

Presentation

Recognized an object on graphics which
taken from street camers.

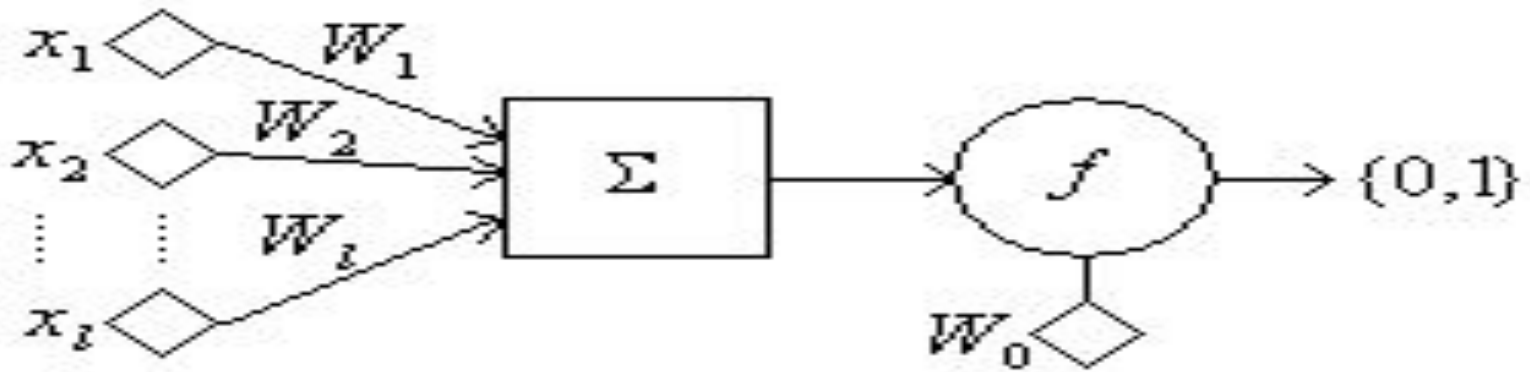
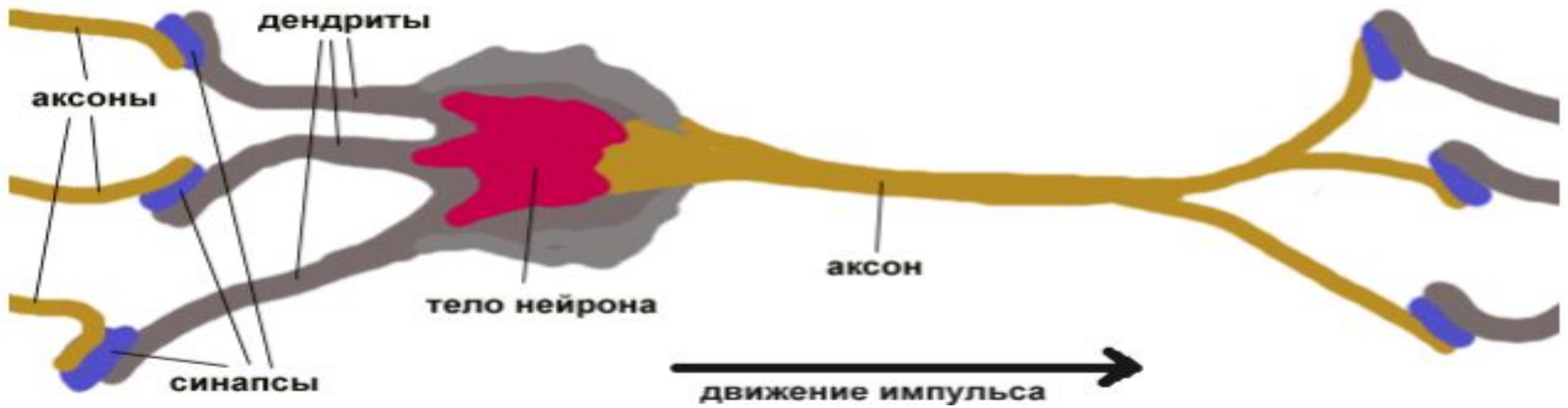
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About recognizing text.

