

### THE PROBLEM OF CREATING ARTIFICIAL INTELLIGENCE



E. P. Smirnov, E. A. Krasnovskiv

Ivanovo State University

#### **Abstract**

Artificial intelligence (AI) is a smart program and a machine that can solve creative problems and generate new information based on existing information. In fact, artificial intelligence is designed to simulate human activity, which is considered intelligent.

#### Results and discussion

The field of artificial intelligence involves more and more subject areas that are more practical in relation to AI, rather than fundamental. Many approaches have been tried, but no research team has yet come close to creating an AI. Banks use artificial intelligence systems in insurance activities and on stock exchanges. Image recognition methods are used in optical and acoustic recognition, medical diagnostics, spam filters, and national security tasks. Game developers use AI of varying degrees of complexity. This forms the concept of "Gaming artificial intelligence".

#### Introduction

Artificial intelligence as a scientific field begins in the middle of the XX century. By this time, the prerequisites for its emergence had already been formed: philosophers argued about the nature of a man and the process of cognition of the world, psychologists developed theories about the work of the human brain, mathematicians asked questions about optimal calculations and the representation of knowledge about the world in a formalized form, the basis of the mathematical theory of computing was born, the first computers were created, the speed of which was higher than that of humans.

#### Conclusion

As a result, today we have a lot of problems on the way to solving the problem of creating AI. But there are two that need to be addressed first - the problem of genetic algorithms and the psychological problem.

#### Methods and materials

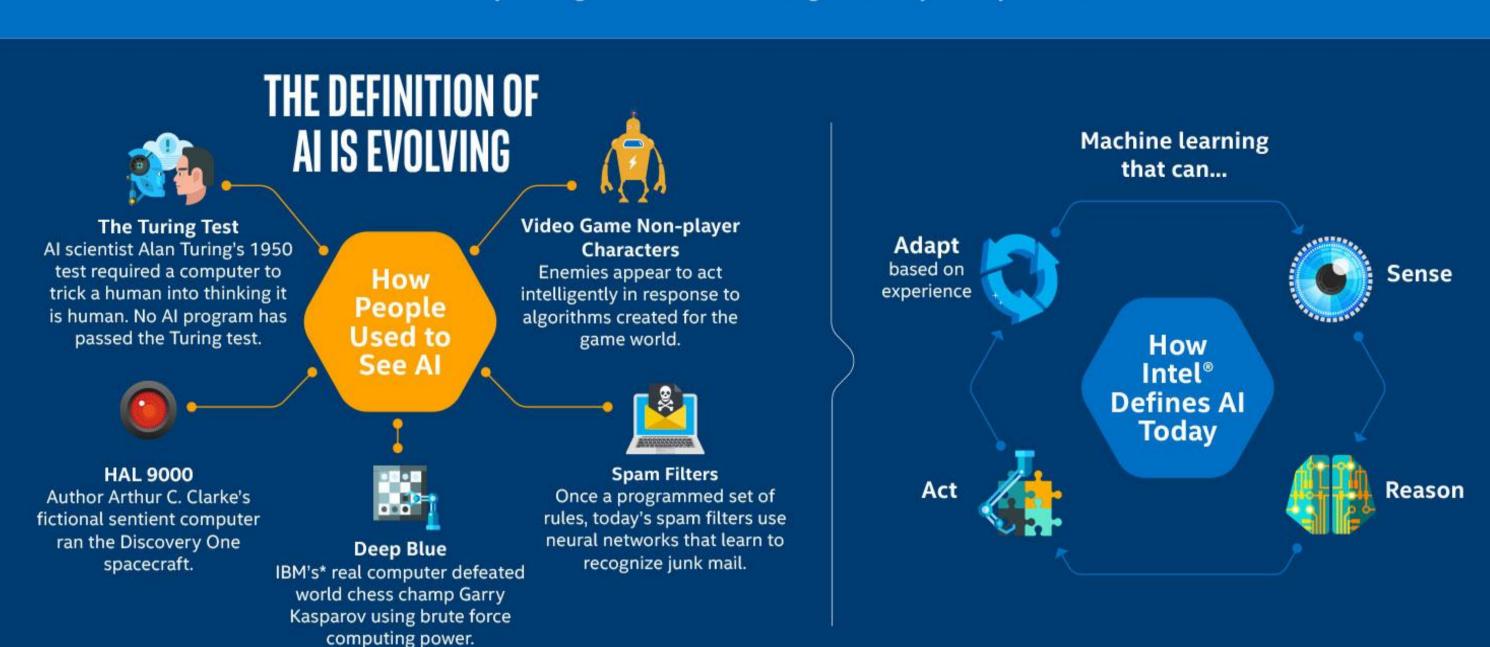
The first AI development that could be implemented with the help of computers of that time dates back to the 40s of the XX century. In 1943 Warren McCulloch and Walter Pitts published their work entitled "Logical calculus of ideas immanent in nervous activity", in which they laid the foundations of neural networks. D. Hebb in the work "Organization of behavior" in 1949 described the basic principles of training neurons.

