

Artificial Intelligence

Vision 2020

Compassionate AI Lab

www.CompassionateAILab.com

25th December 2019



Future Artificial Intelligence (AI) is more about human emotions, compassion, values and elimination of human sufferings. -- Amit Ray



Summary

Artificial Intelligence Vision 2020 is the foundation for contemplating future possibilities of building harmonious, prosperous, diseases free, happy and healthy society. Notable AI scientist [Dr. Amit Ray](#) in his book [Compassionate Artificial Intelligence](#), has taken AI to a new height and created a new [compassionate AI movement](#) all around the globe. In Amit Ray's vision of Artificial Intelligence, future AI should serve to awaken in all of us around the world, a greater awareness for the fusion of human values, intelligence, cultural and spiritual strengths in machine - which should form the foundation of future accomplishments in AI.

He envisaged that the goal of AI 2020 is to remove pain, sufferings, poverty, disease, hunger, and exploitation of humanity. Dr. Amit Ray is keen to put more effort on building mass awareness across the world to stop the future misuses of Artificial Intelligence in military and for mass destructive autonomous weapon systems.

This AI Vision 2020 can serve to indicate the broad lines of policy and strategy by which AI can be used for building stronger, more prosperous and more equitable and more compassionate society in the coming years. The ultimate goal of the initiative is to build and integrate a sustainable, comprehensive, high-quality, reasonable AI systems to strengthen poverty management, disaster management, climate change and national health-care systems.

Our Mission:

The fundamental mission of Sri Amit Ray Compassionate AI Lab is to remove pain, sufferings, poverty, disease, hunger, and exploitation of humanity by using the latest AI technologies and collaborative efforts.

The mission is to engage all levels of people: Governments, International Companies, and Research Institutes that can address the fundamental question of how to eliminate pain and sufferings of the people and society at all levels.

Our Vision:

Realizing the full potential of the latest high end technologies like Artificial Intelligence, Cellular reprogramming, Quantum computing, Robotics, omics data integration, brain-computer interface, and precision medicine to eradicate human pain and sufferings and bring joy and happiness at all levels.

Promotion of latest technologies like: Artificial Intelligence, Cellular reprogramming, Quantum computing, omics data integration, brain-computer interface, precision medicine for cancer treatment, old age support system, child care, eradication of inequality and exploitation, eradication of extreme poverty, eradication of extreme hunger from society.

We play a proactive and leading role in improving people's lives across the world through our solutions.

Our Values:

1. Compassion is the basic human capacity that supports health and well-being for living being. We spread love and compassion for human, nature and all living beings.
2. We promote stopping the misuses of modern technologies for war and human exploitation.
3. We empower young people by involving them in the development of policies and decision-making, projects and youth initiatives.
4. We value diversity among our stakeholders, irrespective of gender, religion, country, color, origin, or age.
5. We play a key role in the development of social communities wherever we operate.
6. We encourage open discussion and exchange to better achieve our goals.

Key Compassionate AI Projects for 2020:

In year 2020, with limited availability of funds and resources, we want to focus in limited critical areas for the implementation of compassionate AI projects. However, we want to continue our fundamental research works on compassion algorithms, emotion building algorithms, explanation engine and development of humanitarian aid projects. We have done considerable ground works for many humanitarian AI projects in the last years, but currently we are limited by resource availability and we are bound to reduce the scope of our work and want to focus only on the critical projects. As and when funds are available we will move into other projects. Currently, our core AI projects for the year 2020 are as follows:

