LORETO COLLEGE

IN HOUSE JOURNAL

I.C.T SOCIETY

FIFTEENTH EDITION

2021-2022

CONNECT

INFLUENCE OF ARTIFICIAL INTELLIGENCE ON HUMAN INTERACTION AND EFFORTS

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ICT SOCIETY
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NOTE FROM THE PRINCIPAL'S DESK

Artificial Intelligence (AI) has over the years been transforming every aspect of the way we live and work. While AI has proved to be a beneficial and a rapid method of delivery in several areas: environmental management, office administration at various levels, vaccine development and more, it is inevitable that from during the Pandemic and post-Covid-19 circumstances, it has come to stay. The far- reaching effects have been evident, especially in educational institutions, though only time will tell the adverse effects on health, employment, society, human relationships and other areas as yet unknown.

Automations under the influence of AI and robotics could bring about error-free results due to flawless AI-driven data collection; predictable far-sighted precision-based solutions may entice many an entrepreneur to jump onto the band-wagon, while the teeming millions at the pinnacle of the pyramid of life face a scramble for existence, because of environmental degradation manifesting Darwin's survival of the fittest in evolution.

It is in the hope that the authors and readers of Connect 2021-2022 will think critically and assiduously question the fall-out of AI that this, the 15th edition of Connect was envisaged by the staff advisors – Ms. Chandrani Sengupta, Dr. Soumya Dutta, Ms. Sumedha Verma, and the Office Bearers of the Society, all of whom have put heart and head together for this annual journal; it is for their foresight and undaunted perseverance that I compliment the authors and editorial team involved in this journal's publication.

Sr. Christine Coutinho
Principal

NOTE FROM STAFF ADVISORS' DESK

Artificial intelligence is gradually transforming the way the world operates. AI is being used in multiple applications across different sectors. It empowers computers and robots to perform tasks that are normally done by humans. AI-enabled gadgets are ushering in revolutionary changes. It is considered to be the future requiring a skilled workforce. While expertise in AI will open up new job prospects it will also threaten the existence of several traditional jobs. In the coming days, AI will transform the classroom experience and the teachers have to adapt to the technological changes to remain relevant. Much of the classroom lectures might be performed by AI-assisted programs. AI will be impacting almost every walk of life. However, there are some areas of concern as well. Machines replacing humans have always been considered a worrisome development. Robots and computer programs outsmarting humans can pose a real threat soon. While artificial intelligence promises revolutionary progress it also needs to be understood that a healthy balance between technology and nature is the only way forward. We like to thank the ICT Society President, Treasurer and all the contributors for all the effort they have put in to make this issue a success.

Ms. Chandrani Sengupta
Dr. Soumya Dutta
Ms. Sumedha Verma

NOTE FROM THE EDITORS' DESK

With immense pleasure and gratitude, we write the editorial for the Fifteenth edition of the in-house journal of the Information Communication Technology (ICT) Society, 'Connect'.

The theme chosen for this edition is "Influence of Artificial Intelligence on Human Interaction and Efforts" keeping in mind the increasing dependency of humankind on Artificial intelligence in the present world. The purpose of this theme is to weigh out the pros and cons and realize what consequences it may have in the future. We asked students to present us with their varied perspectives on the topic and we were delighted to be met with enthusiastic participation, offering us a selection of material for publishing in our journal.

We would like to thank our Principal- Sister Christine Coutinho and our staff advisers Ms. Chandrani Sengupta, Dr. Soumya Dutta and Ms. Sumedha Verma for their invaluable guidance in making this magazine a success.

President - Nandini Das
Treasurer - Samriddhi Basu

CONTENTS

ARTIFICIAL INTELLIGENCE LEADING TO IDLENESS IN HUMANS

The Google trends graph shows the number of searches, which include the term “artificial intelligence, has increased 2-3 times since 2016. Elon Musk, the co-founder of Neuralink and OpenAI, promised to develop a prototype of an AI-powered robot by 2022, the Tesla bot. Musk, also the founder and CEO of SpaceX, had previously warned of a terminator-like AI apocalypse. However, his recent announcement raises questions and concerns regarding the effect of AI on humanity.

Currently, one of the most popular forms of AI that exists is a Chatbot. Companies around the world are developing chatbots. The most well-known chatbots to be produced are Amazon’s Alexa, Google’s Google Home and Apple’s Siri. The capitalist tendencies of these companies have led them to compete in such a way that with each upgrade and update in the AI software, these chatbots develop ‘experiences’ and ‘skills’ similar to humans. For example, Alexa can converse with you on about 70,000 skills, i.e. individual topics. Siri ‘, learns’ the user’s routine to suggest relevant shortcuts; when a user says “order takeout”, Siri can ask “Which order would you like?” and list your popular takeout orders. Researchers suggest these 'emotionally intelligent' AIs can replace human interactions in the next ten years. This makes me wonder if AI can develop the virtue of empathy that permeates human relations. And if it can, how will one distinguish between relations with machines and humans?

If we look at the trend at which these AIs are being developed, their function seems to be to only aid the humans. The interaction between these AIs and humans is not emotional. Every time you say “Alexa”, you follow it with a command. So, at present, the purpose of this AI is to attend to the whims and fancies of humans and to reduce their workload.

This brings to light another facet of AI. Jobs such as warehousing, research and data entry, customer service and proofreading, which require human effort, will be replaced by AIs. As far as proofreading is concerned, AI-powered software such as Grammarly is already on the rise. While this technology increases the productivity rate and facilitates improved performance, this will lead to a widened economic gap and loss of jobs.

With the rise of such AI-powered tools, human dependence on them will increase. For example, as I write this article, I do not worry about making grammatical errors because I have Grammarly downloaded on my device. Thus, with such growing dependence on artificial-intelligence driven software, the human ability to think will reduce.

AI-powered tools are not only a threat to human efforts but also a threat to our privacy. On 4th October 2021, when WhatsApp, Facebook and Instagram had a global outage, our only concern was - privacy. These apps record every waking moment. It was revealed in the documentary The

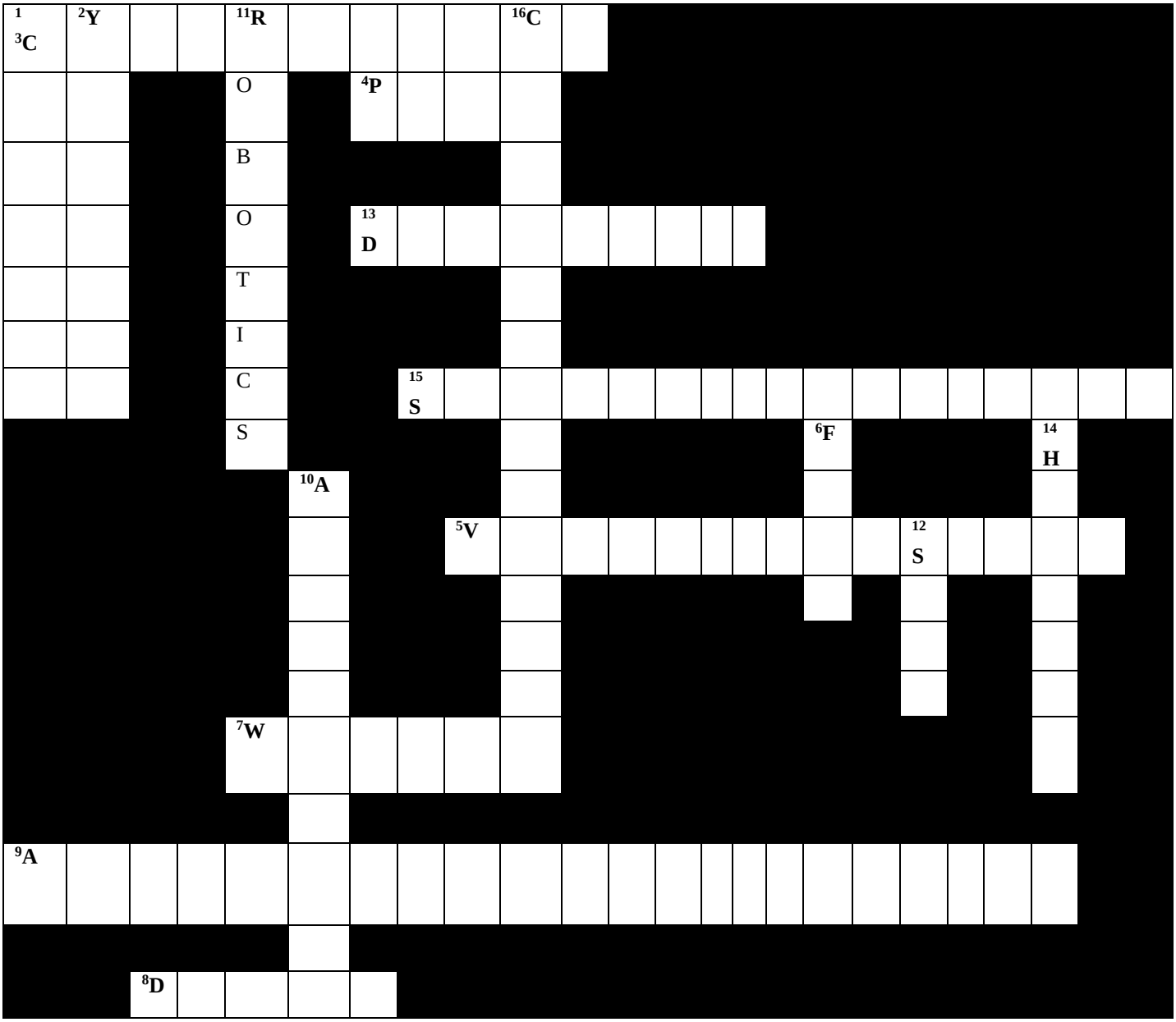
Social Dilemma that these apps work constantly through our phone cameras, recording our facial expressions to various posts to gauge our likes, dislikes, and to ensure maximum engagement from our side. Not only this, it keeps a track of the time we spend on each post. Zuckerberg, the creator and owner of Facebook now Meta, however, said the outage was because of some maintenance malfunction. However, a formal employee, Frances Haugen, brought to the world's notice the Facebook Files, which showed that Facebook was aware of its misdeeds and instead of coping with the problem, they profited from them.

The AI industry has also transcended the realm of security and defense. While it may prove efficient in destroying the enemies' advances, it may also prove to be a menace by aiding fascist governments to destroy the fabric of democracy.
The Pegasus Spyware, developed by an Israeli company, is an example. Multiple governments used this spyware to snoop into the devices of opposition leaders and journalists to get a record of their conversations, messages, and their general activity on the phones. If such Spywares are used on the devices of common citizens, democracy appears to be under a threat of destruction.

Thus, the advancement of AI needs to be looked at from all perspectives to understand the extent to which it affects human relationships and efforts.