# **⊕ ©**

#### ARTIFICIAL INTELLIGENCE—THE NEXT BIG REVOLUTION IN COMPUTING

Computer scientists have been pursuing artificial intelligence (AI) since the 1950s. Here's why the age of artificial intelligence may finally be here.





## THAT HAVE CHANGED THE AI LANDSCAPE



Modern Computer Architecture
Small, cheap multi-chip
processors and modern code
algorithms help programs solve
big problems quickly.



Big Data
Today's intelligent programs
learn by studying huge
stores of digital data
amassed in the Internet age.



Neural Networks
Neural nets organized in layers
that process increasingly
complex data learn abstract

Image 1. Al capabilities.

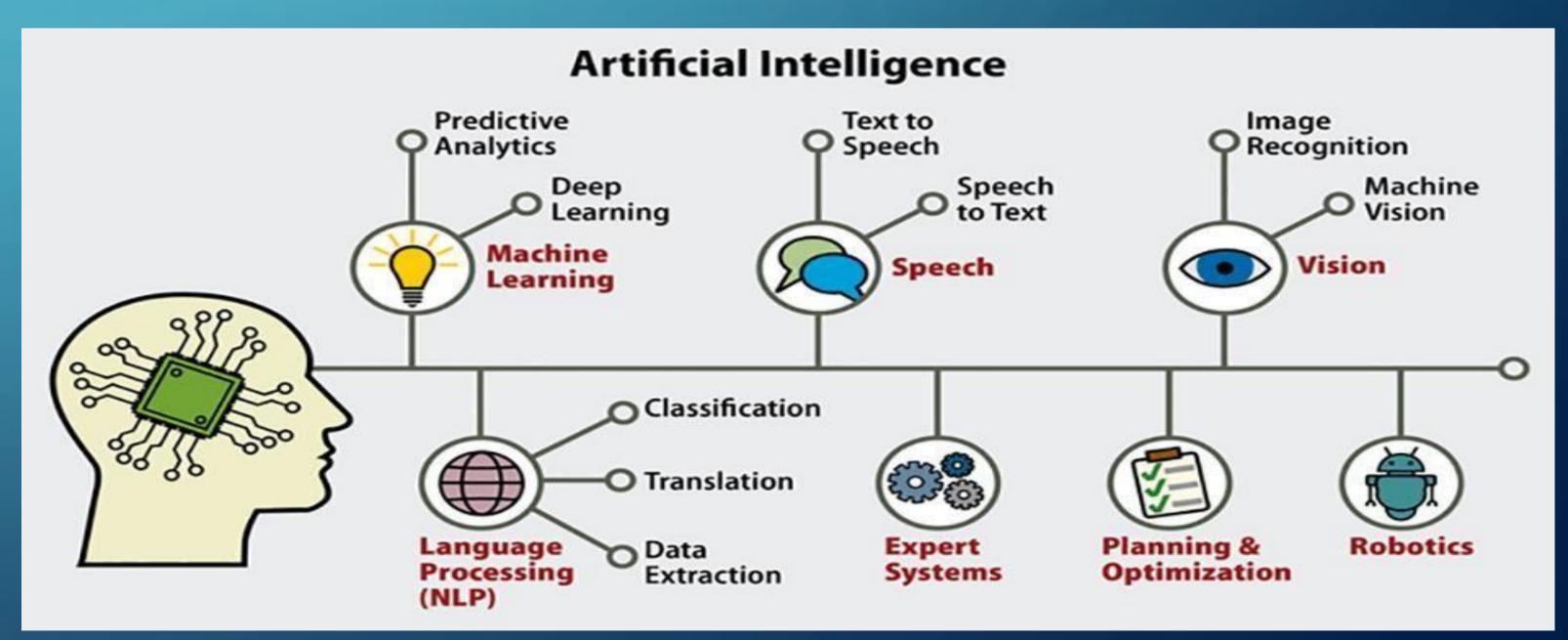


Image2. AI development.