

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

Name and surname, degree, title: <b>Bartosz Świdorski</b> , D.Sc., Prof. SGGW (Warsaw Uni. Life Sc.)	
Discipline/ disciplines of science	Information and communication technology
Professional development (degrees and titles) in chronological order	<p><b>M.Sc.</b> – computer science and econometrics (University of Lodz) - <b>2002</b></p> <p><b>Ph.D.</b> – signal processing (Warsaw University of Technology) - <b>2007</b></p> <p><b>D.Sc.</b> - biocybernetics and biomedical engineering, specialization: artificial intelligence (Warsaw University of Technology) - <b>2018</b></p>
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> <li>1. "<i>Deep neural system for supporting tumor recognition of mammograms using modified GAN</i>", <b>B. Świdorski</b>, Ł. Gielata, P. Olszewski, S. Osowski, M. Kołodziej, Expert Systems with Applications, 164, 113968, <b>2021</b></li> <li>2. "<i>Random CNN Structure–Tool to Increase Generalization Ability in Deep Learning</i>", <b>B. Świdorski</b>, S. Osowski, G. Gwardys, J. Kurek, M. Słowinska, I. Lugowska, The International Joint Conference on Neural Networks, IJCNN <b>2021</b> - accepted</li> <li>3. "<i>Application of Siamese Networks to the Recognition of the Drill Wear State Based on Images of Drilled Holes</i>", J. Kurek, I. Antoniuk, <b>B. Świdorski</b>, A. Jegorowa, M. Bukowski, Sensors 20 (23), 6978, <b>2020</b></li> <li>4. "<i>Context-Based Segmentation of the Longissimus Muscle in Beef with a Deep Neural Network</i>", K. Talacha, <b>B. Świdorski</b>, J. Kurek, M. Kruk, A. Półtorak, L. J. Chmielewski, G. Wieczorek, I. Antoniuk, J. Pach, A. Orłowski, Machine Graphics and Vision, 28, <b>2019</b></li> <li>5. "<i>Data Augmentation Techniques for Transfer Learning Improvement in Drill Wear Classification Using Convolutional Neural Network</i>", J. Kurek, I. Antoniuk, J. Górski, A. Jegorowa, <b>B. Świdorski</b>, M. Kruk, G. Wieczorek, J. Pach, A. Orłowski, J. Aleksiejuk-Gawron, Machine Graphics &amp; Vision, 28, <b>2019</b></li> <li>6. "<i>Classifiers Ensemble of Transfer Learning for Improved Drill Wear Classification Using Convolutional Neural Network</i>", J. Kurek, I. Antoniuk, J. Górski, A. Jegorowa, <b>B. Świdorski</b>, M. Kruk, G. Wieczorek, J. Pach, A. Orłowski, J. Aleksiejuk-Gawron, Machine Graphics &amp; Vision, 28, <b>2019</b></li> <li>7. "<i>Textural Features Based on Run Length Encoding in the Classification of Furniture Surfaces with the Orange Skin Defect</i>", J. Pach, L. J. Chmielewski, A. Orłowski, M. Kruk, J. Kurek, <b>B. Świdorski</b>, I. Antoniuk, G. Wieczorek, K. Śmietańska, J. Górski, Machine Graphics &amp; Vision, 28, <b>2019</b></li> </ol>

	8. „BCT boost segmentation with U-net in TensorFlow”, G. Wieczorek, I. Antoniuk, J. Kurek, L. Chmielewski, <b>B. Świderski</b> , M. Kruk, J. Pach, A. Orłowski, Machine Graphics and Vision 28, <b>2019</b>
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”, <b>2017</b> <b>Reviewer:</b> <b>Ph.D. theses</b> , “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, <b>2021</b>
Project/grants achievements (from the last 10 years)	NVIDIA GPU Grant Program, Academic Program Team, <b>2018</b>
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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