

## Adaptive text recognition algorithms

*Tokhirova Sarvinoz Gayratjon Kizi*

*Isakhanov Khushnidbek Murodiljanovich*

*Tashkent University Farg is a mother branch*

*Muhammad Al- Khorazmi in the name of information technologies*

**Abstract:** *Adaptable the text determination algorithms different different the text information types and the environment conditions automatic respectively adapt will receive methods and models work exit with depends has been research is the field . This algorithms natural the language again performance (NLP) and the car learning in the field main are components .*

*Adaptable the text determination of algorithms purpose hand writing automatic identify the signs optical recognition (OCR), text feeling analysis to make , information separate get the text classification and others such as different in applications the text information to determine accuracy and efficiency from raising consists of*

**Key words :** *adaptive algorithms , text identify , from data learning , automatic adaptation , many task , context seeing exit , NLP, machine study.*

### INTRODUCTION:

All electron document rotation in systems and print the text input in systems main from stages one the text signs recognize get - information graph from form - scan result - text to the shape transfer is known development long to history despite algorithms and sure pressed texts good who knows a lot numerous of algorithms existence is more complicated cases recognize get problem solution Not done. Poor quality recognition of documents accuracy more increase problem is born . In particular , Available algorithms scan as a result received graph from images texts to a person relatively low accuracy with



recognize in getting relatively low accuracy provides. Available has been problems class to emphasize ok , graphic image scan permission increase or scan settings change through improve possible it's not . .

*" Text determination in problems combined algorithms "*

Documents input systems in front standing main task time in its limitations them in text ( digital ) form show for characters is to determine . Recognition quality criteria input system to the goal looking differs . For example , on paper texts recognize get for personal program recognition the results next again work for acceptable to form deliver for necessary has been corrections the number with evaluated natural and objective quality criterion with is described . Operators by the results check with documents public input professional systems for recognition for reliability criterion less it's not . The document recognize get of quality objective criteria characters determination algorithms of work different stages own the results evaluation opportunity have requires to be . This at work the document recognize get of quality objective criteria attention directed without , documents input software of products one part as today's until the day collected recognize get algorithms will try to understand .

*" Electronic document rotation in systems in hand written the text again work and recognize get "*

Electronic document rotation to systems access information not only print textual documents , perhaps in hand written documents ( passport-visa from the service documents , questionnaires , from the population applications acceptance do ) to be also can From this except , electron to form transfer benefit which brings important technical information own into received many old in hand written documents there is .

By hand written the text recognize to get two main method available : current characters input mode recognize get ( interactive mode ) and before written documents recognize get ( passive mode ). First approach in real time in systems used , they pocket personal computers , communicators and another on devices in hand written characters for sensory input systems own into takes This the problem very efficient solution who does many algorithms there is . Symbols to determine accuracy reaches 98% and some cases known one hand writing for no training required . Enter information hint doer of the device trajectories ( stylus , pen and others ). Second approach using the problem solution who does systems recognize low get accuracy has ( about 70-75%) and known one hand writing and to write style requires adaptation . This systems paper from carriers information in input is used . In this case access information scanner or another digital from devices received are images . So by hand written the text again work and recognize get task different activity in the fields current and on demand have being , before written in hand written the text recognize get methods and algorithms work exit such of systems efficiency increases .

*" Text determination methods "*



Information from paper electron to the carrier transfer task not only document rotation in systems surface coming needs is also relevant within Modern information technologies humanity by collected information resources , if they electron to form converted if so , from them to use significant level simplification enable will give . The easiest and fast method - scanners using documents scan . Work result of the document digital image - graphic file . of information textual image graph from the image is preferable . This parameter information storage and transmission expenses significant level to reduce possibility gives also electronic from documents use and analysis of doing all possible has been scenarios done to increase possibility will give . That's why for , practical point of view by implication , eng big interest paper public information tools textual electron to the document translation is to do

In the case of ABBYY Finereader 9.0 Home Edition optical the text from recognition (OCR) technology used without software of supply quality features evaluation .