1. Building more robust frameworks for ethical uses of Artificial Intelligence
2. [Artificial Intelligence for old age support systems](#)
3. [Artificial Intelligence for helping blind people](#)
4. [Artificial Intelligence for new drug design to cure cancer](#)
5. [Artificial Intelligence for Early Prediction of Flood and Famine](#)
6. Artificial Intelligence for prevention of avoidable blindness and visual impairment
7. Building mass awareness across the world to stop the future misuses of Artificial Intelligence in military and for mass destructive autonomous weapon systems
8. [Brain computer interface for mentally challenged people](#)
9. [AI to Combat Anti-biotic Resistance bacteria](#)
10. AI for Antibiotic Resistance Genes Detection
11. [Artificial Intelligence for Classification of Microbial Communities](#)
12. Deep Learning to understand Molecular Basis for Bacterial Resistance
13. [Machine learning to Predict Multi-drug Resistance Behavior of Bacteria](#)
14. [Machine learning to predict Behavior of Bacteria with Phages](#)
15. Machine learning for MRSA Strain Models for Hospital-Acquired Infections
16. [Machine Learning for Culture-free Identification of Bacteria](#)
17. [Artificial Intelligence to Solve Climate Change Issues](#)

Building the future

AI for Boosting jobs and skills

Tackling high unemployment is one of the most pressing challenges facing the governments across the world. Artificial intelligence is likely to change how every job is performed, eliminating work related to repetitive tasks but increasing the need for creative thinkers, according to a new study. Workers who only develop hard skills can be more easily replaced by artificial intelligence but people with right soft skill will get much better job. Stability of the economy is the key to job markets. The integrity of businesses, markets and governments is central to the vitality and stability of economies.

In terms of jobs, women, are too in a disadvantages position. On average, women still earn 25% less than men, only about one-fifth of managerial posts are held by a woman, and many more women work in part-time jobs than men. As women are more inclined to soft skill based job, with AI they have much better job opportunities. We need to facilitate mobility of workers and make it easier from them to move from declining to expanding sectors, and from one place to another. We need to develop societies in which diversity is an asset, rather than a hindrance, and to improve facilities so that women don't have to face an either/or choice between employment and having a family. We need a better work/life balance so that all of us can achieve more creative, productive and fulfilling lives.

AI in addition to creating new jobs, can also destroy existing jobs. Rather than standing in the way of progress, our response is to encourage societies to gain the maximum from the opportunities that advances AI can bring.

Our goal is to train more people, particularly the people of the weaker sections, on soft technologies so that they can thrive with new AI technologies.

Key Compassionate AI Technologies for 2020

In the book, [Compassionate Superintelligence – AI 5.0](#), Dr. Amit Ray explained various AI and related technologies for building future harmonious, peaceful, super intelligent society. There are so many promises and negative implications in future uses of AI in an ethical framework. How to prevent violations? Particularly stopping the misuses of AI in critical areas like gene editing, brain chip, nuclear warfare design are not well defined. Year 2020 is very critical for designing robust frameworks for that. The core technologies for Compassionate Artificial Intelligence and AI Vision 2020 of Sri Amit Ray are as follows:



Figure – 1: Top Ten Technologies for AI Vision 2020

Top Ten Technologies for AI Vision 2020

1. Deep Compassion Algorithms of Sri Amit Ray utilizes hybrid reinforcement learning and deep learning networks to cultivate compassion and values in machine.
2. Deep Emotion Algorithms utilizes big hybrid deep belief networks to assess human emotions and values in machine.
3. Deep Explanation Engine imitates the brain's capacity to explain the reasoning process and interpretation of various results.
4. General Machine learning tools automates analytical model building, to find hidden insights in data without being programmed to look for something in particular or draw a certain conclusion.
5. Brain Machine Interface (BMI) is a device that enables a direct communications path between the brain and the machine to be controlled
6. Neural network tools imitate the brain's array of interconnected neurons, and relay information between various units to find connections and derive meaning from data.
7. Deep learning utilizes really big neural networks and a lot of computing power to find complex patterns in data, for applications such as image and speech recognition.
8. Cognitive computing is about creating a "natural, human-like interaction," it includes using the ability to interpret speech and respond to it.
9. Computer vision employs pattern recognition and deep learning to understand the content of pictures and videos, and to enable machines to use real-time images to make sense of what's around them.
10. Natural language processing involves analyzing and understanding human language and responding to it.