Candidate supervisor's information summary form
maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title: ***Michał Kruk***, D.Sc., Prof. SGGW (Warsaw Uni. Life Sc.)	
Discipline/ disciplines of science	Information and communication technology
Professional development (degrees and titles) in chronological order	***M.Sc.*** – information technologies (Warsaw University of Technology., Poland), ***2004***. ***Ph.D.*** – electrotechnics (Warsaw University of Technology., Poland), ***2008***. ***D.Sc.*** - discipline: automation and robotic (Warsaw University of Technology., Poland) - **2017**.
Most important publications/patens over the last 3 years (maximum 10)	1. Swiderski, Bartosz; Osowski, Stanislaw; Kurek, Jaroslaw; Kruk, Michal; Lugowska, Iwona; Rutkowski, Piotr; Barhoumi, Walid;,Novel methods of image description and ensemble of classifiers in application to mammogram analysis,Expert Systems with Applications,81,,67-78,2017,Pergamon 2. Kruk, Michal; Kurek, Jaroslaw; Osowski, Stanislaw; Koktysz, Robert; Swiderski, Bartosz; Markiewicz, Tomasz; Ensemble of classifiers and wavelet transformation for improved recognition of Fuhrman grading in clear-cell renal carcinoma,Biocybernetics and Biomedical Engineering,37,3,357-364,2017,Elsevier 3. Kruk, Michał; Świderski, Bartosz; Śmietańska, Katarzyna; Kurek, Jarosław; Chmielewski, Leszek J; Górski, Jarosław; Orłowski, Arkadiusz; ,Detection of 'Orange Skin'Type Surface Defects in Furniture Elements with the Use of Textural Features,IFIP International Conference on Computer Information Systems and Industrial Management,,,402-411,2017,"Springer, Cham" 4. Kurek, Jaroslaw; Wieczorek, Grzegorz; Kruk, Bartosz Swiderski Michal; Jegorowa, Albina; Osowski, Stanislaw; ",Transfer learning in recognition of drill wear using convolutional neural network,2017 18th International Conference on Computational Problems of Electrical Engineering (CPEE),,,1-4,2017,IEEE 5. "Dhahbi, Sami; Barhoumi, Walid; Kurek, Jaroslaw; Swiderski, Bartosz; Kruk, Michal; Zagrouba, Ezzeddine; ,False-positive reduction in computer-aided mass detection using mammographic texture analysis and classification,Computer Methods and Programs in Biomedicine,160,,75-83,2018,Elsevier 6. Kurek, Jaroslaw; Wieczorek, Grzegorz; Swiderski, Bartosz; Kruk, Michal; Jegorowa, Albina; Gorski, Jaroslaw; ",Automatic Identification of Drill Condition During Drilling Process in

	Standard Laminated Chipboard with the Use of Long Short-Term Memory (LSTM),19th International Conference Computational Problems of Electrical Engineering,,,1-4,2018,IEEE 7. Kurek, J; Świderski, B; Osowski, S; Kruk, M; Barhoumi, W; Deep learning versus classical neural approach to mammogram recognition,Bulletin of the Polish Academy of Sciences. Technical Sciences,66,6,,2018, 8. Jegorowa, Albina; Górski, Jarosław; Kurek, Jarosław; Kruk, Michał;,Initial study on the use of support vector machine (SVM) in tool condition monitoring in chipboard drilling,European Journal of Wood and Wood Products,,,1-3,2019,Springer Jegorowa, Albina; Górski, Jarosław; Kurek, Jarosław; Kruk, Michał; Use of nearest neighbors (k–nn) algorithm in tool condition identification in the case of drilling in melamine faced particleboard,Maderas. Ciencia y Tecnología,22,2,,2020,
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	27.11.2013, Auxiliary supervisor, *Testing the dispersion properties of soils used for waterproofing hydrotechnical structures*
Project/grants achievements (from the last 10 years)	1. N506 395135, 2. N506 218039, 3. 2011/03/D/ST8/04309, , 4. TANGO1/2666877/NCBR/2015,
Topic – research problem – for which the candidate supervisor seeks a doctoral student	computer vision, image processing, diagnostics systems, image analysis, artificial intelligence, numerical methods, biomedicine, neural networks
<u>Contact details:</u> Faulty/Institute E-mail address Tel.	Faculty of Applied Informatics and Mathematics / Institute of Information Technology (**Dean**) Michal_Kruk@sggw.edu.pl phone: +48 22 59 372 00