Information optical our detection program in our time not only office and at home in use , perhaps from the press previous stage publication also wide in doing spread Optical the text from recognition (OCR) technology which uses programs in librarianship ancient manuscripts Digitization is also old books reprint for is used . This article different different information sources recognize in getting statistics information again work process present is enough Such data time costs are also known one recognition in the case advantages better to evaluate help will give .

OCR software of supply quality features quantitative evaluation for we recognize in getting errors the number count , recognize to get accuracy assessment and the text of information one part recognize get for spent the time to count offer we do

*" Created characters determination methods common point of view "*

Various different of images structured ( printed ) characters recognize get different in nature objects in determining one series scientific and practical problems solution to do provides . Symbols to determine modern methods are also standard problems , such as text to determine and different objects on the surface pressed symbolic information recognize to get directed special tasks solution to do for is used . Current at the time the text determination for intended very a lot numerous programs available ( e.g. FineReader, Readiris , ScanSoft OmniPage , CuneiForm and others ). This of programs each one image again work and recognize get the problem solution of doing to himself characteristic offer does Basically , it is programs is commercial , therefore for to them included problems solution to do methods only them work to the exits known and they are which to tasks suitable to come and which tasks to perform able that it is not determination almost possible it's not . From this in addition to this of programs all of them executable modules in the form of present it is done while of programs their performance the work quality



and they are which uses mathematician models and algorithms to change analysis to do impossible does

This in the article character recognize get the problem solution of doing the most famous and wide spread out methods discussion will be done . Current at the time Created the problem solution in doing three main approach available : structural , attribute and template . Each method his own advantages and disadvantages have

The second the voice determination the problem solution in doing applied methods about common information will give . recognize get systems installed to the structure attention is given Briefly descriptions , as well as eng wide spread out features separate get methods ( such as MFCC and LPCC ), as well as classification methods ( vector quantization method , Gaussian mixture model , supporting vector machine ). Recognition systems evaluation and such evaluation the results present reach methods discussion will be done .

Dynamic recognize get speaker determination and check unites Dynamic identification to do is sample data in the base saved templates with to compare through sound example based on person determination process . Identification of the process result candidates is a list . Make it happen system defined in size the list work output or defined border based on the user candidates to the list input about decision acceptance to do can If in the system from the register has not passed user identification to do in the process participation reach possible if there is , they say.

## REFERENCES

1. Tokhirova Sarvinoz Gayratjon kizi, & Siddiqov Murodali. (2023). NATIONAL ECONOMY AND ITS MACROECONOMIC INDICATORS. *Best Journal of Innovation in Science, Research and Development*, 152–156. Retrieved from <https://www.bjisrd.com/index.php/bjisrd/article/view/980>
2. MILLIY IQTISODIYOT VA UNING MAKROIQTISODIY KO‘RSATKICHLARI. (2023). *Journal of Technical Research and Development*, 1(2), 402-409. <https://jtrd.mcdir.me/index.php/jtrd/article/view/81>
3. Обухов, В., & Тохилова, С. (2023). МИКРОПРОЦЕССОРНЫЕ СИСТЕМЫ И ИХ ПРОИСХОЖДЕНИЕ. *Journal of technical research and development*, 1(2), 32-37.
4. Mahmudova, M., & Toxirova, S. (2023, October). MULTISERVISLI TARMOQ XAVFSIZLIGIDA NEYRON TARMOQLARINI O‘RNI. In *Conference on Digital Innovation: "Modern Problems and Solutions"*.
5. TURANBAYEVNA, K. N., & XUSENOVNA, T. S. (2020). Development of Communicative Didactic Competence of High School Students. *International Journal of Innovations in Engineering Research and Technology*, 7(12), 45-47.



6. Toxirova, S. (2023). Python dasturida lug'atlar bilan ishlash . *Conference on Digital Innovation : "Modern Problems and Solutions"*. ИЗВЛЕЧЕНО ОТ <https://fer-teach.uz/index.php/codimpas/article/view/1910>
7. Toxirova, S. (2023). METHODS OF WORKING WITH SCHOOLCHILDREN WHO CANNOT LEARN. *Conference on Digital Innovation : "Modern Problems and Solutions"*. ИЗВЛЕЧЕНО ОТ <https://fer-teach.uz/index.php/codimpas/article/view/1909>

