

# The enormous potential of AI cannot be dismissed



AN OPEN DIALOGUE

Dr Abdullah Shibli is an economist and works for Change Healthcare, Inc., an information technology company. He also serves as senior research fellow at the US based International Sustainable Development Institute (ISDI).

ABDULLAH SHIBLI

In an op-ed recently in the New York Times, the Nobel-Prize winning economist Paul Krugman wrote, “Artificial intelligence (AI) is already having a significant impact on the economy, and its influence is expected to grow significantly in the coming years... Overall, the effects of AI on the economy will depend on a variety of factors, including the rate of technological advancement, government policies and the ability of workers to adapt to new technologies.”

A very reasonable and sound opinion, coming from Krugman, who is very well-regarded in the profession as well as in the American political establishment. Unfortunately, he then immediately goes on to disown the opening paragraph and offers a disclaimer: “What I did was ask ChatGPT to describe the economic effects of artificial intelligence; that’s just an excerpt.”

Krugman was referring to the new chatbot software ChatGPT – released in November 2022 by OpenAI – which has taken the world by storm with its flashy abilities. ChatGPT can quickly compile information and write essays, spit out computer codes, do complicated mathematics, hold conversations, generate short stories, and whatnot.

The availability of ChatGPT unleashed a veritable tsunami of predictions, reviews, and dire warnings in newspapers across the globe and social media on the effects of the AI revolution. Comments and reactions are pouring in incessantly from the IT industry and from various

politicians, intellectuals, and, of course, economists.

A few of the related thought-provoking questions are: Can computers really think and feel? Will machines finally replace humans and take away jobs? And how soon will that happen? These are all debatable issues, but allow me to offer my answer before I change my mind next year.

I am aligned with Krugman, who does not foresee significant changes immediately. “Artificial intelligence likely won’t transform the US economy in the next decade,” he said in NYT, adding that it could boost labour productivity by doing some jobs better than humans. My caveat. He may be wrong since AI race is heating up, with tech giants Microsoft, Google, and Baidu among those ramping up their efforts to launch their versions of advanced chatbots.

AI will have a major impact in four areas: productivity or output per capita, jobs loss, education, and healthcare and medical research. There will be substantial gains in productivity when AI can help us with repetitive tasks. The impact on the economy might take a little while, but it is inevitable. Whether it takes five years or 10 years for productivity gains to show up in each sector. It is already visible in e-commerce, banking, and transportation.

We all know that the AI revolution is a work in progress. There is hardly any discipline where we do not see some form of AI adoption and adaptation. Business, education,

journalism, medicine, government, law enforcement, arts and culture, transportation; you name any field, and AI has made inroads there with mostly positive outcomes.

Let us take the case of healthcare. Until a decade ago, physicians based their diagnoses entirely on knowledge stored in their memory.

2023), Dr Lee Hood and Dr Nathan Price provide some interesting facts about the benefits of AI-enhanced medical care in the areas of diagnosis, pharmaceuticals, and treatment of diseases.

Studies have revealed that each patient generates over 100 million megabytes of data, from basic testing

mistakes. MedAware sends an alert to the doctor, who is frequently overworked and sometimes exhausted, when the medication does not match the patient’s need or could have an adverse reaction.

As for job loss, there is a good possibility that AI will not only increase productivity per worker

organisations can create guidelines to address privacy, security, and equal access issues. The company OpenAI is already facing roadblocks in European countries. A week ago, Italian authorities ordered OpenAI to stop processing Italian users’ personal information because it may have exposed some users’ messages and payment information.

As AI is used to automate existing jobs, it can lead to discrimination against workers and exacerbate inequality. This debate centres in particular on algorithmic bias and the potential for algorithms to produce unlawful or undesired discrimination in the decisions to which the algorithms relate. These are major concerns for civil rights and consumer organisations representing populations suffering undue discrimination.

An official US EU study recommends investing in training and job transition services for displaced employees, encouragement of development and adoption of AI that is beneficial for labour markets, and investing in the capacity of regulatory agencies to ensure that AI systems are transparent and fair for workers.

In academia, the pushback has been swift. Boston University, my alma mater, has proposed some standards for using AI tools. Students will be advised to inform the professor which AI tools were used, even if to generate ideas, to not use these tools during examinations, and to agree to “employ AI detection tools and originality checks” to avoid any potential plagiarism issues.

Similarly, instructors would have to follow these guidelines: i) Learn how AI tools work to enhance student learning; ii) Grade work created by AI lower than non-AI works; iii) Employ AI detection tools to evaluate the degree to which AI tools have likely been employed; and iv) Impose penalty for mindless use of AI generated materials.



A staff member looks at a robot at the venue for the World Artificial Intelligence Conference in Shanghai, China July 9, 2020.