Harshita Sharma
Psychology Department, First Year

CROSSWORD I



ACROSS:

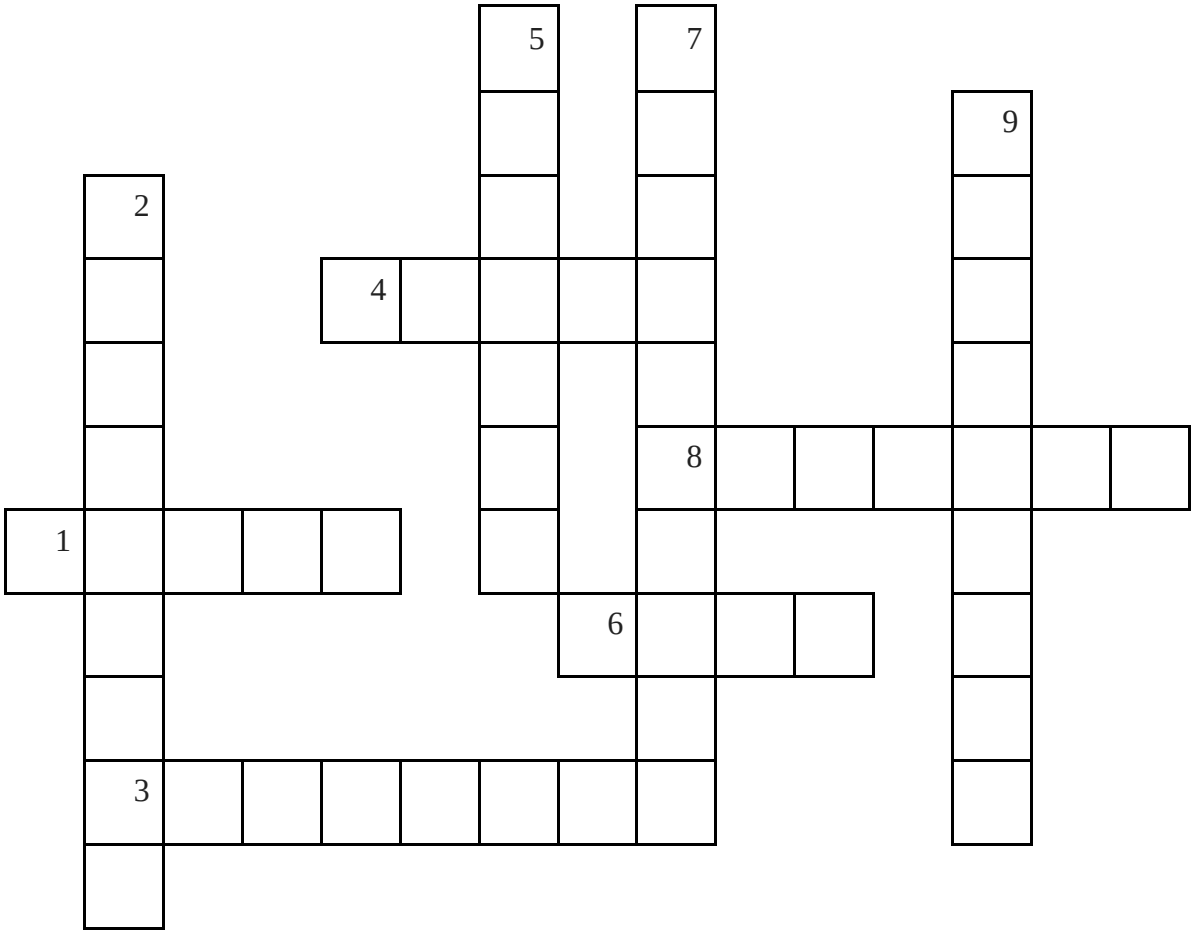
1) The Study of controls of systems with the use of technology known as (11)
4) Name the therapeutic robot with the appearance of a baby harp seal, weighing the same as a new born baby- (4)
5) What is the Illusion of presence that is formed by artificial devices called? (15)
7) _____ is the computer running software capable of answering questions posed in natural language and is developed by IBM Research. (6)
8) What is the unmanned aircraft that navigates autonomously without human control or beyond line of sight? (5)
9) What is the ability of a computer to do tasks that are usually done by humans called? (22)
13) What is it called when the face or body of a person in a video has been digitally altered in such a way that they appear someone else? (9)
15) What is the process known as where a computer identifies and responds to the sound that is produced in human speech? (17)

DOWN:

2) A social media platform owned by Google-(7)
3) What is the computer programme that is designed to prompt conversation with humans over the internet? (7)
6) Mention a business, seeking to introduce robo-cars that are capable of sensing its environment to move safely with little or no human input. (4)
10) _____ is the use of machines instead of people to perform a task. (10)
11) What is the interdisciplinary branch of engineering that deals with conception, manufacture and operation of robots called? (8)
12) ____ is pioneered the 'intelligent personal assistant' which is a part of Apple Inc.'s iOS, iPad OS, mac OS and tv OS operating systems. (4)
14) Exploiting a computer system or a private network inside a computer. (7)
16) _____ Syndrome describes a group of eye and vision related difficulties resulting from prolonged computer or cell phone usage. (14)

Sunanda Basu
English department, Second Year

CROSSWORD II



1. The whole number or amount of something.
2. The action of thinking about something in a logical, sensible way.
3. Relating to or typical of a whole country and its people, rather than to part of that country or to other countries.
4. Several straight muscles.
5. An abstract idea.
6. Half of ten; sum of three and two.
7. Made or produced by human beings rather than occurring naturally, especially as a copy of something natural.
8. Have a strong effect on someone or something.
9. Next to or adjoining something else

Dorris Chien Chien Chu
History department, First Year

Bipasha Paul
History Department, First Year

WILL MACHINES RULE HUMANS?

"Computers will overtake humans with AI at some point within the next 100 years. When that happens, we need to make sure the computers have goals aligned with ours."

- Stephen Hawking.

When Stephen Hawking said this half a decade ago, many thought it was another one of those conspiracy theories, like the existence of aliens. However, with each passing day, we are seeing the impact of Artificial Intelligence increasing in our daily life. Artificial Intelligence is basically the intelligence present in machines, which can be used to mimic human activities, but in a far more efficient fashion.

Back in the day, when we thought about AI, all we could picture was specialized robots which were developed by scientists. Today, AI is much more than that, and is an integral part of our lives. The rapid adoption of AI has had far reaching consequences on human life and many of us are not even aware that we interact with AI on a daily basis.

When we use social media applications, we think of it as a means for connecting with our friends and acquaintances. However, there is a lot more than that happening in the backend, and that is governed by AI. The introduction of AI algorithms to social media platforms has changed the way we interact with people. One might have seen social media apps suggesting people they might know, and more often than not, it turns out to be accurate. The social media algorithm identifies the interests of the user, the place they live in, their educational background, and several other metrics to accordingly suggest people with a similar background. This has made it quite convenient to connect with people who we might not be in touch with.

Likewise, the impact of artificial intelligence isn't just limited to human interaction. AI has played a huge role in minimizing human effort. People use maps on their mobile phones and cars on a daily basis to commute, and the apps suggest the fastest route as per the traffic conditions. This not only helps us in reaching our destination faster, but also prevents further clogging of routes which are facing a traffic jam. This is just one of the numerous examples on how AI has made lives significantly easier for humans.

While the positive impacts of AI on our lives is undisputed, how AI will turn out to be in the future is something which many experts are skeptical about. Hawking isn't the only one who has voiced concerns about AI overpowering mankind in the future, and if we are not careful, we might be unknowingly working towards creating our own enemies.

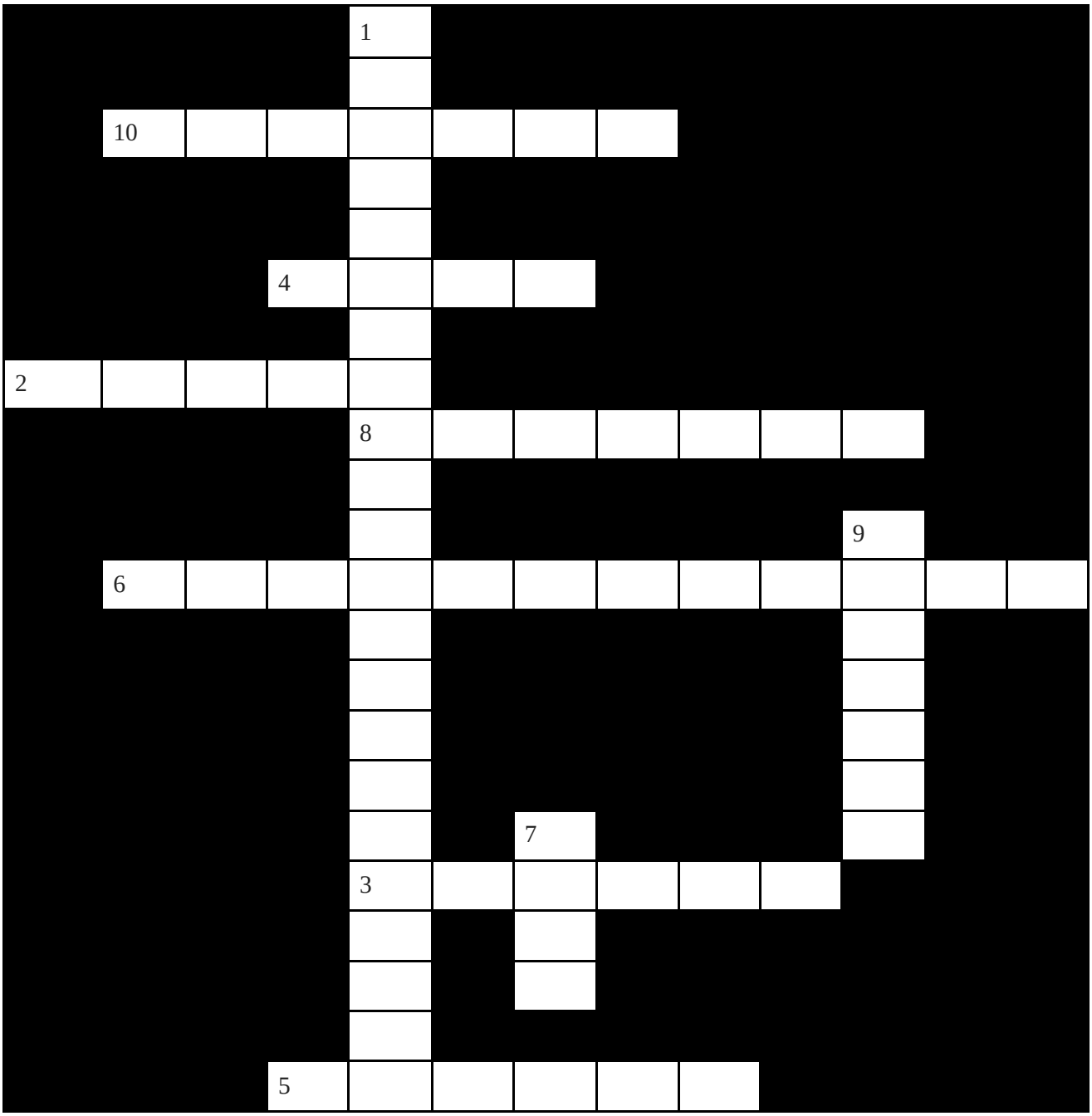
Khadeeja Jamil
Economics Department, First Year

QUIZ I

1. Who designed the internet protocols named - Transmission Control Protocol (TCP) and Internet Protocol (IP)?
2. In which year was the Artificial Intelligence program DENDRAL created, and what is the name of the creator?
3. Who had coined the phrase 'surfing the internet', and in which year was the phrase coined?
4. Which one of the top 10 internet companies in the world have originated in Europe?
5. Who had introduced the world's first commercial electronic digital wrist watch and what was it called?
6. Which was the first movie to be made about a man-made machine with a human form and by whom was the movie directed?
7. In which year and by whom was the division of "weak AI" and "strong AI" explained for the first time?
8. Which Greek God is known for creating robot-like models to help him in his workshop?
9. Who coined the term 'robotics', and also set down the 'Three Laws of Robotics'?
10. Which country became the front-runner of AI in 2021 because of its technological development and market applications?

Adetee Shaw
Political Science Department, First year

CROSSWORD III



ACROSS:

2. What is the name of the robot that Jimmy Falcon meet on his show?

3. Whose company is on the forefront of self-driving car technology?

4. This product (from Apple) is a pioneer of Artificial Intelligence?

5. An AI agent perceives and acts upon the environment using_____

6. Who is known as the father of AI?

8. The male looking robot is called_____

DOWN:

1. The term used to describe the ability of a digital computer-controlled robot to perform task commonly associated with intelligence.

