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

Name and surname, degree, title: ***Ryszard Kozera***, D.Sc., Prof. SGGW (Warsaw Uni. Life Sciences – SGGW)	
Academic discipline/disciplines	Information and communication technology
Professional development (degrees and titles) in chronological order	***M.Sc.:*** maths (Warsaw Uni.), ***1985.*** ***PhD:*** comp. sc. (Flinders Uni. South Australia), ***1991.*** ***Dr.:*** maths (Warsaw Uni.), ***1992*** – recognition of PhD. ***D.Sc.:*** technical sc., comp. sc. (Silesian Uni. Tech.), ***2006.***
Most important publications/ patents in the last 3 years (maximum 10)	***1.*** "Machine Learning-Driven Soil Fungi Identification Using Automated Imaging Techniques", K. Struniawski, ***R. Kozera***, A. Konopka et al., Appl. Sc.-Basel, 16(2), 1-28, ***2026.*** ***2.***"Asymptotics in curve estimation by modified cubic spline and exponential parameterization", ***R. Kozera***, L. Noakes, & M. Wilkołazka LNCS 15908, Int. Conf. Comp. Sc. (ICCS'25, Singapore), 316-331, ***2025***. ***3.***"Automated imaging and machine learning of soil bacteria classification: challenges and insights", A. Konopka, ***R. Kozera***, L. Sas-Paszt et al., Eng. Appl. Art. Intell., 159C, 1-9, ***2025.*** ***4.***"Classification of blackcurrant genotypes by ploidy levels on stomata microscopic images with deep learning: convolutional neural networks with vision transformers", A. Konopka, ***R. Kozera***, A. Marasek-Ciołakowska et al., Appl. Sc.-Basel., 15(16), 1-14, ***2025.*** ***5.***"Automated identification of soil fungi and chromista through convolutional neural networks", K. Struniawski, ***R. Kozera***, P. Trzciński et al., Eng. Appl. Art. Intell., 127B, 1-12, ***2024.*** ***6.*** "TfELM: Extreme Learning Machines framework with Python and Tensor Flow":, K. Struniawski & ***R. Kozera***, SoftwareX, 27, 1-9, ***2024.*** ***7.*** "Extreme learning machine for identifying soil-dwelling microorganisms cultivated on agar media":, K. Struniawski & ***R. Kozera***, P. Trzciński et al., Scientific Reports, 14, 1-23, ***2024***. ***8.***"Exploring Apples' Silicon potential from simulation and optimization perspective",K. Struniawski, A. Konopka & ***R. Kozera***, LNCS 14836, Int. Conf. Comp. Sc. (ICCS'24, Malaga), 35-42, ***2024***. ***9.***"Identification of selected soil bacteria genra based on their geometric and dispersion features", A. Konopka, ***R. Kozera***, L. Sas-Paszt et al., PLoS ONE, 18(10), 1-11, ***2023***. ***10.***"Optimal knots selection in fitting degenerate reduced data", ***R. Kozera***, L. Noakes, LNCS 10475, Int. Conf. Comp. Sc. (ICCS'23, Prague), 439-453, ***2023.***

Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	1. ***Dr S. Collings*** (maths & comp. sc.), The Uni. Western Australia, Perth, Australia (***conferred*** in ***2007***) - "Frontier Points Theorems & Methods for Comp. Vision". 2. ***Dr M. Dolecki*** (comp. sc.), Silesian Uni. Tech., Gliwice, Poland (***conferred*** in ***2014***) - "Classification of Synchronization Time for Tree Parity Machine Used for Reconciliation of Cryptographic Keys". 3. ***Dr M. Wilkołazka*** (comp. sc.), Silesian Uni. Tech., Gliwice, Poland ***(conferred with distinction*** in ***2024***) – „Interpolation of Reduced Data Based on Cubic Polynomials". 4. ***Dr K. Struniawski*** (comp. sc. & communication technology), Polish-Japanese Academy Inf. Technology, Warsaw, Poland (***conferred with distinction*** in ***2025***) – "Optimization and Applications of Extreme Learning Machine Method". 5. ***MSc A. Konopka*** (comp. sc. & communication technology) – ***initiated doctoral procedures*** in ***2026***. Reviewer: 6 Ph.D. theses (Australia, New Zealand, Poland, Singapore, United Arab Emirates), 1 D.Sc. thesis and 1 D.Sc. monograph referee (both in Poland).
Achievements in the area of projects/grants (in the last 5 years)	***a)*** Participation in EU program Interreg Project Brandenburg – Poland (BBPL0300105) Oder Together, SGGW, Poland (+2 partners from Germany and 2 from Poland), 2025-2028. ***b)*** Visiting Research Fellowships, School of Physics, Mathematics and Computing., Uni. of Western Australia, Perth, Australia, 2025.
Subject area of the research project for which the candidate student is being recruited	Computer vision, image analysis, artificial intelligence, numerical methods, optimization, data modelling, interpolation, applied mathematics in computer science and engineering (e.g. biomedicine, trajectory and surface modelling, 3D reconstruction, noise filtering or neural networks).
<u>Contact details:</u> Institute E-mail address Telephone number	Faculty of Applied Informatics and Mathematics / Institute of Information Technology (***The Director***), Department of IT Systems ryszard_kozera@sggw.edu.pl or ryszard.kozera@gmail.com phone: +48 22 59 372 79