**REAL TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED**

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Abstract:

Artificial Intelligence (A.I.) is a multidisciplinary field whose goal is to automate activities that presently require human intelligence. Recent successes in A.I. include computerized medical diagnosticians and systems that automatically customize hardware to particular user requirements. The major problem areas addressed in A.I. can be summarized as Perception, Manipulation, Reasoning, Communication, and Learning. Perception is concerned with building models of the physical world from sensory input (visual, audio, etc.). Manipulation is concerned with articulating appendages (e.g., mechanical arms, locomotion devices) in order to effect a desired state in the physical world. Reasoning is concerned with higher level cognitive functions such as planning, drawing inferential conclusions from a world model, diagnosing, designing, etc. Communication treats the problem understanding and conveying information through the use of language

INTRODUCTION

Artificial intelligence (AI) is the ability of machines to replicate or enhance human intellect, such as reasoning and learning from experience. Artificial intelligence has been used in computer programs for years, but it is now applied to many other products and services. For example, some digital cameras can determine what objects are present in an image using artificial intelligence software. In addition, experts predict many more innovative uses for artificial intelligence in the future, including smart electric grids.

AI uses techniques from probability theory, economics, and algorithm design to solve practical problems. In addition, the AI field draws upon computer science, mathematics, psychology, and linguistics. Computer science provides tools for designing and building algorithms, while mathematics offers tools for modeling and solving the resulting optimization problems.

Although the concept of AI has been around since the 19th century, when Alan Turing first proposed an “imitation game” to assess machine intelligence, it only became feasible to achieve in recent decades due to the increased availability of computing power and data to train AI systems.

To understand the idea behind AI, you should think about what distinguishes human intelligence from that of other creatures – our ability to learn from experiences and apply these lessons to new situations. We can do this because of our advanced brainpower; we have more neurons than any animal species.

Today’s computers don’t match the human biological neural network – not even close. But they have one significant advantage over us: their ability to analyze vast amounts of data and experiences much faster than humans could ever hope.

AI lets you focus on the most critical tasks and make better decisions based on acquired data related to a use case. It can be used for complex tasks, such as predicting maintenance requirements, detecting credit card fraud, and finding the best route for a delivery truck. In other words, AI can automate many business processes leaving you to concentrate on your core business.

Research in the field is concerned with producing machines to automate tasks requiring intelligent behavior. Examples include control, planning and scheduling, the ability to answer diagnostic and consumer questions, handwriting, natural language processing and perception, speech recognition, and the ability to move and manipulate objects.

Objective:

AI can be achieved by reading the behavior of humans and using the results to develop intelligent systems. For example, they learn, make decisions and act in certain situations. Observing humans while problem-solving in simple tasks and using its results to develop intelligent systems.

The overall research goal of artificial intelligence is to create technology that allows computers and machines to work intelligently. The general problem of simulating (or creating) intelligence is broken down into sub-problems.

The symptoms described below receive the most attention. These include special traits or abilities that researchers expect an intelligent system to exhibit. Eric Sandwell emphasizes planning and learning that is relevant and applicable to the given situation.

LITERATURE SURVEY

We did a survey over the possible sources we. Could access in our exploration we did find authors