Now a text Recognized is a topical theme in development of information systems.

Recognize text by computer is difficult because it can not determinate relativity of all visible objects unlike a human and it doesn't have all forms of symbol in memory.

Neural network



Program

For the first we must training our network.

- Read pictures of all classes,
- Filter each picture,
- Build a sign vector for each symbol.

Time of training

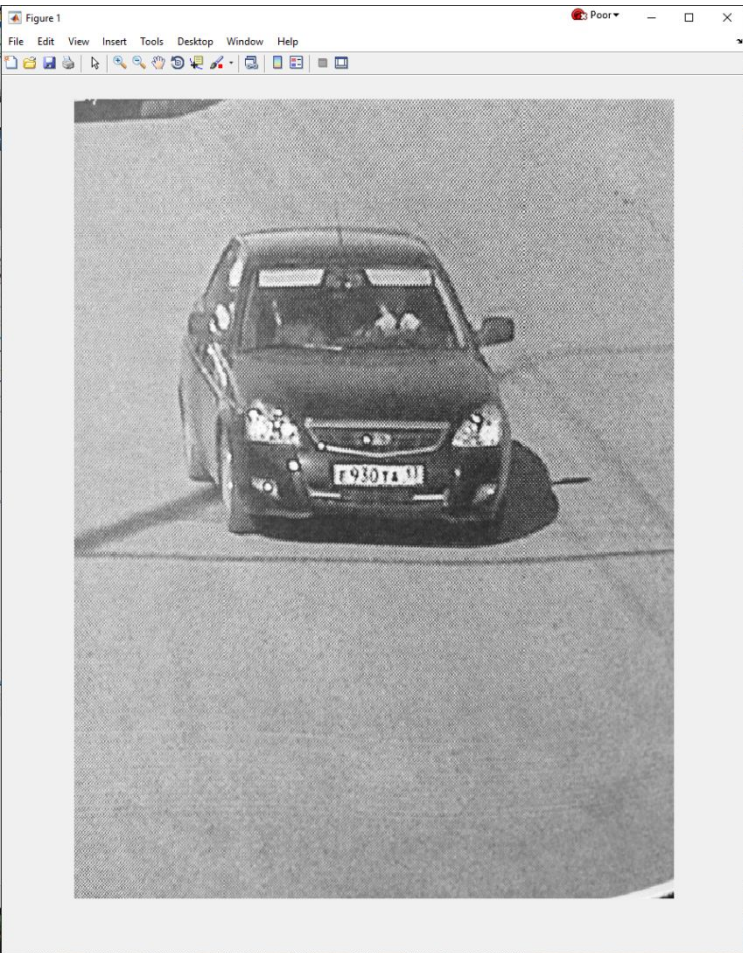
symbol	0	1	2	3	4	5	6	7	8
time	6.17	5.07	5.55	5.42	5.71	5.57	5.54	5.19	5.68