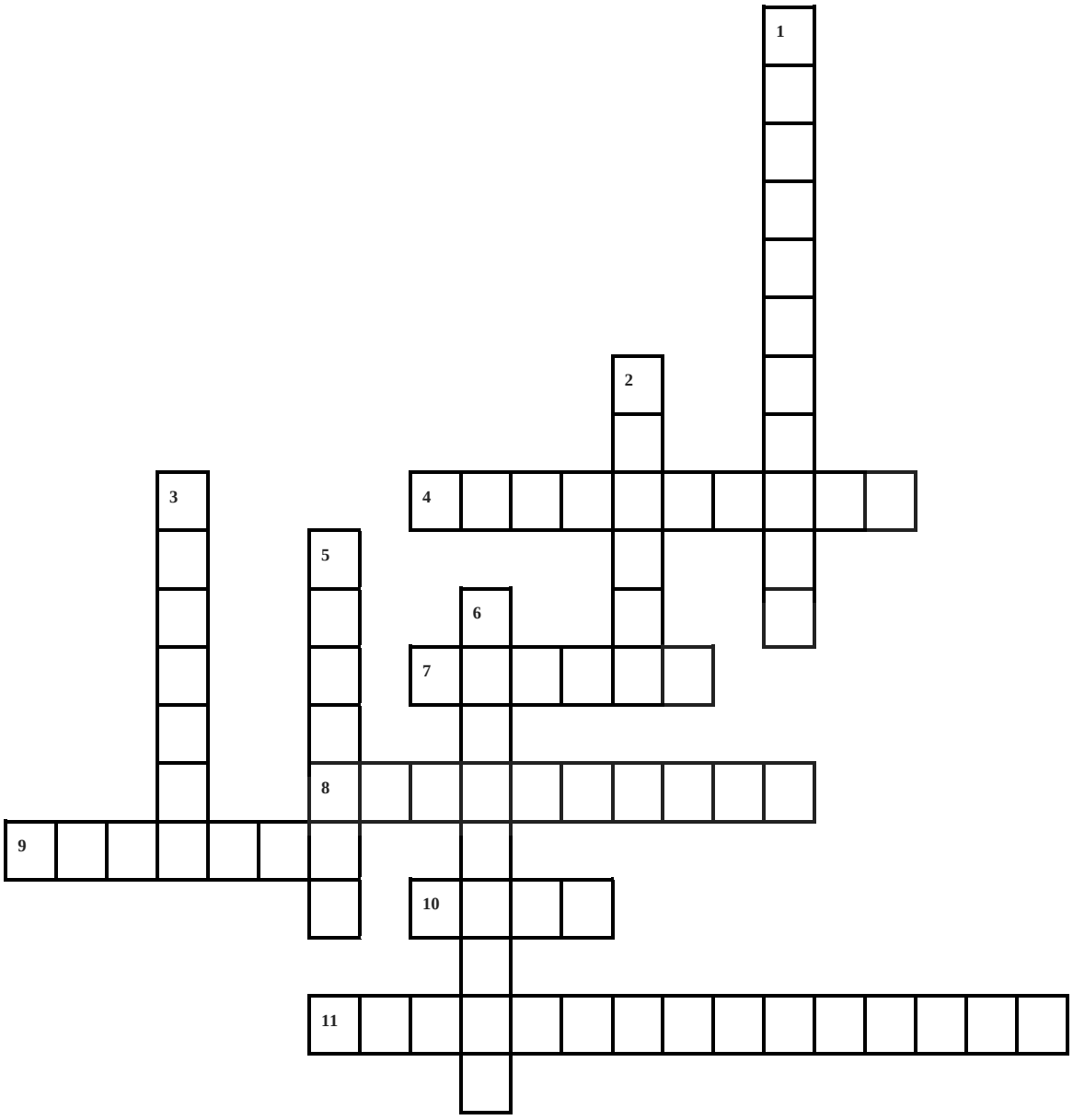
7._____ number of informed search method are there in an AI.

9. The name of the AI system developed by Daniel Bobrow was?

10. The common language for artificial intelligence is_____.

Surabhi Kumari Mishra
History Department, First Year

CROSSWORD IV



ACROSS

4. Let's machines group data points or items into groups with similar characteristics.

7. A type of condition that can change over time.

8. Machine can perform its task or tasks without needing human intervention.

9. A program that mimics human-to-human conversation.

10. Assumptions made by a model that simplify the process of learning to do its assigned task.

11. This subset of AI focused on developing algorithms that will help machines to learn.

DOWN

1. Symptom of machine learning training in which an algorithm is only able to work on or identify specific examples present in the training data.

2. A popular programming language used for general programming.

3. A collection of related data points, usually with a uniform order and tags.

5. Datasets that are too large or complex to be used by traditional data processing applications.

6. A set of rules that a machine can follow to learn how to do a task.

Ankita Dash
Economics Department, First year

ARTIFICIAL INTELLIGENCE- A PART OF EVERYDAY LIFE

A.I. What a fascinating concept to ponder about! Even two decades ago, we thought such ideas could only reach us through a screen from the likes of the worlds of 'The Terminator' and 'I, Robot'. However, massive thinktanks have come together over the years, to actualize this seemingly surreal concept. Machines have become a part of our daily lives now. Living without the internet feels impossible! A.I. is particularly beneficial towards mass personalization of the internet. If we talk about 'boons' of Artificial Intelligence, it might be more fitting to state that A.I. has found only ways to bridge certain gaps in various fields that aids humans in overcoming barriers that hindered us before from discovering novelty.

However, with advantages comes certain setbacks. Even though A.I. takes a lot off our plate and makes it easy for us to achieve success in fields like education and schooling, medicine, research; it has also been one of the major reasons that has lead humans of the twenty first century to be fixated on gadgets and gizmos and become detached from the surrounding natural world.

A.I. applications are used, in search engines like Google, Mozilla Firefox, Microsoft Bing, apps we use daily like YouTube and Spotify. Digital assistants like Google Assistant, Cortana and further, devices like Alexa make use of the applications quite extensively. With changes in lifestyle and the developments that have taken place our daily needs have also changed accordingly, all of these digital applications most certainly assist us in carrying out tasks and cater to our needs but it also makes us complacent in our work and dependence on machines comes into the picture.

Social media platforms also make use of A.I. to a certain level for Ad targeting and providing personalised feed for every user, this becomes the very reason why we see people with their heads down scrolling their phones most time of the day. Platforms like Facebook, Chatrooms, WhatsApp and Instagram have made this world a small place, anyone from any part of the world can be connected via these applications, be it hotshot celebrities or world politicians, writers or thinkers. Especially in a pandemic situation which the entire world is enduring presently, these apps are a gateway to see others, their social life, friends, and most importantly we get a glimpse inside the lives of the trendsetters whom we follow so blindly.

A.I. takes inputs from such social platforms for building virtual profiles of users which infringes privacy. Using phones, laptops and tablets comes to us as naturally as sleep, it has now taken centre stage in our lives. Discerning how much time should be spent on these online platforms and understanding the need that individuals ranging from children to adults should maintain a limit of their usage of these applications will help in making the lifestyles more grounded in the physical world. While the thought of balance is pretty idealistic but catching a break from the pangs of pain in the real world is only turning into unhealthy addiction and dependence on the virtual world.

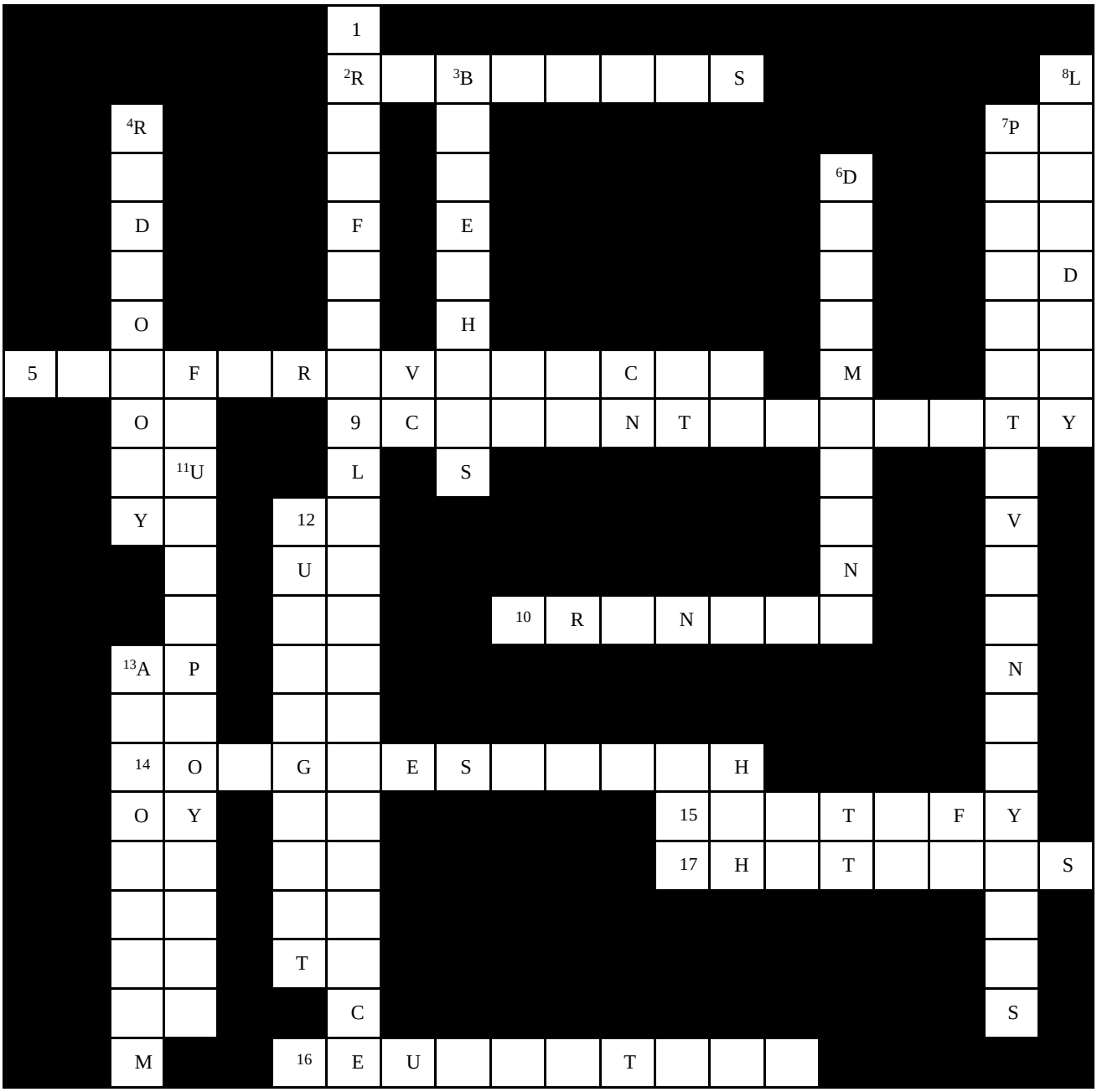
Feelings of fulfilment and happiness cannot be derived from the confines of an artificial world. Both the universes, that of the real and the virtual worlds are expanding.

With the help of virtual reality, a mother is reunited with her deceased daughter, fighter pilots get simulation rides for their training without even getting on a real plane itself. Sophia the humanoid robot has made several headlines across the world, one ‘who’ can closely resemble human facial expressions linked with various emotions that humans feel. She is one of the first robots that can actually crack a joke! In Japan, convenience stores are now being run by service bots, all the services are provided by the robots. Machines and technology are on the rise. However, the online, virtual world is untethered, can exist without any strings attached but the existence of mere people and humans are rooted in nature that is tangible.