PHOTO: REUTERS

Things have changed today thanks to the rapid development of AI and its use in clinical decision support systems (DSS). A recent Johns Hopkins study reported that more than 250,000 people in the US die every year from medical errors and other reports claim the number to be as high as 440,000. Medical errors are the third-leading cause of death after heart disease and cancer, and these errors can be reduced with the help of AI.

In their book, “The Age of Scientific Wellness” (Harvard University Press,

results, MRI, information on patient outcomes, and more. “These (DSS) systems leverage what computers are naturally good at – storing, recalling and correlating vast amounts of information virtually instantaneously – and link it to the ability of a human expert to reason intuitively and think creatively,” Hood and Price write.

AI-enabled healthcare has already saved innumerable lives in many different ways. MedAware, an AI programme, is used to help doctors avoid prescribing the wrong prescription due to unintended

but also replace some repetitive or routine tasks currently done by humans. On the other hand, jobs with a strong human element – such as being a therapist – are especially unlikely to be taken over by technology, according to Dimitris Papanikolaou, a professor of finance at the Kellogg School of Management at Northwestern University. “Jobs that emphasise interpersonal skills are much harder to be replaced by an AI,” he says.

The advance of AI will be facilitated if governments and/or international

রেজিস্ট্রার দপ্তর  
যশোর বিজ্ঞান ও প্রযুক্তি বিশ্ববিদ্যালয়  
যশোর-৭৪০৮, বাংলাদেশ।

Office of the Registrar  
Jashore University of Science and Technology  
Jashore-7408, Bangladesh

Memo No-JUST/Reg.(Ac.)/1423/M.Phil & Ph.D Admission Circular/2019-1503  
Date:10/04/2023

Admission Circular  
(Full-time/ Part-time M.Phil and Ph.D Program)

Applications are invited for admission in the full-time/part-time M.Phil and Ph.D program at Accounting and Information Systems(AIS), Finance and Banking(FB), Management(MGT) and Marketing(MKT) departments and the full-time M.Phil and Ph.D program at Environmental Science and Technology (EST), Microbiology (MB), Fisheries and Marine Bioscience (FMB), Genetic Engineering and Biotechnology (GEBT), Nutrition and Food Technology (NFT), Pharmacy (Pharm), Physical Education and Sports Science (PESS), Physics (Phy), Chemistry (Chem), Mathematics (Math), English (Eng), Agro Product Processing Technology (APPT), Physiotherapy and Rehabilitation (PTR), Climate and Disaster Management (CDM) Nursing and Health Science (NHS) departments and the full-time/part-time Ph.D program at Computer Science and Engineering (CSE), Chemical Engineering (ChE), Industrial and Production Engineering (IPE), Petroleum and Mining Engineering (PME), Electrical and Electronic Engineering (EEE), Biomedical Engineering (BME) and Textile Engineering (TE) departments and the full-time M.Phil program at Computer Science and Engineering (CSE), Chemical Engineering (ChE), Industrial and Production Engineering (IPE), Petroleum and Mining Engineering (PME), Electrical and Electronic Engineering (EEE), Biomedical Engineering (BME) and Textile Engineering (TE) departments in the July-2023 semester of 2023-2024 academic year.

- General qualifications, conditions and the process of admission form collection and submission of the M.Phil and the Ph.D program are available in the university website (<https://just.edu.bd>) or in the respective departments.
- The application form has to be filled-up properly and submitted to the respective department by 17/05/2023 (excluding holidays).

Registrar  
Jashore University of Science and Technology

GD- 700

Government of the People's Republic of Bangladesh  
Upazila Health Complex Gowainghat  
Gowainghat, Sylhet.

Memo no. UHC/Gowain/MSR/2023/210  
Date: 13/04/20223

Tender Notice 2022-2023 (OTM)

e-tender Notice has been invited in E-GP portal for procurement of following packages

Sl. No.	Tender ID	Name of Goods	Tender/Proposal Publication Date and Time	Tender/Proposal Last Selling Date & Time	Tender/Proposal Closing/ Opening Date & Time
1	790413	Procurement of Medicine for the F.Y 2022-2023 at Gowainghat Upazila Health Complex, Sylhet.	13-Apr-2023 12:00	26-Apr-2023 16:00	27-Apr-2023 12:00
2	790414	Procurement of Medical Equipment for the F.Y 2022-2023 at Gowainghat Upazila Health Complex, Sylhet.	13-Apr-2023 12:00	26-Apr-2023 16:00	27-Apr-2023 12:00
3	790415	Procurement of Gauge, Bandages and Cotton for the F.Y 2022-2023 at Gowainghat Upazila Health Complex, Sylhet.	13-Apr-2023 12:00	26-Apr-2023 16:00	27-Apr-2023 12:00
4	790416	Procurement of Linen for the F.Y 2022-2023 at Gowainghat Upazila Health Complex, Sylhet.	13-Apr-2023 12:00	26-Apr-2023 16:00	27-Apr-2023 12:00
5	790417	Procurement of Chemical Reagent for the F.Y 2022-2023 at Gowainghat Upazila Health Complex, Sylhet.	13-Apr-2023 12:00	26-Apr-2023 16:00	27-Apr-2023 12:00
6	790418	Procurement of Medical Furniture for the F.Y 2022-2023 at Gowainghat Upazila Health Complex, Sylhet.	13-Apr-2023 12:00	26-Apr-2023 16:00	27-Apr-2023 12:00

