

# Operation ai and machine learning

[Technology](#), [Artificial Intelligence](#)



## **Principle of operation AI and Machine learning and how it could affect the future**

### **Investigation**

I am very interested in Computerscienceand programming. That is why my goal for this project is to research about AI and Machine learning(neural networks) and find out how it can affect in the future and how is it affecting now.

I have chosen this project because in the future i want to become a programmist and study this topic. My computer science and ICT classes provide me knowledge to do this project. There i learn to code and program, which can help me to understand the functions of AI. AI (Artificial Intelligence) is intelligence displayed by machines.

It was created to solve problems that people cannot solve. It is not discovered fully yet, but it is one of the priorities oftechnologyworld nowadays.

Today, AI(Machine learning nowadays) is used in a variety of spheres:

Virtual Personal Assistants, Predictions while Commuting, Email Spam and Malware Filtering, Online Customer Support . The most famous and helpful specific examples are to see patterns in any spheres.

Logical Plan: StepDescriptionQuality

- Control Date Start – End1Research about AI.

- Effectively analyse and evaluate a wide range of source/data in terms of origin and purpose, recognizing values and limitations.
- Synthesizes information to make valid, well-supported arguments1  
Dec, 2017 – 10 Jan, 20182Research how it change our life now.
- Effectively analyse and evaluate a wide range of source/data in terms of origin and purpose, recognizing values and limitations.
- Synthesizes information to make valid, well-supported arguments1  
Dec, 2017 – 10 Jan, 20183Research how other people(powerful) responded about AI.
- Effectively analyse and evaluate a wide range of source/data in terms of origin and purpose, recognizing values and limitations.
- Synthesizes information to make valid, well-supported arguments1  
Dec, 2017 – 10 Jan, 20184What AI can cause in the future.
- Effectively analyse and evaluate a wide range of source/data in terms of origin and purpose, recognizing values and limitations.
- Synthesizes information to make valid, well-supported arguments1  
Dec, 2017 – 15 Jan, 20185During 1-4 steps write in the final report.
- Effectively analyse and evaluate a wide range of source/data in terms of origin and purpose, recognizing values and limitations.
- Synthesizes information to make valid, well-supported arguments1  
Dec, 2017 – 15 Jan, 20186Analyse all 1-5 steps and information in it and write conclusion.
- Thoroughly interpret a range of different perspectives and their implications.

- Synthesizes information to make valid, well-supported arguments Jan 15, 2018 – Jan 25, 2018 Correct all report and check grammar and information mistakes.
- Effectively analyse and evaluate a wide range of source/data in terms of origin and purpose, recognizing values and limitations.
- Thoroughly interpret a range of different perspectives and their implications.
- Synthesizes information to make valid, well-supported arguments Jan 25, 2018– Jan 30, 2018

### **Essay**

AI or artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Nowadays AI is something that people wants to create, some of them spend their personal money to reach this goal. The best example of this is Elon Musk, he is an awesome engineer, he has a lot of companies that create something new and essential, always make a really huge step in science.

Today AI is a goal that all world wants to reach, but what they are creating and developing now is Machine Learning Systems. Now machine learning helps us a lot. All big corporations are trying to put it into more parts of the company. In the future, if someone creates AI, it will take all jobs from the people, because AI is a person, but not in the human body.

But before AI, Machine learning will develop a lot, so it will take some jobs, but not all, actually jobs that should do something with the same operations or the hard process that needs a lot of energy. Amazon one of the biggest

company that is trying to create AI. Amazon Machine Learning platform provides companies with the ability to predict and find patterns using data. Additionally, Amazon Echo brings artificial intelligence into the home through the intelligent voice server, Alexa.

Also, our favorite company Apple is trying to create AI. Apple has acquired four artificial intelligence startups within the past two years, demonstrating its big step into the artificial intelligence sphere. Siri, Apple's virtual assistant, has transformed over the years from being a fairly simple voice assistant to being a fully-fledged digital assistant. But still it's not AI, it's just Machine Learning system.