Hence, even if we occasionally find solace in the worlds of Netflix or VR our strings are attached to the five elements of nature, putting more thought on our natural habitats is more crucial now than ever before, when we are confronted with global crisis like climate change.

Rupanjana Ghosh
English Department, First Year

CROSSWORD V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DOWN:

1. An intelligence designed by humans and demonstrated by machines.
3. A discipline that focuses on the relationship among living beings which must be followed by AIs.
4. Improvement to detect specific diseases and analyze the scans.
6. A process by which patterns are discovered for extracting information.
7. When a machine makes conjectures about future using current and historical ideas.
8. AI must be transparent without hiding any secret agenda.
12. A test to test the ability of a machine to mimic human behaviour.
11. A result as works will be replaced by digital devices.
13. A set of rules for AI on how to solve problems.

ACROSS:

2. Designing and manufacturing cyborgs.
5. High profile example of AI for autonomous vehicle.
9. AI designers and developers must shoulder the outcome and impact of AI on society
10. To reduce the number of decisions made by AI.
14. Search engine using AI.
15. Music app where AI sometimes make decisions for you.
16. Rules drawn from experience to solve a problem quickly.
17. Allows machine to answer calls as well as track orders.

Sukanya Mukherjee
Economics Department, First Year

AI AND US: OUR HOPE OR OUR END

Artificial Intelligence (AI) is the development of computers and technology to perform tasks requiring normal human intelligence and forms an important base of the fourth industrial revolution. Yes, you heard it right we are talking about making I wish I was as intelligent as you a reality but the difference is it isn't you who will be getting intelligent but your machines. You might already be aware of artificial intelligence with all these terms machine learning, chatbots, algorithms becoming part of conversations and discussions for the past few years. But just like the age-old "pineapple on pizza" has supporters and opponents, even the spread of AI has both positive and negative views.

The supporters argue AI will help get work done quicker, more efficiently, be more precise, and help us better predict. The other party argues that AI has made humans lazier, will lead to large-scale unemployment, create more wealth inequality, and is frightened about a future where AI will overpower humans. AI also replaces emotions with logic and compromises ethics (remember Sophia answering yes to killing humans and another robot saying he'll be nice to us and keep us in people's zoo for old time's sake). In January 2015 Stephen Hawking along with dozens of AI experts had penned an open letter for research on societal impacts of AI and to prevent pitfalls.

Let us talk about how does AI affects our interactions and life. Well, what if I tell you your entire life is a lie interplay of algorithms. It shouldn't be a surprise that the answer to who knows you best isn't your best friend, parents, or any person but your devices. If you feel am exaggerating, consider watching The Social Dilemma on Netflix where tech experts from Silicon Valley who have been involved in the development of your favorite social media platforms share their concerns about its dark side.

Some say AI will impair our cognitive development. Remember rushing to the library every time something intrigued you because there was no other way to learn about it well now anytime you have a doubt who do you turn to, obviously the know it all's: Siri, Google, Alexa, and so on. In 2011, a group of researchers in Harvard University had published a paper on the Google Effect: cognitive consequences of having information at your fingertips.

This syndrome causes us to tend to forget information and where we can get it. Another study showed usage of GPS leads to reduced activity of brain areas responsible for spatial orientation and navigation. But folks hold on there is some good news too. Some researchers say as repetitive tasks will be handled by bot humans will get the opportunity to further develop their abstract thinking, imagination, creativity, and intuition (so pick up the paintbrush, pen, ukulele the bot can't beat you in that or did I speak too soon). AI is being developed in different fields from healthcare to predictive police, weaponry to education, space exploration to home and service robots, etc. So

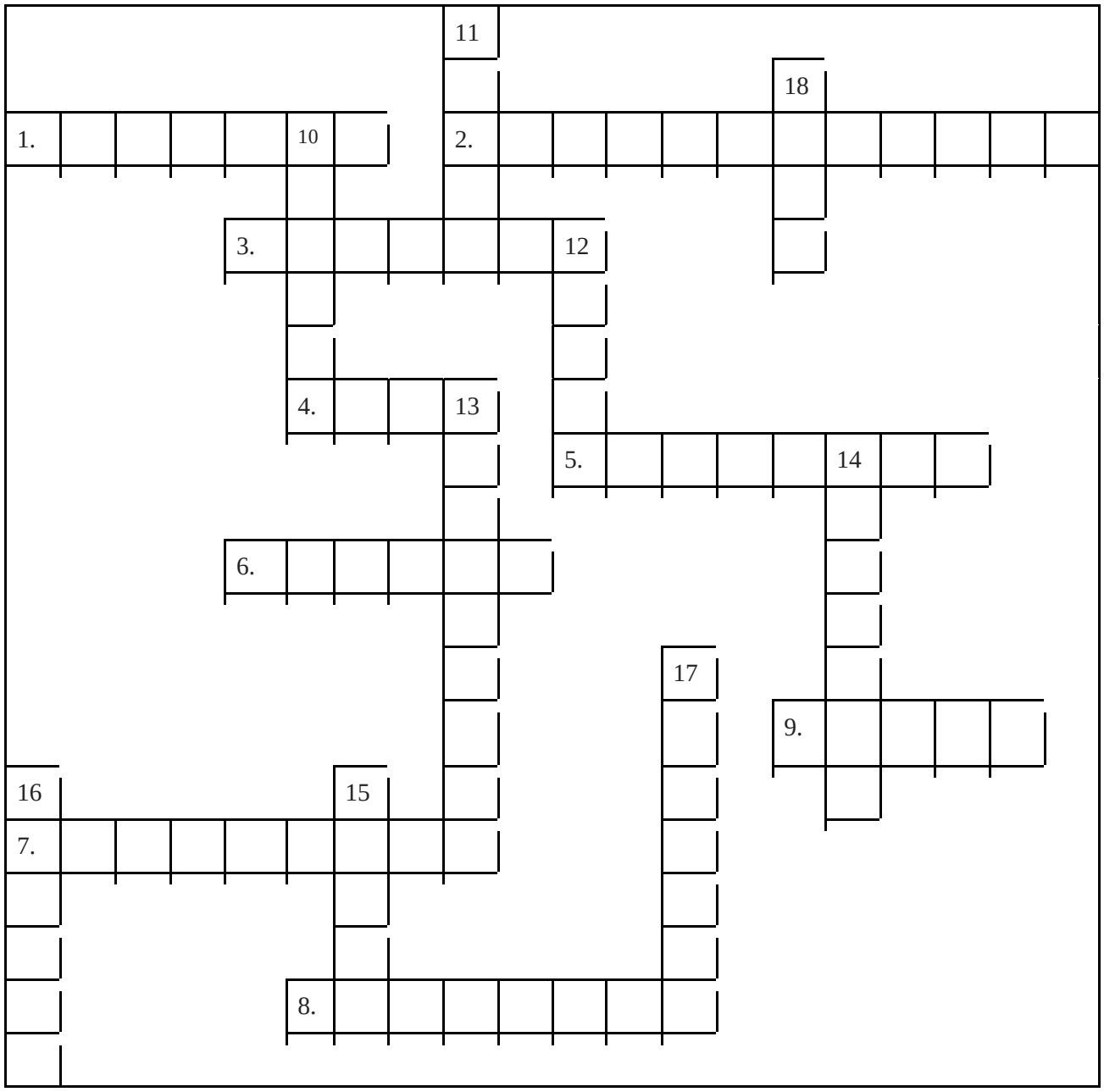
don’t be surprised if soon a conversation in the hospital is “Hey bot can I have my reports”. AI will enable greater individualization as AI can take over the rote job.

This will lead to large-scale unemployment of people who are unskilled or semi-skilled and are engaged in such professions as driving, food service, etc. But we all know machines and industrial revolutions have always led to both unemployment and advancements. We are already expecting Tesla to gift the world a self-driving AI car but despite this, even Elon Musk also shares his concerns about this new powerful toy (AI) everyone is fascinated with.

AI is both a boon and a bane. With AI we can overcome the human limitations and help fasten the pace of development and work on bridging the gap between different groups in society but we need to ensure that AI systems are accountable, explainable, and unbiased and the application of AI is done in a lawful, ethical and robust manner. AI is a double-sided sword that needs to be handled with utmost care as much potential of change it mesmerizes us with, equally drastic calamities can be caused by its mismanagement as with great power comes great responsibilities.

Alisha Mushrat
Psychology Department, First Year

CROSSWORD VI



ACROSS

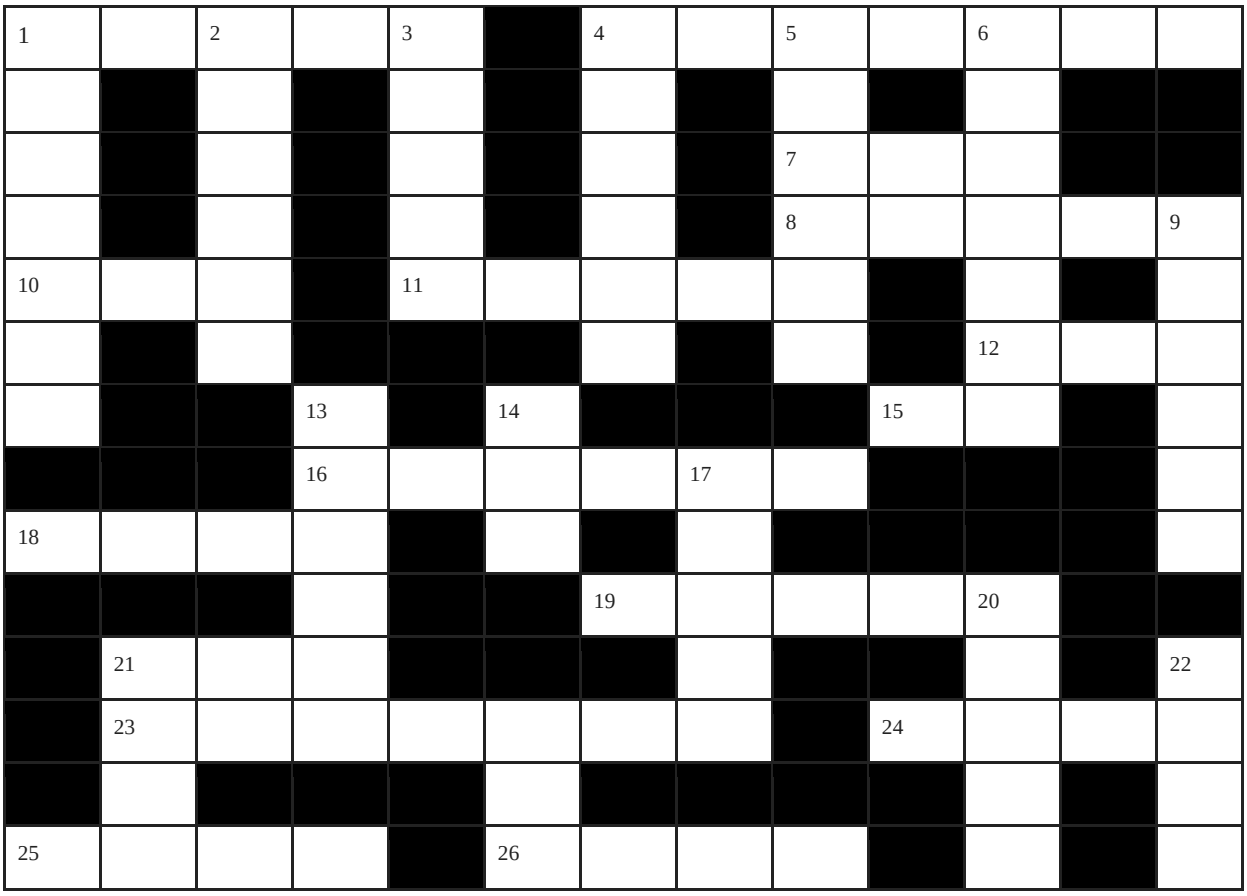
1. Smartest AI in the world created by Google.
2. What is the I in AI stand for?
3. A virtual assistance developed by Microsoft
4. A learning app that helps you with pronunciation and vocabulary to speak English confidently
5. An AI pet that can also help with delivery, aiding the visually impaired etc.
6. WORLD'S first robot citizen and the first robot innovation Ambassador
7. This company supports researchers and organization who use technology and AI to improve the world
8. This is one of the first robot ever built in 1996
9. These organizations help the economy by using AI for revenue generations and risk management

