Introduce

Hello, dear audience! My name is Egoshkin Danila, I'm a first-year postgraduate student, my specialty is Applied Math.

So, today I would like to present you my thesis on topic "The dynamic algorithm based on the fuzzy logic"

Nowadays the algorithms of artificial intelligence and fuzzy logic are widely used for the solution of a large number of practical problems.

The main component of intelligent systems is a knowledge base, which includes a set of rules for logical output, expressed in the form of fuzzy productions.

There are two approaches in the development of the expert systems knowledge bases:

– experts knowledge analysis on the basis of experience;

– automatic formation of knowledge base using intelligent analysis methods of data and algorithms of machine learning.

The development of the second approach is defined to be of greater value. Since machine learning accelerates the time of systems creation.

I will show you the application running on this algorithm. An example of the work of this algorithm can be seen on the website of the program [3], which perform the classification and maps an arbitrary user in a set of comic book characters database "CMD - Combat Marvel DC".

Here we can see the database consist of 101 characters.

Well, let's start to answer questions. And see who we are

So, who are you in comics?!

The system greets us. So it says hello. Let's say hello too.

Are you a woman?

What is your height? (cm)

How old are you? (years)

What is your weight? (kg)

What hair color do you like?

How long is your hair?

What would you do, if you saw a cat on a tree?

Try to remove him

Give him a wave

Shake the tree

Use your super power to remove him

Do you ever like bad guys in an action movie?

All the time. Good guys are boring

And the bad guy can be good someday

Depends... how bad are they?

Never!

Do you wanna be a Dark Lord?

Oh, Yes

No

I wanna be a Contemplator

I'm a Dark Lord, the original, the only

Do you wanna build a snowman?

Yes

Yes. I know exactly what you are talking about :)

It is for children

I'm a Dark Lord, the original, the only

You see a baby with candy. What do you do??

Nothing

What kind of candy are we talking about?

Take away the candy

Ask the baby where its mother is

What eyes color do you like?

You are: Human

Thus, the algorithm using fuzzy logic maps our data to a database that can change dynamically.

So, thank you for your attention and if you have any questions – you are welcome to ask!

\*Who Am I in Comics\*

(neural network)

0. The system greets us. – Hello

1. Are you a woman? – No

2. What is your height? (cm) – 185

3. How old are you? (years) – 25

4. What is your weight? (kg) – 68

5. What hair color do you like? – Brown

6. How long is your hair? – Medium

7. What would you do, if you saw a cat on a tree?

Try to remove him

Give him a wave

Shake the tree

Use your super power to remove him

8. Do you ever like bad guys in an action movie?

All the time. Good guys are boring

And the bad guy can be good someday

Depends... how bad are they?

Never!

9. Do you wanna be a Dark Lord?

Oh, Yes

No

I wanna be a Contemplator

I'm a Dark Lord, the original, the only

10. Do you wanna build a snowman?

Yes

Yes. I know exactly what you are talking about :)

It is for children

I'm a Dark Lord, the original, the only

11. You see a baby with candy. What do you do??

Nothing

What kind of candy are we talking about?

Take away the candy

Ask the baby where its mother is

12. What eyes color do you like? – Other

13. You are – Other