecturer at AGH-UST, " Multimodal Interfaces"

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[1] Organisation, street address, telephone, email, web page
[2] With keywords characterising your field(-s) of expertise
[3] Max. 10
[4] List didactic, major grants, conference responsibilities, professional recognitions, memberships, journals, patents, etc.

Lecturer at AGH-UST, " Sensors and machine intelligence"
Lecturer at AGH-UST, " Telemedicine"
Lecturer at AGH-UST, " Virtual Reality and Stereovision Systems"

2000 - to date, AGH-UST, supervision of 24 Master's, 28 BSc students, with their thesis/diploma

major grants (as Investigator)
Tile: Functional model of automaton, comprising machine vision system, for scarification and assessment of acorn viability by means of automatic recognition of topography of mummification changes
Period: 2015-2018
Centre: AGH University of Science and Technology (BS3/A8/134/2015)
Funds: National Centre of Research and Development of the Republic of Poland (NCBiR): 2 370 600 PLN

Title: Intelligent surveillance system for monitoring of important public spaces and buildings SIMPOZ
Period: 2010-2013
Centre: AGH University of Science and Technology (0128/R/T00/2010/12)
Funds: State Committee for Scientific Research: 2 086 980,00 PLN

Title: Investigation of multimodal sensing of selected physiological parameters in human with assessment of their utility in the premise infrastructure of disabled
Period: 2008-2012
Centre: AGH University of Science and Technology (N N518 426736)
Funds: State Committee for Scientific Research: EUR 212.000
Number of persons: 15

reviewer of papers submitted to
- Sensors (ISSN 1424-8220)
- Applied Optics Journal
- Information Sciences
- Image Processing & Communications Journal
- others

cooperation with industry:
- * 1999 – to date: ONT Oprogramowanie Naukowo-Techniczne (MathWorks distributor)

science popularization:
- Managing YouTube channel: https://www.youtube.com/c/StrefaInżynieriiBiomedycznej/
- Organization and participation in the presentation of the results of students' master's thesis "*The use of augmented reality techniques to support human perception*" in regional television (TVP3 Krakow)
- Article in PAP Science in Poland : "*Augmented Reality*"
- 22nd Science Picnic of Polish Radio and the Copernicus Science Centre 2018. Demonstration title: Remote heart rate detection using ordinary camera.
- 2019r ITHACA
  Demonstration title: Remote heart rate detection using ordinary camera