DOWN

10. One of the most famous search engine which is powered by AI
11. A country which is the largest market for industrial robot since 2013
12. Is the voice service that powers Amazons family of ECHO product , Amazon Fire TV etc.
13. A virtual assistant developed by Google
14. The first AI program created in 1965
15. The most use type of search available in AI
16. One of the first companies to build a business around AI
17. Formally known as NIIT technology is an Indian multinational information technology company
18. It is the AI based voice assistant available across all Apple devices

Johanna M. Thangadurai
Psychology Department, First Year

CROSSWORD VII



ACROSS

1. A command to copy from one location to another (5)
4. A device used to convert documents into digital data (7)
7. A small hard-working insect (3)
8. Small letters; _____ case (5)
10. Period of time in history (3)
11. A treeless grassy plain (5)
12. To erase (3)
15. Agreement/Acceptance (2)
16. Text files with small pieces of data (6)
18. At the back (4)
19. A small movable device that helps to control on a computer (5)
23. Moving files within a computer system (7)
24. Unit of data of a fixed size (4)
25. Requests, pleads (4)
26. Information processed or stored by a computer (4)

DOWN

1. An episodic series of downloaded digital audio files (7)
2. A physical surface to present visual information (6)
3. A method of exchanging messages using electronic devices (5)
4. The rules that control the structure of symbols in computers (6)
5. A computer used to process continuously varying data (6)
6. Related links and information between computer systems (7)
9. Reload the operating system of a computer (6)
13. To move visuals of a window (up/down, right/left) (6)
14. A period (3)
17. Pictures on a computer screen that represents a program or function (5)
20. A small icon placed in line with text (5)
21. Errors or faults in a computer program or system (4)
22. Installs or hardware device or software program to the computer (4)

Lesley Danielle Pote
Psychology Department, First Year

WORD SEARCH I

D	A	T	O	C	I	T	E	A	L	G	O	R	I	T	H	M	B	E	N
E	D	I	H	Y	O	O	L	F	Y	T	O	U	A	E	B	R	U	I	O
Y	Q	V	H	L	H	G	P	Z	M	N	Z	O	V	N	A	N	O	H	P
R	A	M	L	T	B	O	N	G	O	I	N	G	G	O	N	E	V	E	N
R	O	B	O	T	I	C	S	I	B	O	I	X	X	L	X	N	R	C	I
U	Q	R	U	H	I	H	C	H	T	B	P	N	M	H	E	C	E	I	L
D	O	H	S	W	Q	A	K	N	Z	I	I	B	H	N	E	V	K	G	L
U	A	K	P	K	Y	T	A	C	P	X	V	L	B	P	N	R	F	G	I
I	I	T	O	P	U	B	D	A	T	A	S	E	T	H	N	V	B	A	G
V	M	O	A	L	N	O	L	M	Q	G	E	S	S	J	O	E	N	M	O
H	S	I	N	M	K	T	A	J	X	D	M	P	O	C	P	N	D	O	P
N	O	T	I	P	I	S	M	L	S	W	A	N	E	F	I	J	L	A	A
K	V	E	H	J	B	N	Z	W	X	Q	N	P	I	P	T	E	O	N	R
O	O	S	O	C	H	I	I	E	R	D	T	Y	I	O	P	U	N	M	A
P	Y	T	H	O	N	Y	Y	N	Y	G	I	L	E	I	X	H	E	C	M
I	Z	D	B	N	V	M	I	V	G	D	C	S	O	F	T	W	A	R	E
F	C	A	K	J	N	D	G	H	R	K	S	V	J	O	H	K	O	O	T
I	X	T	O	L	O	V	E	L	Y	N	M	B	U	T	I	A	M	N	E
L	A	A	V	C	O	M	P	U	T	E	R	V	I	S	I	O	N	J	R
M	A	C	H	I	N	E	L	E	A	R	N	I	N	G	I	F	O	L	H

CAN YOU FIND THE FOLLOWING A.I. TERMS IN THE ABOVE JUMBLE???

Algorithm	Chatbots
Cognitive science	Machine learning Dataset
Data mining	Test data
Percepts	Robotics
Semantics	Software
Test data	Cognitive science
Google	Computer vision
Parameter Python	Machine learning

Nandini Das
History Department, Third year

Life ten years ago!

What was life a ten years ago?

Did we have Siri to set an alarm?

We spent time giggling for almost a day or so,

Time was great without the ‘blue ticks’;

And now, we have lost that charm.

The charm of life when we planned a day to gather,

Yet it wasn’t enough for us,

Now, even if we have a week together,

We stick our faces to our phones, and let the precious time casually pass.

And now, it’s always Siri making a call,

Or, Alexa turning on the lights,

Crushing the human connection and warmth,

We chose to reach materialistic heights.

What I fear is that it’s little too late

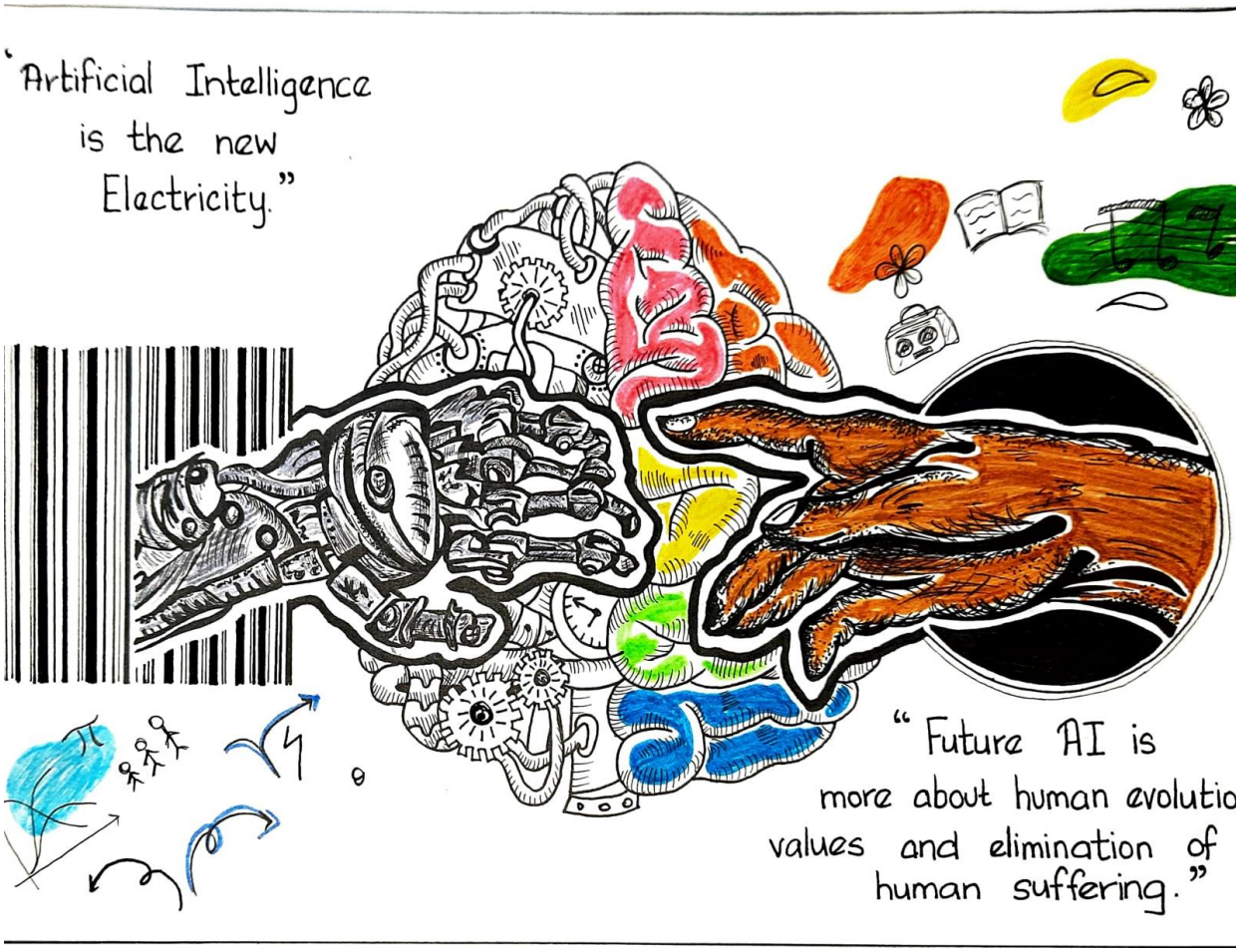
To bring back those good old days,

When warmth and affection were superior,

Instead of today’s technological daze.

Prerana Ghosh
Psychology department, First Year

ARTIFICIAL INTELLIGENCE IS THE NEW ELECTRICITY



Shalini Regina Gomes.
History Department, First Year

WORD SEARCH II

P	S	A	T	M	A	C	H	I	N	E	V	I	S	I	O	N	E	O	N
Y	E	A	N	C	H	D	I	A	L	O	X	H	P	R	A	V	J	Z	W
T	A	R	G	R	T	H	D	A	H	K	L	U	K	R	N	B	S	Z	Y
H	M	T	W	E	T	Y	J	X	H	W	V	D	J	Z	U	J	S	F	S
O	E	I	B	H	T	R	T	Y	E	A	H	K	V	O	N	N	I	H	F
N	N	F	A	S	G	H	R	A	U	B	E	Y	W	T	X	S	I	W	I
A	S	I	S	B	A	C	K	P	R	O	P	A	G	A	T	I	O	N	N
S	A	R	S	A	C	A	L	L	I	S	G	R	A	L	A	P	I	N	G
F	E	O	R	A	I	N	T	E	S	D	G	S	N	P	T	Q	T	B	A
R	O	B	O	T	I	C	S	A	T	S	F	H	K	H	B	S	E	B	C
Y	R	O	W	R	A	T	O	N	I	X	G	K	O	A	P	F	B	S	J
D	S	Y	D	G	U	L	A	C	C	D	C	Z	N	G	T	K	E	A	W
J	B	I	T	I	F	H	G	Z	S	Y	R	W	K	O	G	E	R	F	B
K	R	C	C	H	A	T	B	O	T	O	A	Y	D	Q	F	A	T	R	H
F	I	S	H	I	N	S	F	C	R	L	T	R	W	T	G	R	T	T	R
F	G	I	F	Y	F	N	I	V	J	I	C	F	V	N	E	R	E	H	S
S	R	N	T	Y	R	E	A	R	D	A	T	A	L	O	G	T	S	G	X
G	A	A	A	S	F	H	Y	K	P	D	N	H	U	D	F	K	T	H	O
S	D	T	M	E	C	H	A	N	I	C	A	N	M	E	S	R	E	T	H
C	O	N	N	E	C	T	I	O	N	I	S	M	C	S	H	K	L	F	A

Find the answers to the questions below from the word grid given:
(Tip: Look for words in vertical, horizontal and diagonal directions.)

HAPPY SEARCHING!!

