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

Name and surname, degree, title: ***Bartosz Świderski***, 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**. – computer science and econometrics (University of Lodz) - **2002** **Ph.D**. – signal processing (Warsaw University of Technology) - **2007** **D.Sc**. - biocybernetics and biomedical engineering, specialization: artificial intelligence (Warsaw University of Technology) - **2018**
Most important publications/patens over the last 3 years (maximum 10)	1. "Ensemble of classifiers based on deep learning for medical image recogition", F. Gil, S. Osowski, **B. Świderski**, M. Słowińska, Metrology and Measurement Systems, Vol. 30, ISSN 0860-8229 , 2023 2. "*Random CNN structure–tool to increase generalization ability in deep learning*", **B. Świderski**, S. Osowski, G. Gwardys, J. Kurek, M. Słowińska, I. Ługowska, EURASIP Journal on Image and Video Processing, 2022 3. "*Random Deep Neural Network for Melanoma Recognition*", **B. Świderski**, S. Osowski, P. Olszewski, Ł. Gielata, M. Słowińska, I. Ługowska, International Joint Conference on Neural Networks (IJCNN), 2021 4. "*Deep neural system for supporting tumor recognition of mammograms using modified GAN*", **B. Świderski**, Ł. Gielata, P. Olszewski, S. Osowski, M. Kołodziej, Expert Systems with Applications, 164, 113968, **2021** 5. "*Application of Siamese Networks to the Recognition of the Drill Wear State Based on Images of Drilled Holes*", J. Kurek, I. Antoniuk, **B. Świderski**, A. Jegorowa, M. Bukowski, Sensors 20 (23), 6978, **2020** 6. "*Context-Based Segmentation of the Longissimus Muscle in Beef with a Deep Neural Network*", K. Talacha, **B. Świderski**, J. Kurek, M. Kruk, A. Półtorak, L. J. Chmielewski, G. Wieczorek, I. Antoniuk, J. Pach, A. Orłowski, Machine Graphics and Vision, 28, **2019** 7. "*Data Augmentation Techniques for Transfer Learning Improvement in Drill Wear Classification Using Convolutional Neural Network*", J. Kurek, I. Antoniuk, J. Górski, A. Jegorowa, **B. Świderski**, M. Kruk, G. Wieczorek, J. Pach, A. Orłowski, J. Aleksiejuk-Gawron, Machine Graphics & Vision, 28, **2019** 8. "*Classifiers Ensemble of Transfer Learning for Improved Drill Wear Classification Using Convolutional Neural Network*", J. Kurek, I. Antoniuk,

	J. Górski, A. Jegorowa, **B. Świderski**, M. Kruk, G. Wieczorek, J. Pach, A. Orłowski, J. Aleksiejuk-Gawron, Machine Graphics & Vision, 28, **2019** 9. "*Textural Features Based on Run Length Encoding in the Classification of Furniture Surfaces with the Orange Skin Defect*", J. Pach, L. J. Chmielewski, A. Orłowski, M. Kruk, J. Kurek, **B. Świderski**, I. Antoniuk, G. Wieczorek, K. Śmietańska, J. Górski, Machine Graphics & Vision, 28, **2019** 10. „*BCT boost segmentation with U-net in TensorFlow*", G. Wieczorek, I. Antoniuk, J. Kurek, L. Chmielewski, **B. Świderski**, M. Kruk, J. Pach, A. Orłowski, Machine Graphics and Vision 28, **2019**
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	Assistant supervisor: M.Sc. Grzegorz Wieczorek, „Computer analysis of microscopic images supporting the diagnosis of ductal carcinoma breast cancer", **2017** **Reviewer:** **Ph.D. theses,** *"Three-dimensional reconstruction of the intestinal glands based on the sequence of microscopic images"*, R. I. Roszczyk, Warsaw University of Technology, Information and communication technology, **2021**
Project/grants achievements (from the last 10 years)	NVIDIA GPU Grant Program, Academic Program Team, **2018**
Topic – research problem – for which the candidate supervisor seeks a doctoral student	Development of artificial intelligence (especially deep learning methods). Application of artificial intelligence methods in biomedicine. Random Network, Siamese Network, Generative Adversarial Network
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