

## :: STUDIA II STOPNIA ::

Zgłoszenie tematu pracy dyplomowej na rok akademicki 2019/2020

<b>Promotor:</b>	<b>dr hab. Jozef Kapusta, prof. UP</b>
Temat pracy magisterskiej (j. polski, j.angielski):	Sieci neuronowe do identyfikacji fałszywych wiadomości <i>Neural Networks for Fake News Identification</i>
Zakres pracy i oczekiwane rezultaty praktyczne:	<p>Alongside increasing use of social networks, especially for communication, we observe the high increase in the distribution of false news, hoaxes and other half-truths in periodicals, as well as in society. The issue of actively looking for ways to prevent the interference of fake news on citizens' opinion is currently one of the European Commission's priorities.</p> <p>The diploma thesis is focused on the application of neural networks. The advantage of the usage of neural networks for prediction is that they are able to learn from examples only and that after their learning is finished, they are able to catch hidden dependencies.</p> <p>The aim of the practical part is to represent the functionality of the neural network using the model created in the Jupyter Notebook environment (Python) with API Keras (TensorFlow). The prediction model will serve to "fake news" identification. The model will be trained with fake and real news datasets from kaggle.com.</p>
Aspekt naukowy, problemowy, innowacyjny pracy:	Selection and implementation of neural network methods, analyzing „fake news” source data by machine learning methods.
*Oprogramowanie, język programowania, środowisko systemowe:	Jupyter Notebook environment (Python) with API Keras (TensorFlow).
*Środowisko uruchomieniowe	Windows or Linux
Dodatkowe wymagania i uwagi:	The diploma thesis will be written in English.
*Literatura:	<ol style="list-style-type: none"><li>1. Xichen Zhang, Ali A. Ghorbani.: An overview of online fake news: Characterization, detection, and discussion. In. Information Processing &amp; Management, Elsevier, 2019</li><li>2. De keersmaecker, J., Roets, A.: 2017. ‘Fake news’: Incorrect, but hard to correct. The role of cognitive ability on the impact of false information on social impressions. In: Intelligence, Vol. 65, 2017, pp 107-110, ISSN 0160-2896</li><li>3. Learn and use machine learning, online: <a href="https://www.tensorflow.org/tutorials/keras">https://www.tensorflow.org/tutorials/keras</a></li></ol>

\*pola opcjonalne