1. A set of rules that a machine can follow to learn how to do a task.
2. Program developed to communicate with people in a way that mimics human-to-human conversations
3. A popular programming language used for general programming.
4. Way of training of neural networks based on a known output
5. Rules drawn from experience to solve a problem faster in AI
6. Usage of an algorithm to cut off undesirable solutions of a problem
7. Narrow AI is also called
8. Computer program developed by Alphabet Inc.
9. An approach in the fields of cognitive science, explaining mental phenomena using artificial neural networks
10. Declarative logic programming language; subset of PROLOG
11. A test of the computer based synthesized voice to check if it can tell a joke in a tone to make people laugh
12. AI data structure to divide knowledge into substructures
13. Technology providing imaging based automatic inspection
14. A basic unit of a data structure
15. An interdisciplinary branch of science and engineering dealing with the design, construction, operation, and use of robots

Samriddhi Basu
English Department, Second Year

QUIZ II

1. In the 1950s, who proposed a solution to the question of when a system designed by a human is ‘intelligent’?

A) John Von Neumann
B) Claude Shannon
C) Alan Turing
D) Andre Weil

2. Artificial Intelligence was defined as “The study to proceed on the basis of the conjecture that every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it.” Who offered this influential definition?

A) John McCarthy
B) Leonard Adleman
C) Howard Aiken
D) Frances E. Allen

3.Which software developed by DeepMind, the AI branch of Google’s—was able to defeat the world’s best player at Go, a very complex board game?
A) AlphaZero
B) AlphaGo
C) Master
D) AlphaGo Zero

4.A typical example of Artificial Intelligence exclusive only to Apple Inc.'s iOS, iPadOS, watchOS, macOS, tvOS, and audioOS operating systems?

A) Cortana
B) Siri
C) Google Assistant
D) Alexa

5. When was the term artificial intelligence coined?

A) 1945
B) 1955
C) 1968
D) 1956

6. Which language is mainly preferred for A.I.?

A) Python
B) Java
C) PHP
D) Scala

7. How many available ways are there to solve a problem of state-space-search?

A) 5
B) 1
C) 0
D) 2

8. What is the full form of PEAS- a representation model on which an AI agent works?

A) Page, Electricity, Adobe, Scan
B) Perl, Encarta, Acrobat, Search Engine
C) Performance, Environment, Actuators, Sensors
D) Petabyte, Epiphany, Algorithm, Security

Madhuja Chakraborty
English Department, First Year

IS ARTIFICIAL BETTER THAN NATURAL?

Humans have used their intelligence to program their artificial counterparts in machines to make their lives simpler. This artificial Intelligence not only performs clerical roles but also has changed our living hood. We are so heavily dependent on AI that even writing this article is not possible without it. I need to search and cross-check facts on Google which uses AI to list all sites of relevance in an order.

I might even cross-check my grammatical errors on a popular site that uses the same to spot and eliminate all such basic errors. Whatever news piece, shopping item, videos, reels, and the people we meet online through Instagram suggestions will be credited to AI. The false blame we put on auto-correct when we ourselves make a blunder is on AI.

Since the past two years when the whole world is in lockdown our interaction with AI has increased at a tremendous rate. It has become easier for us to joke and converse sitting on a bed, making clicking noises on a keyboard than to meet up and talk in a physical presence.

Our whole schedule is stored in our phones, which is now responsible for us to wake up on time, cook our lunch, and even drink water! Banks generally keep a check on the usual card payments of their customers and whenever they find a sum to be unusual block the card or give a call to prevent possibilities of card scams and theft.

Since AI is generally pre-programmed and is much more prone to be consistent in its operation, as well as being quicker than humans to complete its tasks, more and more organisations are replacing tens of humans with one AI software or a robot. Japan already employs around a quarter of a million robot workers and has humanoids for entertainment, guarding, and even for social interactions and therapy.

Paro is a robot baby seal that intends to elicit emotions and calm its users to be therapeutic to them. WhatsApp has launched its very own WhatApp bot that generates an automated response to the people, particularly used by businesses to manage problems of clients and achieve operational efficiency. This is progressively eliminating the possibility of people sitting together and talking even about something as mundane as them being unable to work with a toaster.

If the chatbot made people distant we cannot simply forget how the translation tools have brought the world closer. The barrier of language has been largely broken down. When earlier language seemed to have been vastly limited sources of entertainment, (No hate is meant to Star Plus) translations in almost real-time have opened up a sea and seven continents worth of content for consumers around the globe simply because of subtitles and possibly dubbing.

The Hallyu wave, which has taken over the world by storm refers to the huge consumption of South Korean dramas, song albums, and more. This alone contributed to about 12 billion American dollars' worth of boost in the South Korean Economy in 2019. Turkey is the second-largest exporter of serial dramas after the USA.

The impact of this can be noticed when foreign artists top the song charts of domestic billboards. Not only this, this has created a huge demand for apps that teach these languages for free or for a minimum cost, which again develops another aspect of AI, which is the ability to teach!

There is truth in AI eliminating jobs and hampering inter-human interaction and effort, but we cannot ignore that it has created another sector of opportunity for the programmers and all other jobs associated with humanoids. American technologist Kevin Kelly has made a seventh kingdom of classification- Technium.

This includes all of the technology that exists in the world. They have become so essential that they simply cannot be neglected as something a man made. In the future, this classification is only going to expand with AI gradually dominating its chain. We need to learn how to update ourselves and ride this wave as well as to not be too dependent on it. This is the only way we can enjoy the ride.

Navyaa Agarwal
Economics Department, First Year

QUIZ III

1. _____ is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

2. Who is known as the Father of Artificial Intelligence?

3. Machine learning, Deep Learning, Computer Vision are sub-fields of AI. True or false?

4. AGI is when a program can compute, evaluate, and work on multiple tasks with human-level integrity and intellectuality. What is the full form of AGI?

5. ANI refers to a computer's ability to perform a single task extremely well, like playing chess. It is beneficial and essential for performing numerous tasks, but it is not quite effective as AGI. What does ANI stand for?

6. According to experts, the main reason AGI has not been accomplished yet is due to the fact that it is almost impossible to replicate the _____.

7. Autocomplete and autocorrect are AI features. True or false?

8. _____ is a virtual assistant technology largely based on a Polish speech synthesiser named Ivona, bought by Amazon in 2013.

9. What is the most used programming language for Machine Learning?

10. Even if you're not familiar with the name Susan Bennett, you'd likely recognize her voice. She was the original voice of _____, a dependable presence in many people's lives, responding to various inquiries and fulfilling spoken commands.

Tiyasha Mukherjee
Economics Department, First Year

A Day without AI…

The term “Artificial Intelligence”, popularly known as AI in its abbreviated form, is composed of two words, where Artificial means “man-made” and intelligence means “thinking power”. Hence, AI means “a man-made thinking power.” It is a branch of computer science with the help of which creation of intelligent technologies behaving like humans, thinking like humans, and making decisions like them are made possible. The basic goals of AI are to replicate human intelligence, solve knowledge-intensive tasks and create an intelligent connection between perception and action.

Today, AI has almost become a part and parcel of our lives. So, let’s just take an instance of a day without AI, to understand how we humans have become dependent on it. Its 8a.m. in the morning and you have to wake up to sit for your online classes and begin yet another online day. But you missed the first class as you were unable to wake yourself up since you do not have your Google Assistant to set alarms for you.

Next, you cannot have your cup of coffee in a foggy winter morning until you make it for yourself since your AI equipped coffee maker is not there in use. You have to wash your clothes all by yourself as your washing machine with the AI technology is unavailable. Even you cannot play mobile games for your entertainment until you have a human partner to compete with because your smartphone won’t play as your opponent. Alexa will not play the music for you, YouTube will not recommend videos based on your choice and Facebook will not remind you of the birthdays of your dear ones.

So, its very conclusive from all these facts that we, humans, are almost futile without AI in our daily lives. As a result, we are growing slothful day by day. Since AI helps in doing works without making errors, eventually we are becoming more and more error-prone in nature. More dependency on modern machines and technology is leading to a loss in mental capabilities of human beings. Consequently, what is happening is that humans are losing their authenticity and creativity.

Priyakshi Sen
History Department, First Year

QUIZ IV

1. Which of the following is a negative impact of AI on society?
(a) Artificial intelligence working hours
(b) Data privacy
(c) Not subjective
(d) Perform repetitive tasks with ease

2. How does artificial intelligence become useful to society?
(a) It become helpful in completing tasks quickly and efficiently, producing more products
(b) It become helpful in completing tasks quickly thus makes people crazy
(c) It become helpful in making task easier and less efficient resulting to boost of Economy
(d) It helps us to complete our task

3. Which system of programs and data structure that approximates the operation of the human brain?
(a) Intelligent network
(b) Decision support system
(c) Neural network
(d) Genetic programming

4. Which program that gathers information or performs some other service on a regular schedule without a human being's immediate presence.
(a) Aggregator
(b) Agile applet
(c) Page
(d) Intelligent agent

5. In what way can artificial intelligence become harmful?
(a) Excessive use if AI makes people lazy since they rely too much on it
(b) By using AI as a weapon in wars, many innocent lives will be affected
(c) AI replaces the human force resulting to less job opportunities to human workers
(d) AI programmed devices are harmful through the radiation it produces

6. Which of the following is a positive impact if AI on society?
(a) Data privacy
(b) Biased judgements
(c) Artificial intelligence working hours
(d) Loss of control

7. Who is known as the father of AI?
(a) Fisher Ada
(b) Alan Turing
(c) John McCarthy
(d) Allen Newell

8. Which of the following statements illustrate the good effects of artificial intelligence.
(i) Uplifts economic status due to old invented AI machines
(ii) Enables easy and fast negotiations
(iii) Helps the society in seeking solutions
(iv) Creates problems due to misuse of technology
(a) i, ii
(b) ii, iii

(c) iii, iv
(d) i, iii

9. What is the potential ability of the human brain to accept an implanted mechanical device, such as a computer as a natural part of its representation of the body?
(a) Virtual machine
(c) Serendipity
(b) Self assembly
(d) Brain machine interface

10. What is the tendency for people to think of inanimate objects as having human-like characteristics?
(a) Aliasing
(c) Self-replication
(b) Personalization
(d) Anthropomorphism

Shweta Kumari.
History Department, First Year.

ARTIFICIAL INTELLIGENCE - AN ALTERNATIVE TO HUMAN EMPLOYMENT

Artificial intelligence (AI), the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. The development of artificial intelligence (AI) is one of the great milestones of recent years. It has changed our way of relating to technology and will be the basis for the fourth industrial revolution where robotics will gain ground compared to humans.

Autonomous cars and smartphones, as examples of AI, not only make our lives more comfortable but we can talk to them and interact. Experts are considering how this transformation influences our mental processes and how it will affect the lives of human beings and their way of behaving and of thinking.

However, it might influence the human beings in both positive and negative ways –
Some of the positive influences are -

1) Reduction in Human Error: The phrase "human error" was born because humans make mistakes from time to time. Computers, however, do not make these mistakes if they are programmed properly. With Artificial intelligence, the decisions are taken from the previously gathered information applying a certain set of algorithms. So, errors are reduced and the chance of reaching accuracy with a greater degree of precision is a possibility.
2) Helping in Repetitive Jobs: In our day-to-day work, we will be performing many repetitive works like sending a thanking mail, verifying certain documents for errors and many more things. Using artificial intelligence, we can productively automate these mundane tasks and can even remove "boring" tasks for humans and free them up to be increasingly creative.
3) Faster Decisions: Using AI alongside other technologies we can make machines take decisions faster than a human and carry out actions quicker. While taking a decision human will analyze many factors both emotionally and practically but AI-powered machine works on what it is programmed and delivers the results in a faster way.

Some of the negative influences are-

1) High Costs of Creation: As AI is updating every day the hardware and software need to get updated with time to meet the latest requirements. Machines need repairing and maintenance which need plenty of costs. It's creation requires huge costs as they are very complex machines.