9	А	Б	В	Г	Д	Е	Ж	З	И	К
5.41	5.09	5.25	5.58	5.02	5.69	5.14	5.31	5.46	5.33	5.2

Л	М	Н	О	П	Р	С	Т	У	Ф	Х
5.48	5.78	5.39	5.6	5.3	5.2	5.31	5.26	5.54	5.71	5.62

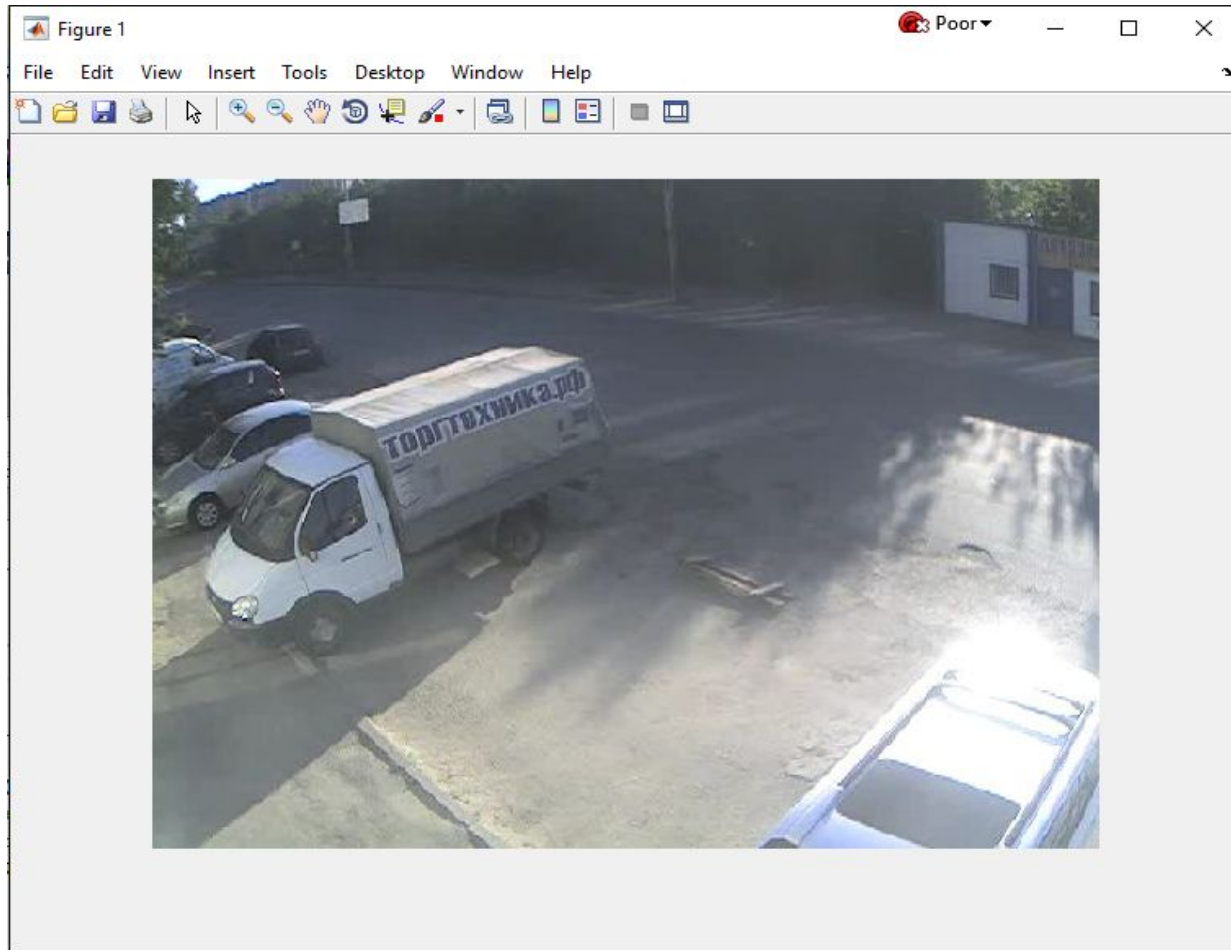
Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
5.28	5.69	5.25	5.26	5.74	5.82	5.75	5.4	5.33	5.11

