

# Application of Artificial Intelligence and Machine Learning in Smart Phones

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## Abstract

Companies across industries are implementing Artificial Intelligence to scale up and advance their business operations. Advances in Deep Learning are helping drive the business success from e-commerce to national security. Data is the most important ingredient to a successful recipe of an AI model. Machine learning platform includes algorithms, development tools, APIs, model deployment and more. Computers are given the opportunity to learn without explicit programming. Innovative startups and big companies like Amazon, Google and Microsoft all make use of machine learning.

**Keywords:** Artificial Intelligence, Experience, Machine Learning, Smart Phones.

## Introduction

Artificial intelligence (AI) is an ability of intellectual systems to perform creative functions, which are traditionally considered the prerogative of humans. At present, the development of AI is crucial. AI itself is used in various fields of science and technology, but in this article, we'll be talking mostly about its integration into smartphones. Machine learning is an artificial intelligence (AI) discipline geared toward the technological development of human knowledge. Machine learning allows computers to handle new situations via analysis, self-training, observation and experience.

Machine learning facilitates the continuous advancement of computing through exposure to new scenarios, testing and adaptation, while employing pattern and trend detection for improved decisions in subsequent (though not identical) situations.

## Objective

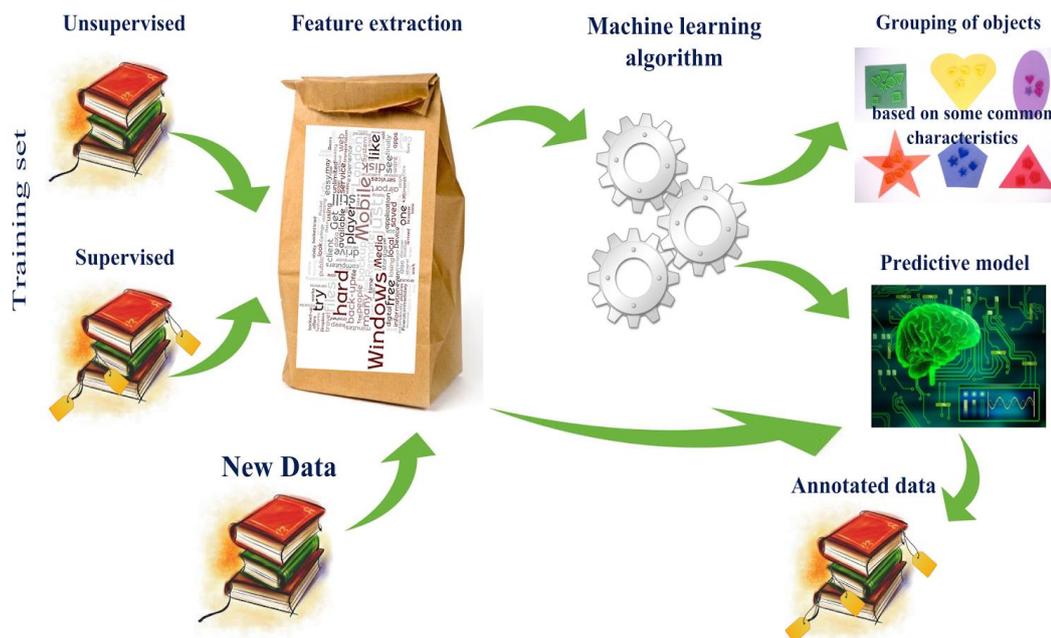
- To study the application of Artificial Intelligence and Machine Learning in Smart Phones

## Source of Data

The data I based only on secondary data.