2) Making Humans Lazy: AI is making humans lazy with its applications automating the majority of the work. Humans tend to get addicted to these inventions which can cause a problem to future generations.
3) No Emotions: There is no doubt that machines are much better when it comes to working efficiently but they cannot replace the human connection that makes the team. Machines cannot develop a bond with humans which is an essential attribute when comes to Team Management.

CONCLUSION:

In conclusion, artificial intelligence will become more valuable to humans than its capabilities. It will become a part of our daily lives. Some worry about the development of this new technology where a robot that can learn and develop skills on its own. Artificial intelligence will surpass humans on an IQ level and become better than humans at many skills or knowledge. This leaves some people in an identity crisis.

Why makes humans so unique and what is their purpose if artificial intelligence can simply replace them by taking all of their traits and habits? Artificial intelligences are designed to learn on their own and resemble a human brain and physical and mental properties. One thing is for sure, is that artificial intelligence will continue to develop because of humans.

Humans will continue to make new discoveries and discover new things. Artificial intelligence will never be able to accomplish that, however they may assist a human by providing theories. The future is unknown and maybe artificial intelligence and humans will be able to work together on many different topics.

Ruparna Banerjee
Geography Department, First Year

QUIZ V

1. The substantial work in the field of Artificial Intelligence (AI) was started in the mid-20th century by British logician and computer pioneer. What was his name?
   (a) Charles Babbage
   (b) Alan Mathison Turing

2. The Artificial Intelligence (AI) has the ability of computer-controlled robots to perform the tasks generally associated with whom?
   (a) Digital devices
   (b) Intelligent beings (human beings)

3. Researches on AI focus mainly on learning, reasoning, problem solving, perception, and using language. All these are components of what?
   (a) Components of intelligence
   (b) Components of knowledge

4. "The Fundamentals of Learning" (1932) was the book that first suggested that human learning consists of some unknown property of connections between neurons in the brain. The author of this book was psychologist at Colombia University, New York. Who was the author?
   (a) Donald Hebb
   (b) Edward Thorndike

5. The concept of Artificial Intelligence that aims on building machines that has the ability to think like human intelligence. What is this AI called?
   (a) Strong AI
   (b) Expert AI

6. What is the name of the test arranged for examining the practical knowledge and intelligence of the modern AI computers is known as?
   (a) Turing Test
   (b) AI based Test

7. Two of the best-known early AI programs that were called, Eliza and Parry, gave an eerie semblance of intelligent conversation. This program was-
   (a) Relied on canned sentences and simple programming tricks.
   (b) Relied only on programming methodology

8. The AI project that aims to assemble a comprehensive ontology and knowledge base that spans the basic concepts and rules about how the world works, what is this AI project known as?
   (a) CPC
   (b) CYC

9. AI replaces the need of face-to-face interaction of human beings for any basic need as a result what will take place in near future?
   (a) Diminishing human closeness
   (b) Low gained knowledge

10. The main theory AI is focused on-
   (a) Theory of Demand and Supply
   (b) Theory of Mind and Intelligence

Atrayee Mandal.

Geography Department, Second year

ARTIFICIAL INTELLIGENCE INFLUENCING HUMAN BEHAVIOUR

The meaning of AI or Artificial Intelligence become an important element of our discussion before advancing to the discussion of its further predicaments over the human behaviour. The meaning of AI is often misunderstood by everyone due to the complex technical definitions given in books and journal, but the simple or basic way of defining AI is, a form of digital mechanism or ability of a computer-controlled robot to perform or try to mimic the intellectual task or ability pursued by a human mind. The activities done by the upcoming web portals through AI applications to provide service to their customers for instance, web search engines used by web platforms like google, recommendation system used by applications like YouTube, Amazon and Netflix, understanding human speech used by mechanisms like Alexa, self-driving cars system used by Tesla, are just a few examples of AI used in the lives of the common people. After introducing a small bit about AI, the next step towards its relationship along with its effect on human life can be understood.

Artificial Intelligence can be regarded as both a blessing and a curse on human life although the two terms used are two extreme situations to refer to but still its significance cannot be ignored. AI as a blessing makes life easier as it not only recognizes our interests but also helps us to define ourselves at times as a customer or even exceling in various taste choices especially in web shopping portals. But the disadvantage is that it only shifts our mind more towards consumerism and we forget our other jobs or necessities in life and end up over spending. An AI is a best way in managing our security needs especially in mobile phone or smart phones in the growing scenario of cyber-crimes. But it also makes us too much dependable on the security provided by an AI that we are unable to use a local or cheaper phone with less advanced AI system, may be as it does not have finger print scanning system for screen unlocking, which in turn costs to high at price to have phone with proper required features.

Another significant importance of AI would be the benefit which we are recently getting from the virtual assistant technologies like Amazon Alexa. Such mechanisms just work as an artificial human whom we can only listen and address to, give commands related to fulfilling our digitalized needs and it fulfills those demands. It becomes very easier to just fulfill our needs just saying and

sitting in one place without even moving. This is a very helpful system during the time of need but during other times it is just makes us feel so lazy that we forget to use our hands and legs even the amount which is at least required to stay healthy. This especially has a bad impact on the daily lifestyle of children and young people if misused by them.

After such a discussion where only, a few elements about the AI could be discussed and its benefits and disadvantages but before concluding one most important thing is that the each and everything in the universe has its own advantages and disadvantages but proper balance should be maintained in order to understand the true value and its function, hence, here the “it”, is Artificial Intelligence. To understand the proper value is to first try and understand true functions of the AI and then using it according to need in solving a particular problem etc. But this does not mean that we shall forget our capacity to solve are problems, then only we would be able to advance technologically and as an whole as an individual and as a society.

Roshni Ghosh
History Department, First Year

ARTIFICIAL INTELLIGENCE AND PSYCHOLOGY

Advances in technology in the current years of life lead to several spellbound inventions. One of the predominant invention being Artificial Intelligence which is actually an utilisation of human intelligence in terms of culmination of both software and hardware components. Vendors, nowadays have been scrambling to promote how their products and services uses AI. In fact the transaction modes we use quite often are way more improvised by making computers think like humans. This good news is even spreading across various sectors like banking, recruitment, agriculture, healthcare and transit. We are introduced to AI operated software almost daily in our lives. Those who travel by metro come across a ticket vending machine planted in every metro station. Though it is not used frequently due to lack of awareness, we can utilise it for recharging our smart cards. Even we can use it for collecting tokens for single time use. The process that took much toll of our time manually is now much time efficient with the introduction of AI in several places. During pre-Covid days, although AI was much present, still we were not aware much about the presence. During covid days, as people completely shifted to online mode in all respect, they became more aware about AI and now its sufficient utilisation is leading to full blown modernisation and an impetus in digital world. Just as with means of algorithms all the above mentioned things can be accomplished. Similarly we can utilise it to comprehend human Psychology.

Brief Psychotherapy assists patients to become aware and change their behaviour when facing an immediate emotional conflict and to implement a transformation process through actions of listening, observing, increasing awareness and making interventions. Therapeutic tools work employs tools and techniques to trigger a process of change, emphasizing cognitive and affective understanding. Artificial Intelligence serves the purpose of enhancing the psychotherapy with computer-implemented tools.

Psychologists are in fact, helping to develop and deploy AI Software and technologies, including everything from therapeutic chatbots to facial-recognition systems. They are also amassing a robust literature on human-computer interaction, digital therapeutics, and the ethics of animation.

To understand it much better, let’s delineate an example. The first chatbot, Eliza, was created by MIT’s Joseph Weizenbaum as long ago as 1966. While its intelligence was limited, simply rewording patient’s phrases as questions, Eliza proved incredibly convincing. Eliza mainly simulated the renowned Psychologist Carl Rogers.

While AI can conduct therapy sessions, rather e -therapy sessions and assessments autonomously, it can also assist human practitioners before, during or after sessions. Additionally, physical assessments such as increased heart rate or temperature changes in response to challenging questions can provide valuable and insightful additional data for clinician. Not only that, recording data, managing record keeping and triggering automatic follow-up actions would free up valuable time for the human professional.

A range of AI- driven, mental health apps are already available. Several such products adopt Cognitive Behavioural Therapy (CBT) procedures, widely considered the “gold standard” of intervention for many psychological conditions. During Covid-19 Pandemic, demand for mental health services increased drastically with crisis services. Pandemic-related mental illness was not expected to peak until mid-2021. At the same time, in-person care was often ruled out -in late April 2020 half of the medicare-funded mental health services were delivered remotely. Meditation and mindfulness apps saw downloads soar.

This provides evidence that clients will readily engage in technology-mediated forms of therapy. At the very least, the improved efficiencies will increase the number of clients that can be managed by a single human psychologist.

It is true that the field of AI is growing but at the same time, many clinical Psychologists don’t think that this side can be compatible with the most human side of people. This situation may be controversial in the sense, in the world of Psychology and one of the main reasons for that is the ethical aspect. The code of ethics (deontological code) is one of the barriers which could exist in this relation between psychology and AI. It is not considered that a machine can reach the level of consciousness or knowledge of a real person.

Regardless of flaws, AI has proved to be flourishing in all sectors be it in Psychology or any other fields concerned. It is still being explored to implement it several aspects and to make the tedious manual jobs way faster, and accessible.

Madhuparna Banerjee
Psychology department, Second year

QUIZ VI

1. Who is the inventor of Artificial Intelligence?

a) Geoffrey Hinton
b) Andrew Ng
c) John McCarthy
d) Jürgen Schmidhuber

2. Which of the following is the branch of Artificial Intelligence?

a) Machine Learning
b) Cyber forensics
c) Full-Stack Developer
d) Network Design

3. Which of the following is not the commonly used programming language for Artificial Intelligence?

a) Perl
b) Java
c) PROLOG
d) LISP

4. In how many categories process of Artificial Intelligence is categorized?

a) categorized into 5 categories
b) processes are categorized based on the input provided
c) categorized into 3 categories
d) process is not categorized

5. Which of the following is a component of Artificial Intelligence?

a) Learning
b) Training
c) Designing
d) Puzzling

6. The total number of logical symbols in AI are _____

a) There are 3 logical symbols
b) There are 5 logical symbols
c) Number of logical symbols are based on the input
d) Logical symbols are not used

7. Which of the following are the approaches to Artificial Intelligence?

a) Applied approach
b) Strong approach
c) Weak approach
d) All of the mentioned

8. Which of the following is an advantage of artificial intelligence?

a) Reduces the time taken to solve the problem
b) Helps in providing security
c) Have the ability to think hence makes the work easier
d) All of the above

9. Artificial Intelligence has evolved extremely in all the fields except for _____

a) Web mining
b) Construction of plans in real time dynamic systems
c) Understanding natural language robustly
d) All of the mentioned

10. What is the name of Artificial Intelligence which allows machines to handle vague information with a deftness that mimics human intuition?

a) Human intelligence
b) Boolean logic
c) Functional logic
d) Fuzzy logic

Sadiyah Hossain.
Political Science Department, First Year

ARTIFICIAL INTELLIGENCE IN ECONOMICS

The main feature of economic theories is that they try to eliminate the effects of uncertainties by attempting to bring the future to the present. Artificial intelligence (AI) is the intelligence which is derived in a non-human manner out of synergy of working of individual units towards a specific direction with a defined objective, for example, in a room where many people are meditating out of their own choice without forcing others, a vibe is generated and motivates a newcomer to sit in meditation spontaneously. This vibe does not belong to any body in particular, but benefits everybody in performing the meditation activity smoothly. It is AI.

- *AI in Price Discovery in Real Sector:*

The determination of selling price in a market where innumerable transactions are happening with respect to a particular product be it a potato in the vegetable market or a share of some company in a stock exchange is an AI process. A process similar to the auctioning in the vegetable markets in India in the early morning is codified in the software programmes and is run on the trading platform of the exchange houses to track the tatonnement of bids and offers over a scrip.

