

## *Text recognition programs*

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**Abstract:** *OCR software* different formats present done the text data ( for example , scanned images , manually written notes or photos ) automatically respectively in the car readable to the text rotate for intended software are solutions . This programs information again work processes in automation important role plays and optical characters recognition (OCR), documents again performance , text analysis and another many in the fields main is a part .

**Key words :** *programs , text determination , accuracy , many language , adaptation , integration , OCR, documents again work , automation , machine study*

### **INTRODUCTION:**

#### 1. ABBYY FineRe says .

ABBYY FineReader is Russian company ABBYY by work developed optical characters detection program.

The program is for you document images ( photos , scans results , PDF files ) electronic editable to formats rotate enable will give . Specifically , Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Rich Text Format, HTML, PDF/A, searchable PDF, CSV and simple textual in the files . Ten the first from the version starting from files djvu format storage can Ten second version one face ninety in the language OCR supports and their forty eight for installed spelling inspection there is .

FineReader in images the text who knows all programs between no doubt leader is considered



Users to be disappointed possible the only thing that is program paid Only test version ten five day during free This period fifty the page to scan permission is given

Advantages : obvious recognize get very a lot reading languages ; source of the image to quality tolerance

Disadvantage : ten five daily test

## 2. About CR CuneiForm .

CuneiForm ( English clove , clove ), Cognitive OrenOCR is it of the Russian company Cognitive Technologies free distributed open optical the text determination system .

OCR CuneiForm 1993 by Cognitive Technologies commerce product as work developed System Russia and in the world the most famous scanners , MFP and software supply models with provided by : Corel Draw, Hewlet-Pachard , Epson, Xerox, Samsung, Brother, Mustek , OKI, Canon, Olivetti and others

OCR is the use of technology to recognize the characters of scanned handwritten or printed text and convert them into an electronic form that is more easily recognized by computers and other programs. The basic recognition process involves examining the text and translating the characters into a code that can be used for data processing. OCR is sometimes called text recognition.

The technology consists of a combination of hardware and software used to convert physical documents into machine-readable text. To copy or read text, hardware such as an optical scanner or a special circuit board is used, and software is responsible for advanced processing. Software may use artificial intelligence to perform advanced intelligent recognition (ICR) techniques, such as recognizing languages or handwriting styles.

OCR is often used to convert printed legal or historical documents into PDF files. Users can then edit and format the received electronic copies using conventional text editors. The first step in the optical recognition process is to use a scanner to process the physical form of the document. After all the pages have been copied, the OCR software converts the document into a two-color or black-and-white version. The scanned bitmap image is analyzed for light and dark areas. In this case, the dark areas are defined as the characters to be recognized, and the light areas are defined as the background. The dark areas are then processed to search for letters or numbers.

Existing recognition programs can have different ways of working, but usually they all focus on a single character, word or block of text. Two main algorithms are used for character detection.

- ✓ recognize get material different fonts and the text formats examples using again is processed .
- ✓ recognize get known one letter or number (ICR) features belongs to features determination from the rules to use based on Determination from the function using



software supply document information letter or number how formed about to the rules according to evaluates . For example , the capital letter "A". in the middle horizontal line with intersected two diagonal lines as storage can

#### Features .

CuneiForm paper documents and graph of files electron copies automatic or half automatic of the original document in the mode structure and the font of the font save to stay opportunity with editable to form rotate system as placed System electron documents one once and packaged again work for two program own into takes Russian and English languages mixture is supported . From pictures the text information reading for free of charge program . recognize to get accuracy seeing outgoing previous from the program lower has been is order . But it's free helper program for functionality still great .

The program is recognized of the text font reading and keep can Font information in the base used print of fonts most of them there is . Even writing from the car came out the text recognize is also supported . Clarity provide for recognize get to the process special dictionaries connected , they scanned from documents the dictionary fills

Advantages : free distribution ; of the text correctness check for from dictionaries use poor quality from photocopies the text scan .

Disadvantages : relatively low accuracy ; less numerous languages is supported .

#### 3. WinSc and 2P DF .

It's even complete entitled program not but helper program . None how no installation required and executable file one how many kilobytes organize does recognize get process very fast , but as a result received documents only in PDF format is stored .

In fact , the whole process three button click with ends : source , destination choose and program to work drop off Assistant program many files fast again work for intended . To users convenience Create for big interface language package present done

Advantages : portability ; fast work use convenience

Disadvantages : only one exit file format .

#### 4. Simple OCR .

From images texts recognize get for great small program . He even manuscripts also supports reading . Problem it is Russian language interface languages to the collection , recognize get for supported languages is not included in the list .

But if you English , Danish or french their languages your scan need if , then better free of charge option to find you can't

Own within program the font sure decoding , noise take to throw and graph image release provides . From this except , the program with WordPad in the interface almost one different has been installed the text editor there is being , this from the program use opportunity significant level increases .

Advantages : text sure determination ; comfortable the text editor ; from the image noise take throw



Disadvantages : Russian of the language complete lack of

5. Freem o re O CR.

Program from pictures the text and graphics quickly separate get enable will give .  
The program is one how many scanners with to work without losing to work supports .  
Received the text textual document or MS Office document format storage can

From this besides , a lot paged recognize get function present will be done .

Freemore OCR is free distributed , but the interface only English in the language  
But this condition never how way use convenience effect because it doesn't management  
elements intuitive way organize done

Advantages : free distribution ; one how many scanners with work ability ;  
deserved recognition accuracy .

Disadvantages : in the interface Russian of the language absence ; recognize get  
for Russian language package download get necessity

Text in FineRe a der determination .

Scanned documents with efficient work for What is ABBYY FineReader ? for that  
the program main from functions how to use and him right to work to drop you know  
need Scanning tool information from the page to the page without transfer selected printed  
in the document the text sure knows From this except , the program on the page fonts ,  
titles and footers and the text order to the original possible as long as closer tries to save

" Service " in the menu select , go to " Options " . and determination mode specify  
: complete or fast recognize get Full the mode is of low quality textual files , color in the  
background texts or complicated tables with work for comfortable will be Recognize  
quickly get big in volume files for or time when limited recommendation will be done .

Editing in ABBYY FineReader 12 to difficulties road not to put for work exits  
intuitive interface and elements across easy navigation they created Text two method edit  
possible : directly in the " Text " window or tools on the " Tools " panel and then " Confirm " .  
choose through . Text change for there is tools of the " Text " window on top  
is located is , font, font size , indentation and characters replacement for standard the  
collection own into takes PDF image straight away editing for you " Image to the " editor  
" menu your transition and from the register necessary function choose need.

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