

## **CREATION OF ARAB GRAPHIC WRITINGS RECOGNITION PROGRAM**

*Turaqulov Sh. X<sup>1</sup> & Iskandarova S.N<sup>2</sup>*

*<sup>1</sup>Head of the Technical Support Department of the Information Technology Center of Samarkand State University, Samarkand, Uzbekistan*

*<sup>2</sup>Research and Innovation Center for Information and Communication Technologies at the Tashkent University of Information Technologies Named after Muhammad al Khorezmi, Tashkent, Uzbekistan*

### **ABSTRACT**

*The most effective results in the processing and recognition of images are achieved through the development of information technology, the introduction of new technologies. The TensorFlow library capabilities in the python programming environment are huge in getting effective results. It describes how to use open data sets to recognize Arabic graphics and to form datasets for additional letters for old Uzbek and Farsi text letters. Examples, advantages and analysis of the results obtained by the TensorFlow platform to perform calculations with python are given. The efficacy and mode of use of the convolutional neural network are described. Results were obtained from the use of open data sets via [www.kaggle.com](http://www.kaggle.com). The most effective methods of recognizing the given Arabic text are used, and only the results obtained are described, without the algorithms given in the references. CNN created a model for the data set letters, based on which the results were 90% recognizable.*

**KEYWORDS:** *Segmentation, CNN (Convolutional Neural Network), Tensorflow, Python, Neural Network, Recognition, Model*

---

### **Article History**

**Received: 02 Dec 2020 | Revised: 04 Dec 2020 | Accepted: 22 Dec 2020**

---