About Elon Musk, he has 2 companies that have relationship with AI, first is OpenAI, this company is trying to create Artificial Intelligence. And the company that works with it is Neuralink, this company is creating software to merge people with it. Also creating a device for this. Nowadays all big corporations are trying to put as much Machine Learning as they can, they do it because it can help people a lot.

This one takes place in everyday people's life, it's personal assistant, like Siri, Cortana, Alice, so they all are doing the same and the big advantage of using Machine Learning is that people don't need to write each step that product should make because it learns by itself.

If we take Siri as an example, we will see that in the first year Siri wasn't really confident with answers, with its voice, but it took some time for Siri to study from the people's respond and we can see how Siri is answering our

questions, it almost every time perfect, but it still learning, actually it could make intonation it a quiet good manner, but as I told it still learning.

Also, Google is giving Machine Learning to anyone who need it, it's picture search, it find the major parts of the picture and using it, trying to find the same one, but with the text and information about it. As well it analyzes what you're searching, so next time it could give you the best information that you need.

So again we can see that Machine Learning system is learning by itself from us. And one of the most important for humans lives is Security. If you've flown on an airplane or attended a big public event lately, you almost certainly had to wait in long security screening lines. But machine learning is proving that it can be an asset to help eliminate false alarms and spot things human screeners might miss in security screenings at airports, stadiums, concerts, and other venues.

That can speed up the process significantly and ensure safer events. Also, security can be electronic money security. Machine learning is getting better and better at spotting potential cases of fraud across many different fields. Paypal, for example, is using machine learning to fight money laundering.

The company has tools that compare millions of transactions and can precisely distinguish between legitimate and fraudulent transactions between buyers and sellers. Also Data security for example company Kaspersky. Their learning model has no problem with the 2-10% variations and can predict which files are malware with great accuracy. In other

situations, machine learning algorithms can look for patterns in how data in the cloud is accessed, and report anomalies that could predict security breaches.

There are 2 opinions about future of AI, one of them is that it's very dangerous and another one will help people. Here is one of them:

Autonomous weapons are artificial intelligence systems that are programmed to kill. In the hands of the wrong person, these weapons could easily cause mass casualties.

Moreover, an AI arms race could inadvertently lead to an AI war that also results in mass casualties. To avoid being thwarted by the enemy, these weapons would be designed to be extremely difficult to simply "turn off," so humans could plausibly lose control of such a situation. This risk is one that's present even with narrow AI but grows as levels of AI intelligence and autonomy increase.

Here is another one: Artificial intelligence and the science of robotics can be put to use in mining and other fuel exploration processes. Not only that, these complex machines can be used for exploring the ocean floor and hence overcome the human limitations. Due to the programming of the robots, they can perform more laborious and hard work with greater responsibility.

Moreover, they do not wear out easily. Machines, unlike humans, do not require frequent breaks and refreshments. They are programmed for long hours and can continuously perform without getting bored or distracted or

even tired. The principle of operations Machine Learning Systems is that it learns and analyze information by itself. But yet nobody can exact tell operation of AI because nobody created it, but a lot wants to.

AI is a basic human, but not in the human body. So in my opinion people will need to create more rules and pressure and control levers to control AI. Machine learning is developing now and take really big steps to develop it and create AI. The big corporation is fully engaged in process of creating and using AI.

AI could affect future in different ways, but still, nobody knows how it still all about teaching it properly like a child. Development of skills: When I started doing the project, I hadcritical thinkingskills such as interpreting data, formulating factual and topical questions and revising understanding based on new information.

Through the project, I developed such critical thinking skills as evaluating evidence and arguments, drawing reasonable conclusions and generations from the information I was getting during by research in books, internet sources and knowledge that I've got on the conferences. I also hadcommunicationand social skills which are using appropriate forms of writing for different purposes, participating in digitalsocial medianetworks and collaborating with peers and experts.

I developed the communication skills such as giving and receiving meaningful feedback and using a variety of speaking techniques to



communicate with variety of audiences while summarising the information and writing a final version of my essay.