

Candidate supervisor's information summary form

maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title: Bartosz Świdorski , D.Sc., Prof. SGGW (Warsaw Uni. Life Sc	
Scientific discipline/ disciplines	Information and communication technology
Professional development (degrees and titles) in chronological order	<p>M.Sc. – computer science and econometrics (University of Lodz) - 2002</p> <p>Ph.D. – signal processing (Warsaw University of Technology) - 2007</p> <p>D.Sc. - biocybernetics and biomedical engineering, specialization: artificial intelligence (Warsaw University of Technology) - 2018</p>
Most important publications/ patents in the last 3 years (maximum 10)	<p>1. C.Chudobiński, B.Świdorski, I.Antoniuk, J.Kurek, "Enhancements in Radiological Detection of Metastatic Lymph Nodes Utilizing AI-Assisted Ultrasound Imaging Data and the Lymph Node Reporting and Data System Scale", <i>Cancers</i> 16 (8), 1564, 2024</p> <p>2. B. Swiderski, S. Osowski, J. Kurek, C. Chudobinski, "Random Ensemble of Extended CNN Structures for Medical Image Recognition", <i>International Work-Conference on Artificial Neural Networks</i>, Springer, 483-493, 2023</p> <p>2. "Ensemble of classifiers based on deep learning for medical image recognition", F. Gil, S. Osowski, B. Świdorski, M. Słowińska, <i>Metrology and Measurement Systems</i>, Vol. 30, ISSN 0860-8229, 2023</p> <p>3. "Random CNN structure–tool to increase generalization ability in deep learning", B. Świdorski, S. Osowski, G. Gwardys, J. Kurek, M. Słowińska, I. Ługowska, <i>EURASIP Journal on Image and Video Processing</i>, 2022</p> <p>4. "Random Deep Neural Network for Melanoma Recognition", B. Świdorski, S. Osowski, P. Olszewski, Ł. Gielata, M. Słowińska, I. Ługowska, <i>International Joint Conference on Neural Networks (IJCNN)</i>, 2021</p> <p>5. "Deep neural system for supporting tumor recognition of mammograms using modified GAN", B. Świdorski, Ł. Gielata, P. Olszewski, S. Osowski, M. Kołodziej, <i>Expert Systems with Applications</i>, 164, 113968, 2021</p> <p>6. "Application of Siamese Networks to the Recognition of the Drill Wear State Based on Images of Drilled Holes", J. Kurek, I. Antoniuk, B. Świdorski, A. Jegorowa, M. Bukowski, <i>Sensors</i> 20 (23), 6978, 2020</p>

<p>Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral programmes/procedures) in chronological order</p>	<p>Assistant supervisor: M.Sc. Grzegorz Wieczorek, „Computer analysis of microscopic images supporting the diagnosis of ductal carcinoma breast cancer”, 2017 Reviewer: Ph.D. theses, “<i>Three-dimensional reconstruction of the intestinal glands based on the sequence of microscopic images</i>”, R. I. Roszczyk, Warsaw University of Technology, Information and communication technology, 2021</p>
<p>Project/grants achievements (in the last 10 years)</p>	<p>NVIDIA GPU Grant Program, Academic Program Team, 2018</p>
<p>Topic – research problem – for which the candidate supervisor seeks a doctoral student</p>	<p>Development of artificial intelligence (especially deep learning methods). Application of artificial intelligence methods in biomedicine. Random Network, Siamese Network, Generative Adversarial Network, UNET3D, Pose Estimation, Alpha Fold</p>
<p><u>Contact details:</u> Institute E-mail address Tel.</p>	<p>Faculty of Applied Informatics and Mathematics / Institute of Information Technology, Department of Artificial Intelligence e-mail:bartosz_swiderski@sggw.edu.pl, http://www.wzim.sggw.pl/bartosz_swiderski/ phone: 22 59 37 241</p>