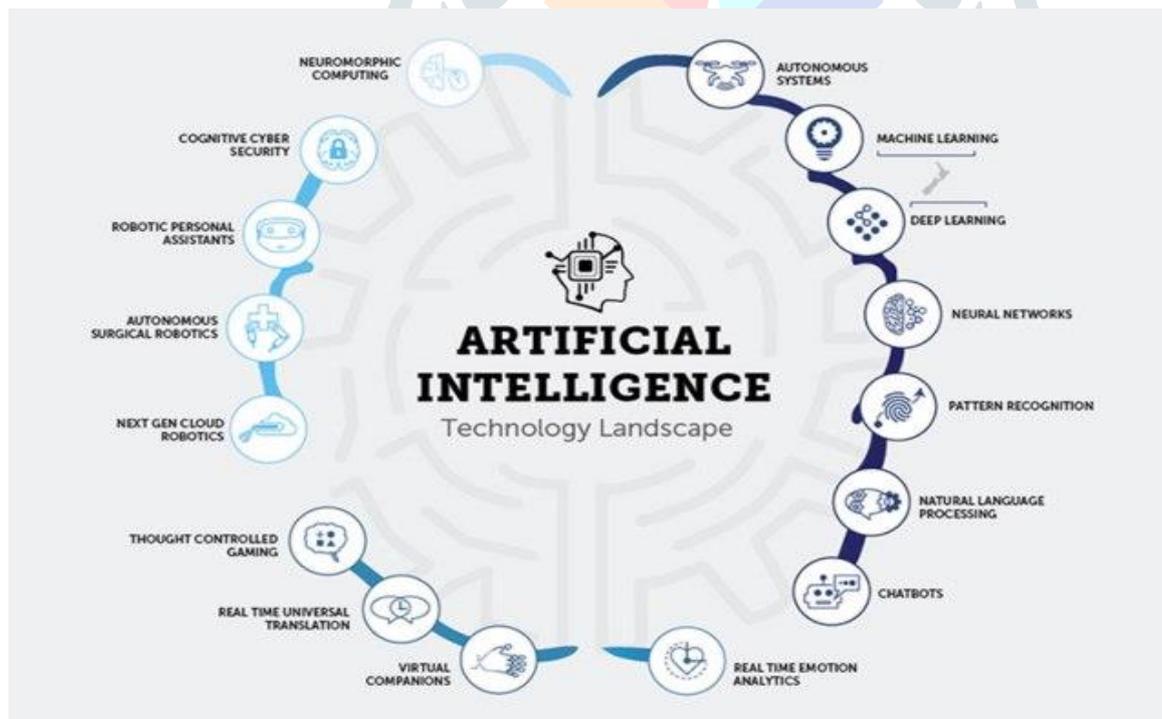
## Working of Machine Learning

### Machine learning workflow



Source: Dr.Natalia Konstantinova's Blog

### Working of Artificial Intelligence



Source: Whatsthebigdata.com

## Applications

- 1. Automated Photo Classification** - The image recognition available via AI can do some amazing things with the photos on your phone. The most common feature found on these devices, as well as on social media, is to identify the individual in the picture and recommend tagging them.
- 2. Understanding of Natural Language** – AI on smart phones ensure accuracy in speech recognition. AI also have a capability of real time translator where users can travel and use this when they are not able that place language
- 3. Digital Me** – It has become a simulated extension of the user. Smart phone recognizes now the user needs and preferences. Automated tasks such as reader preferences, from camera, sensors and other data.
- 4. Automated calendar entries** - Another AI-infused feature is designed to streamline the process of scheduling appointments and events by parsing email and automatically adding them directly to your calendar – fishing out information regarding flights, appointments, or even restaurant reservations. These apps can also assist in coordinating a meeting by sending multiple suggested times to all the participants until an agreeable time is found.
- 5. Speech Hunt** - Voice Recognition is becoming famous nowadays. Enable the users to search what they need through digital controlled voice assistants. It is not only used in smartphone but also in smart speakers such as Amazon Echo, Google home etc.
- 6. Personalization** - The use of artificial intelligence helps to improve the processing of a cell phone according to the particular profile of each person, instead of using a generic profile, the processors respond according to the use of each user. The same will be adapted to the habits of its owner. Taking this a step further, ML will be able to improve the personalization techniques of these engines in more precise ways. The technology will offer more specific data that they can then use on ads to improve the shopping experience for consumers.
- 7. User Authentication** – This includes patterns for swiping, applying pressure points to the smartphone screen and scrolling
- 8. Efficiency** - The artificial intelligence increases gear performance by making efficient use of energy. Artificial intelligence will add a lot of value to accumulate experience and know when it is necessary or better to turn on and off the nuclei to respond to the functions ordered by the user.

9. **Recognition of Smartphones** – AI will be able to sense, process, evaluate, and ultimately react to user's tempers. An application of contextual AI learning in the automotive safety industry, where by smartphone camera can be used to analyse a driver's fatigue level
10. **Location-based app suggestions** - Smartphones normally know where they are and will make helpful app recommendations based on the user's physical location. Users walking into a Starbucks store may be prompted to use the coffee shop's app. This function usually requires enabling the location services on your smartphone.
11. **Data on Data** – ML has great prospective in producing data of the highest quality that will lead to better models, an better-quality user experience and more data that helps repeat but advance upon this cycle. As the quantity of data available increases, the charge of storing this data decreases at roughly the same rate Its Autopilot feature learns from this data and improves the software that propels these self-driving vehicles forward as the company gathers more data on the possible pitfalls of autonomous driving technology.
12. **AI-powered chipsets in mobiles** - UNISOC has found a unique way of assimilating AI into the everyday lives of Indian users. It is in plans of releasing chipsets that would support AI, AR and VR. These chipsets would make it a authenticity for Indians to access advanced features, including facial recognition. Its applications are diverse and multi-faceted, such as securing the mobile phone and online transactions with facial recognition and a lot more.

## Conclusion

Artificial Intelligence in future can attain greater heights. They can achieve great discoveries and advances for humanity due to its multiple possibilities. Most artificial intelligence systems have the ability to learn, which allows people to improve their performance over time. The adoption of AI outside the technology sector is at an early or experimental stage. Machine learning is a field that is continuously being innovated, it is important to keep in mind that algorithms, methods, and approaches will continue to change.

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