



INSTITUTION: Gdańsk University of Technology, Faculty of

Electronics, Telecommunications and Informatics

CITY: Gdańsk

POSITION: Machine learning specialist

POSTED: 28.11.2024 EXPIRES: 27.12.2024

TASKS / ROLE

• this position is intended for a researcher in Machine Learning for predictive maintenance of offshore wind turbines, whose tasks will include:

- development and adaptation of ML algorithms for the analysis of time series of measurement data for classification and prediction tasks
- implementation and optimization of ML models on a cloud computing platform
- collaborative writing of research papers for international conferences and journals in the field of artificial intelligence and its applications in wind Energy
- preparing technical reports for an international consortium of a European research project

REQUIREMENTS

- Ph.D. in Computer Science or Engineering, Electrical or Mechanical Engineering, Physics or other related technical field
- proven track of professional academic or industrial experience of at least 3 years (reference letter)
- proven track record of industrial/academic activity in advancing the state-of-the-art of machine learning (list of publications)
- hands-on experience adapting the following technologies in the development of novel technology-based approaches as part of research projects: NumPy, SciPy, scikit-learn, TensorFlow, Pytorch, Keras, etc.
- strong and proven end-user relationship skills including the ability to discover the true technical challenges and requirements associated with opportunities, recommending alternative technical approaches, and shaping future opportunities
- understanding of modern deep learning architectures, including convolutional neural networks, recurrent neural network and transformers
- Python proficiency
- proficiency in developing, training, and deploying models both in cloud platforms as well as on-prem resources. Any experience deploying models in various Federated Learning schemes is highly desired
- proficient in data exploration techniques and tools
- good communication skills, able to explain model training and performance results to a non-computer science audience
- good written and oral communication skills in English for preparing scientific papers and conference presentations conveying complex technical information clearly and coherently
- must be a person allowed to work in Poland and to travel within the Schengen (EU) zone





ADDITIONAL REQUIREMENTS

- track record of extending ML tools and algorithms for new challenges (list of publications)
- ability to work in an interdisciplinary research team composed of members from academia and industry formed to conduct competitive research
- practical understanding of Physics Informed Machine Learning principles and models
- experience programming machine learning algorithms for GPUs
- understanding of Deep Neural Networks in analyzing time-series SCADA data
- understanding adapting ML algorithms and tools with operational workflows deployed on cloud platforms

BENEFITS

- pay range from 11,000 PLN (2,580 EUR) up to 16,000.00 PLN (3,750 EUR) gross salary. Its final level will be determined by considering all factors listed above during evaluation of the winning application based on the education, experience, knowledge, skills, and abilities of the candidate. The upper limit of the pay range is not a guarantee of compensation or salary
- opportunity to work in an international team of experts with an established reputation in the area of design and operation of offshore wind farms under the umbrella of European research programs
- access to the state-of-the-art TASKcloud operated by Gdańsk University of Technology (Gdańsk Tech)
- unlimited access to the university library and all digital libraries licensed to Gdańsk Tech, including IEEE Xplore and ACM DL
- on campus there are: refreshment kiosks, relaxation areas and free parking lot
- work in a well-connected Tri-city agglomeration (trams, busses, fast city trains, bike paths, etc) with healthy and attractive recreational surroundings (marinas, sea beaches, forests, lakes, etc.) and historical places

DOCUMENTS

- CV including personal details, education and qualifications, employment history, certificates (if any), academic/professional achievements and brief summary of the research record based on up to FIVE best publications authored/co-authored by the candidate
- full list of publications with bibliometric parameters (citations, IFs)
- at least one letter of reference signed by an active senior faculty member at a University or Research Institute

PLANNED DATE OF COMPETITION ENDS: 31.01.2025
PLANNED DATE OF EMPLOYMENT: 01.03.2025

PLACE AND FORM OF THE OFFERS: Electronically to the e-mail address: magkwasn@pq.edu.pl

CONTACT E-MAIL ADDRESS: bogwiszn@pg.edu.pl

IN THE TITLE OF E-MAIL, PLEASE ENTER:

ML specialist - offshore

On-line interviews will be recorded with the candidate's consent.

The contest may be closed without selecting a candidate. We will contact the selected candidates.





Please include following clause:

"In accordance with Article 6 (1) (a) of the General Data Protection Regulation of 27 April 2016 (EU Journal of Laws L 119, of 04.05.2016) (GDPR) I hereby agree to the processing of personal data included in my job offer by the Gdańsk University of Technology (Politechnika Gdańska), ul. Narutowicza 11/12, 80-233 Gdańsk for the purposes required for recruitment."

In accordance with Article 13 of the General Data Protection Regulation of 27 April 2016 (EU Journal of Laws L 119, of 04.05.2016)(GDPR) we hereby inform that:

- 1. The Data Controller presented in the job offer is Gdańsk University of Technology (Politechnika Gdańska), ul. Narutowicza 11/12, 80-233 Gdańsk (postal code: 80-233).
- The Data Controller appointed the Data Protection Officer, who may be contacted via email address: dpo@pq.edu.pl
- 3. Your personal data will be processed for purposes related to servicing the Employer portal of Gdańsk University of Technology in accordance with Article 6 (1) (a) RODO (consent).
- 4. Your personal data will be stored until the recruitment process is completed or when employment is terminated. After this time your personal data will be archived and stored for the period of 10 years.
- 5. Granting the consent for data processing is voluntary but necessary for recruitment purposes.
- 6. The data provided will not be made available to third parties. The recipients of the data will only be institutions authorized by law.
- 7. You have the right to request access to the content of your data and the right to rectify, supplement, delete or limit processing, the right to data portability, the right to object to the processing, and the right to withdraw consent at any time. Moreover, you have the right to file a complaint with the supervisory authority in charge of personal data protection (i.e. the President of the Personal Data Protection Office).
- 8. Your data will not be subject to profiling.
- 9. The Data Controller will not transfer any personal data to a recipient in a third country or an international organization.