Test pictures



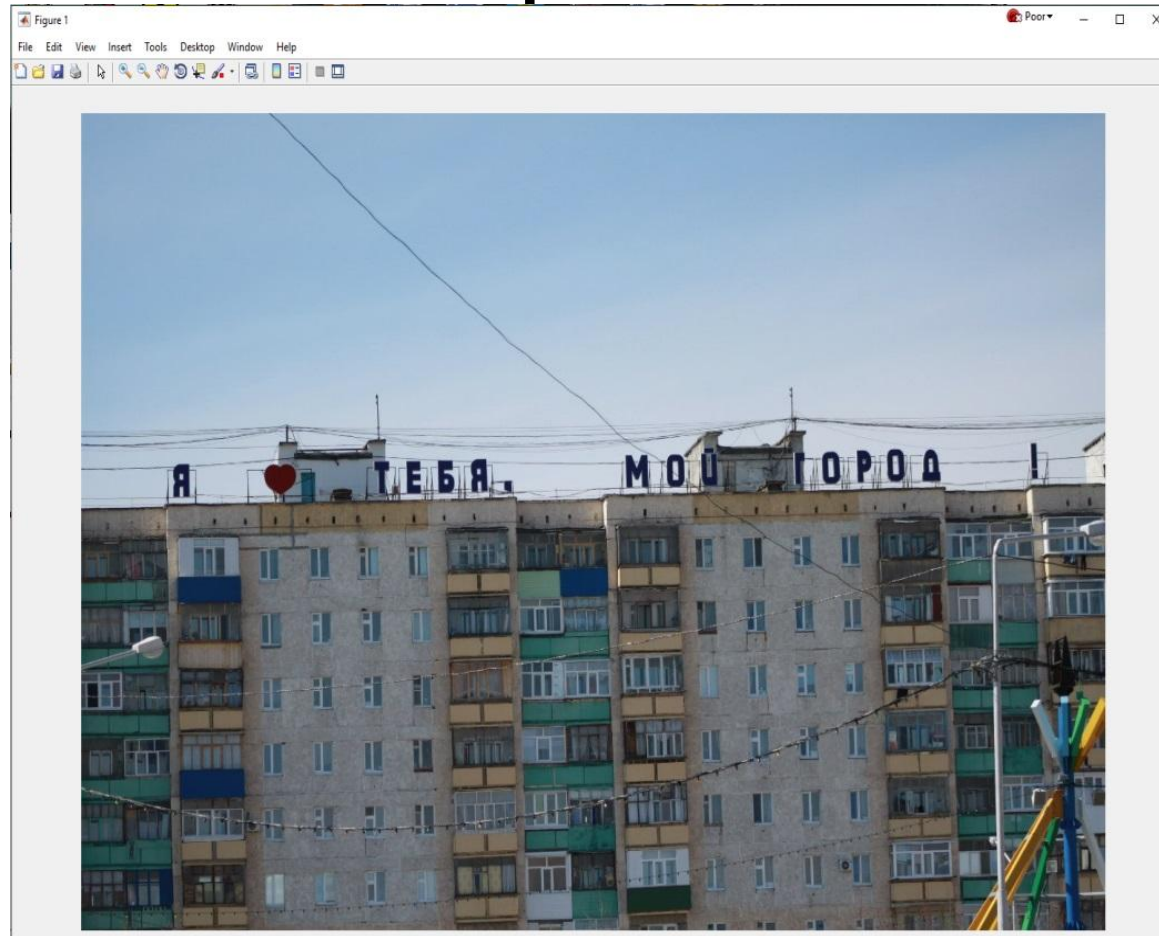
symbol	E	9	3	0	T	A	5	1
time	0.17	0.17	0.17	0.18	0.17	0.17	0.18	0.17

Test pictures



Т	О	Р	Г	Т	В	Х	И	И	К	А	Р	Ф
0.21	0.21	0.19	0.19	0.21	0.22	0.21	0.22	0.21	0.21	0.21	0.19	0.20

Test pictures



Я	Т	Е	Б	Я	М	О	Й	Г	О	Р	О	Д
0.2	0.21	0.21	0.2	0.2	0.21	0.19	0.21	0.2	0.19	0.2	0.19	0.2

Conclusions

- 15 pictures is tested.
- Global percent of recognize $\approx 87\%$.
- An average time of recognize a symbol ≈ 0.2 sec.

Thanks for attention!