This is an online Tender, where only e-Tenders will be accepted in National e-GP Portal and no offline/ Hard copies will be accepted. To submit e-tender, please registration in the national e-GP system portal (<https://www.eprocure.gov.bd>) is required. The fees for Tender-Proposal document to be deposited online through any registered Banks branches. Further information and guidelines are available in the national e-GP system Portal and from e-GP help desk ([helpdesk@eprocure.gov.bd](mailto:helpdesk@eprocure.gov.bd)).

(Dr. Moshir Rahman)  
UH&FPO  
Upazila Health Complex Gowainghat  
Gowainghat, Sylhet.

GD- 692

Government of the people's Republic of Bangladesh  
Directorate of Technical Education  
F-4/B, Agargaon, Dhaka-1207  
Phone: 02-41024597, E-mail: [advocddo@gmail.com](mailto:advocddo@gmail.com)

Invitation for Tenders

1	Ministry/Division	Ministry of Education, Technical and Madrasah Education Division		
2	Agency	Directorate of Technical Education		
3	Procuring Entity Name	Director (Vocational)		
4	Invitation for	Supply of Manpower through outsourcing in the newly launched 3rd phase 15 Technical School and College (TSC) at different upzilla.		
5	Invitation Ref No	57.03.0000.027.07.022.23.167		
6	Date	12.04.2023		
KEY INFORMATION				
7	Procurement Method	Open Tendering Method (OTM)		
FUNDING INFORMATION				
8	Budget and Source of Funds	GoB		
9	Tender Package No.	DTE/VOC/OUTSOURCING/2022_2023		
10	Tender Package Name	Supply of Manpower through outsourcing in the newly launched 3rd phase 15 Technical School and College (TSC) at different upzilla.		
11	Tender Publication Date	16.04.2023		
12	Tender Selling Date	16.04.2023		
13	Last Selling of Tender Document Date (must be the date prior to the day of Tender Closing Date)	Date : 30.04.2023, Time: 4:00 PM		
	Date	Time		
14	Tender closing Date and Time	02.05.2023 02:00 PM		
15	Tender opening Date and Time (within one hour of Tender Closing)	02.05.2023 02:30 PM		
16	Pre Tender meeting Date and Time	27.04.2023 11.30 AM		
17	Name & Address of the office(s)	Address		
	-Selling Tender Document (Primary Place)	Director (Vocational), Directorate of Technical Education Accounts Section, 3 <sup>rd</sup> Floor, Room No.: 311, F-4/B, Agargaon, Dhaka-1207.		
	- Selling Tender Document (Secondary Place)	Principal, Technical Teachers Training College, Tejgaon, Dhaka-1208.		
	- Receiving Tender Document	Director (Vocational), Directorate of Technical Education 1 <sup>st</sup> Floor, Room No.: 212, F-4/B, Agargaon, Dhaka-1207.		
	- Opening Tender Document	Director (Vocational), Directorate of Technical Education 1 <sup>st</sup> Floor, Room No.: 212, F-4/B, Agargaon, Dhaka-1207.		
INFORMATION FOR TENDERERS				
18	Eligibility of Tenderers	As per TDS		
19	Brief description of services	Supply of Manpower (Electrician Cum pump operator category 1, Security Guard category 5, Cleaner category 5) through outsourcing in the newly launched 3rd phase 15 Technical School and College (TSC) at different upzilla.		
20	Price of Tender Document (tk.)	2000.00 (Taka two thousand only)		
21	Package No	Identification of package	Location	Tender security amount (tk.)
	01	DTE/VOC/OUTSOURCING /2022_2023/	Director(Vocational), Directorate of Technical Education	3,60,000/- (Taka three lac sixty thousand only)
22	The Procuring entity reserves the right to reject all the tenders or annul the tender proceedings			
23	PROCURING ENTITY DETAILS			

Md. Salahuddin Ahmed  
Joint Secretary  
Director (Vocational)  
Directorate of Technical Education  
Phone-02-41024597  
E-mail: [advocddo@gmail.com](mailto:advocddo@gmail.com)

GD- 693