- *AI in General Equilibrium:*

The earlier circular reference function in the spreadsheet helping simultaneous determination of output and interest rate together in real and monetary sectors has grown into the AI process where it is possible to determine volume and prices not only in all output markets but also at the same time in all input markets delivering a general equilibrium at a much-reduced time frame.

- *AI, Big Data, Data Science, Analytics, Machine Learning and Algorithm:*

There is hardly any water tight compartmentalization among big data, data science, algorithm, analytics, machine learning and AI. We can say that one works with the others. Let us consider the process of forecasting admission or demand for treatment in a private hospital for some specific disease. If information are collected from all patients or their relatives regarding what prompted them to go to a particular private hospital in presence of many other hospitals offering the same treatment and thus such data are collected from all patients or their relatives of all private hospitals offering the said treatment that enormous data can be structured by big data process and then modelling can be conducted by analytics procedure.

Once the demand function is framed, suitable apps in android and other operating systems are developed as the channels of contacts between the points of demand and supply. In connection with microeconomics many of the apps like Amazon and Jiomart are playing the roles of online markets of final products in the real sector. The markets of the factors of production like capital are those like YONO SBI and NSE mobile and those like Naukri.com are for labour.

Algorithm can help framing the demand function and then AI may conduct the forecasting process.

- *AI in Financial Sector:*

In financial economics there is widespread use of AI in making decisions of trading in financial securities like stocks and bonds based on prediction of their prices and also in making decisions of entering interest rate derivative contracts with speculative or hedging motives based on

prediction of benchmark interest rates like LIBOR (short term) and 10-year government security yield (long term). Algorithmic trading, automated trading etc are now common vocabularies in financial literature. The most spectacular contribution of AI is toward indicating a tail loss in the value at risk that was not available before the subprime crisis. That way AI can be useful in preventing systemic crisis.

- *AI to Prevent Loan Default:*

Application of big data to the details of loan defaulters of the all the banks and application of AI in detection of moral hazard underlying certain lending-borrowing decisions can provide an earlier signal about a prospective default.

Above all are about use of AI relating to profit-making or utility-maximizing decisions generally in the arena of microeconomics, financial economics, industrial economics and game theory.

- *Socio-economic Applications of AI:*

Relating to macroeconomics and development economics, big data, data science and AI can be useful, e.g. in predicting (i) the number of migrant labourers between two regions in urban economics, (ii) the interest losses to governments and the corresponding volumes of funds returned by the target users in public finance, (iii) the volumes of unaccounted transactions in the informal sector and the concerned behaviour of the economic agents involved in those transactions in Indian economy, (iv) loss of incomes of farmers disconnected from the electronic national agricultural market (eNAM) in agricultural economics, (vi) inflation and unemployment in macroeconomics and so on.

- *AI for Economic Research:*

Theorizing economic behaviour is a major part of economic research. The process of collection of data on economic behaviour has been evolving toward being more and more automated since the ICT (information, communication and technology) revolution. Over last two decades in India the researchers have been finding their hard discs deluged with big data collected through internet portals and electronic payments. Analysis and interpretation of these data using AI ushered in a new age of economic research.

- *Caveat:*

Unfortunately the Inability to track the use of each and every coin and paper note of a conventional currency or fiat money in an emerging economy causes cavity in the database of transactions in a sizeable informal sector as a result of which application of AI and the associated tools may not be able to yield the desired results in absence of computer literacy, financial inclusion and technology-oriented mindset of the entire population.

Tirtha Mayra
Economics Department, First Year

QUIZ VII

1) Who is known as the Father of AI?
2) Artificial Intelligence is also known as?
3) What makes a system or process function automatically?
4) A field of engineering focusing on the design and manufacturing of cyborgs, the so-called machine man. Name it?
5) Which algorithm is used in the game tree to make decisions of win/lose?
6) What uses a combination of computer vision, image recognition amid deep learning to build automated control in a vehicle?
7) Which AI technique enables the computers to understand the association and relationships between objects and events?
8) In which machine is the automatic reasoning tool used?
9) Name an automated virtual assistant in Apple's IOS series of devices?
10) In LISP, the addition 3+2 is entered as what?
11) The first AI programming language was called what?
12) Which search algorithm requires less memory?
13) Face recognition system is based on which AI?
14) This technology allows machines to determine what humans are saying, whether in text or by voice. Name it.
15) What was the first Chatbot?
16) What is necessary to guide a narrower and more discriminative search?
17) Name a chess computer built by the International Business Machines Corporation (IBM)?
18) Who proposed the new type of computer 'multiprocessor' that would assign each artificial neuron in a network to a separate processor?
19) Name a Google's AI-powered predictions.
20) Name a ride-sharing application.

K. Jasmine Reddy

Psychology Department, First year

The Perception of reality

What separates reality from the abstract world? - a question that lurks deep in the corners of my mind.A decade ago, I would have said "Experience and touch" but I am not so sure anymore. The experience of external stimuli in human body is based on the human mind's interpretation of the electrical nerve impulses it receives. Technology has slowly but steadily paved the path of complete experience of a digitally simulated world which mimics the external stimuli so perfectly that it is almost imperceptible to our minds. Virtual reality and reality as we perceive has morphed smoothly into augmented reality.

Every information is just a touch away. The reality of navigating through the city traffic blends effortlessly with the GPS providing routes and information and real time navigation tips through the use of artificial intelligence. Artificial intelligence has brought in radical changes in human interaction. We are getting closer and closer to each other or are we? We know everything and nothing at the same time, we are closer and further away from each other. It is not only the world which exists both digitally and physically but ourselves too. We have created a digital avatar of ourselves with resembles us in some aspects but whose public image is carefully curated and controlled. Somewhere the periphery between physical world and digital world is disappearing. We are part of a generation where oversharing is the norm, where every moment of importance is captured and stored in bytes of data and people spend millions on NFTs. A decade ago who would have thought that someone would buy the first tweet by Twitter CEO Jack Dorsey for $2,915,835.47 or a video of LeBron James Lakers highlight for $208K.

We are racing headlong in a world where we own pieces of encrypted code whose ownership is recorded in public ledgers, a place where experiences maybe be rendered useless by the accessibility of every piece of information, a place where knowing a person takes a few clicks and solving a problem isn't our job anymore and where language changes with the colors of the days, trends rise and fall like ocean tide but a rather lonely world where we crave the nostalgic human interaction.

Ishita Samanta
English Honors, First Year

QUIZ VIII

1. In which year artificial intelligence was found as an academic discipline?

2. Who was the father of AI?

3. Where was artificial intelligence coined?

4. Which is the most commonly used language for AI?

5. Which search algorithm requires less memory?

6. Which algorithm is used in the game tree to make decisions of win/lose?

7. How many ways are there to solve a problem of state-space-search?

8. What is an evolved definition of artificial intelligence led to a phenomenon known as?

9. What is the ability to find patterns in a stream of input is referred to as?

10. What is the intelligence displayed by humans and other animals is termed?

11. Which field of science is closely related to AI?

12. What is the fundamental goal of research in Artificial Intelligence?

Tania Baral
Georgraphy Honours, Second year

Answers

Crossword I

1) Cybernetics
2) YouTube
3) Chabot
4) PARO
5) Virtual presence
6) FORD
7) Watson
8) Drone
9) Artificial intelligence
10) Automation
11) Robotics (Done for you)
12) SIRI
13) Deep fakes
14) Hacking
15) Speech recognition
16) Computer vision

Crossword II

1. Total	2. Reasoning.	3. National	4. Recti	5. Concept
6. Five	7. Artificial	8. Insight	9. Alongside	

Quiz I

1. Vinton Gray Cerf and Robert Elliot
2. 1965, created by Carl Djerassi.
3. Jean Armour Polly (also known as 'Net-mom')
4. None of the top 10.
5. Hamilton Watch Company, it was called 'Pulsar'.
6. 'Metropolis', directed by Fritz Lang (1927).
7. 1980, by John Searle.
8. Hephaestus.
9. Isaac Asimov.
10. China.

Crossword III

Across:

2.SOPHIA
3. GOOGLE
4. SIRI
5.SENSOR
6.JOHNMcCARTHY
8.ANDROID

Down:

1.ARTIFICIAL INTELLIGENCE
7. FOUR
9.STUDENT
10. PYTHON.

Crossword IV

1. Overfitting 2. Python 3. Dataset 4. Clustering 5. Big Data
6. Algorithm 7. Fluent 8. Autonomous 9. Chatbot 10. Bias
11. Machine Learning

Crossword V

Down:

1. ARTIFICIAL INTELLIGENCE
3. BIOETHICS
4. RADIOLOGY
6. DATA MINING
7. PREDICTIVE ANALYTICS
8. LUCIDITY
12. TURING TEST
11. UNEMPLOYMENT
13. ALGORITHM

Across:

2. ROBOTICS
5. SELF DRIVING CAR
9. ACCOUNTABILITY
10. PRUNING
14. GOOGLE SEARCH
15. SPOTIFY
16. HEURISTICS
17. CHATBOTS

Crossword VI

Across

1. AlphaGo
2. Artificial
3. Cortana
4. Elsa
5. Alpha dog
6. Sophia
7. Microsoft
8. Deepblue
9. Banks

Down

10. Google
11. China
12. Alexa
13. Assistant
14.. Dendral
15. Voice
16. Amazon
17. Coforge
18. Siri

Crossword VII

Across

1. Paste
4. Scanner
7. Ant
8. Lower
10. Age
11. Llano
12. Rub
15. Ok
16. Cookie
18. Rear
19. Mouse
23. Uploads
24. Word
25. Asks
26. Data

Down

1. Podcast
2. Screen
3. Email
4. Syntax
5. Analog
6. Network
9. Reboot
13. Scroll
14. Eon
17. Icons
20. Emoji
21. Bugs
22. Adds

Word Search II

1. Algorithm
2. Chatbot
3. Python
4. Backpropagation
5. Heuristics
6. Pruning
7. Weak AI
8. Alpha GO
9. Connectionism
10. Datalog
11. Ebert Test
12. Frame
13. Machine Vision
14. Node
15. Robotics

Quiz II

1-C 2-A 3-B 4-B 5-D 6-A 7-D 8-C

Quiz III

1. Artificial Intelligence
2. John McCartny
3. True
4. Artificial General Intelligence
5. Artificial Narrow Intelligence
6. Human brain
7. True
8. Alexa
9. Python
10. Siri

Quiz IV

1-(b)	2-(a)	3-(c)	4-(d)	5-(b)
6-(c)	7-(c)	8-(c)	9-(d)	10-(d)

Quiz V

1-(b)	2-(b)	3-(a)	4-(d)	5-(a)
6-(a)	7-(a)	8-(d)	9-(a)	10-(a)

Quiz VI

1-c	2-a	3-a	4-c	5-a
6-c	7-d	8-d	9-d	10-d

Quiz VII

1. John McCartny	2. Industrial Revolution	3. Automation
4. Robotics	5. Min/Max Algorithms	6. Self-friving Cars
7. Pattern Patching	8. LISP Machine	9. Siri
10. (+3 2)	11. Information Processing Language (IPL)	12. Depth First Search (DFS)
13. Applied AI	14. Natural Language Processing	15. Eliza
16. Heuristics	17. Deep Blue	18. John Holland
19. Google Maps	20. Uber, Lyft	

Quiz VIII

1. 1956
2. John McCarthy
3. Dartmouth College, in Hanover, New Hampshire.
4. Python
5. Depth First Search
6. Min/Max Algorithm
7. 2
8. AI Effect
9. Unsupervised Learning
10. Natural intelligence
11. Mathematics
12. Reasoning

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