Authors: Review IntroductionThe potential of artiﬁcial intelligence (AI) to augment andpartially automate research has sparked vivid debates inmany scientiﬁc disciplines, including the health sciences(Adams et al., 2013;Tsafnat et al., 2014), biology (Kinget al., 2009), and management (Johnson et al., 2019). Inparticular, the concept of automated science is raising in-triguing questions related to the future of research in dis-ciplines that require “high-level abstract thinking, intricateknowledge of methodologies and epistemology, and per-suasive writing capabilities”(Johnson et al., 2019: 292).These debates resonate with scholars in Information Sys-tems (IS), who ponder which role AI and automation canplay in theory development (Tremblay et al., 2018) and incombining data-driven and theory-driven research (Maasset al., 2018). With this commentary, we join the discussionwhich has been resumed recently by Johnson et al. (2019) inthe business disciplines. The authors observe that across thismulti-disciplinary discourse, two dominant narratives haveemerged. The ﬁrst narrative adopts a provocative and vi-sionary perspective to present its audience with a choicebetween accepting or rejecting future research practices inwhich AI plays a dominant role. The second narrativeacknowledges that a gradual adoption of AI-based researchtools has already begun and aims at engaging its readers in aconstructive debate on how to leverage AI-based tools forthe beneﬁt of the research ﬁeld and its stakeholders. In thispaper, our position resonates more with the latter per-spective, which is focused on the mid-term instead of thelong-term, and well-positioned to advance the discoursewith less speculative and more actionable discussions of thespeciﬁc research processes that are more amenable appli-cations of AI and those processes that rely more on thehuman ingenuity of researchers.In this essay, we focus on the use of AI-based tools in theconduct of literature reviews. Advancing knowledge in thisarea is particularly promising since (1) standalone reviewprojects require substantial efforts over months and years(Larsen et al., 2019), (2) the volume of reviews published inIS journals has been rising steadily (Schryen et al., 2020),and (3) literature reviews involve tasks that fall on aspectrum between the mechanical and the creative . At thesame time, the process of reviewing literature is mostlyconducted manually with sample sizes threatening to exceedthe cognitive limits of human processing capacitiesbeen illustrated recently by Larsen et al. (2019), whoestimated that in the IS ﬁeld, the number of relevant papersin many research areas easily exceeds 10,000. As a conse-quence, some review articles, problematically, no longer aimfor comprehensive coverage, often restricting their scope tofew top journals. Overall, we anticipate that these trends willbe reinforced in the future, further emphasizing the need toenvision fruitful collaboration between human researchersand machines, such as AI-based tools (cf. Seeber et al., 2020).In light of these challenges, we focus on the contributionsof AI which refers to the capability of performing cognitivetasks and exhibiting intelligent behavior commonly asso-ciated with human intelligence (Russell and Norvig, 2016;Taulli and Oni, 2019). Speciﬁcally, we are interested inapproaches that are commonly referred to as “weak AI”andcombine process automation (execution engines) with ca-pabilities like machine learning (ML) or natural languageprocessing (NLP). Machine learning refers to tools,methods, and techniques for learning and improving taskperformance with experience (Goodfellow et al., 2016;Mitchell, 1997), while NLP refers to computational tools,methods, and techniques for analyzing, interpreting, andincreasingly generating natural language (Manning andSchütze, 1999). Although we are particularly interestedin tools powered by advanced AI, we do not discard pre-decessors of AI per se.AI offers two capabilities that are particularly salient forconducting literature reviews. First, they operate on po-tentially fuzzy, weakly structured, and unstructured data thatare provided in the form of bibliographical meta-data or full-text documents. Techniques of NLP can go beyond purelysyntactic processing of text by abstracting and analyzing itssemantic meaning, thereby promising to offer valuablesupport in the searching and screening tasks. For example,papers including the word “review”may be hard to dis-tinguish on a syntactic level, but using semantic techniques,NLP performs much better in dissociating whether “review”refers to a literature review or a customer review. An ex-ample applying such techniques to IS research is offered bySidorova et al. (2008), who illustrate the topics prevalent intop-tier IS journals based on latent Dirichlet allocation(LDA) models. This paper clearly shows the advantages ofLDA models, which allow unobserved (latent) topics toemerge from the analysis of bags of words. The applicationof NLP techniques has further been considered useful forgenerating semantic topics from samples of papers andthereby allowing researchers to explore the literature from amore abstract perspective (Mortenson and Vidgen, 2016).Second, advanced supervised ML techniques, such as deeplearning, can be trained to replicate the decisions of re-searchers. This relieves researchers of the task of explicatingand codifying myriads of rules, and even more signiﬁcantly,it can automate decisions for which exact rules are hard tospecify. The work of Larsen et al. (2019) is exemplary in thisregard, developing classiﬁers that can automatically screenand include papers relevant to research on TAM (Tech-nology Acceptance Model). Considering these capabilities,we expect AI to be most useful in the mechanical tasks ofreviews compared to more creative ones. At the same time,an informed discourse and methodological guidelines arenecessary to identify the appropriate areas of applicationand to address the challenges associated with AI, such asmodel overﬁtting, biases, black box predictions, and theacceptance by the research community.The objective of this essay is to frame the broaderdiscourse on how AI is and can be applied in the individualsteps of the literature review process, providing illustrativeexemplars for prospective authors and outlining opportu-nities for further advancing such methods. To clearly framethis objective, we coin the term AI-based literature reviews(AILRs), which refers to literature reviews undertaken withthe aid of AI-based tools for one or multiple steps of thereview process, that is, problem formulation, literaturesearch, screening for inclusion, quality assessment, dataextraction, or data analysis and interpretation. Withoutnecessarily being driven by academic researchers, func-tionality for literature searches is already supported by AI,as implemented by academic literature databases and in-dexing routines. We focus on how AI-based tools canevolve to play an even more powerful role and furtherautomate and augment steps in different types of literaturereviews. An important question for researchers is how suchtools can best be leveraged in all stages of the reviewprocess and how it can be adapted to particular types ofreviews. In doing so, it can be expected that different typesof reviews, such as descriptive or interpretive reviews, willbe more or less amenable to the use of AI. The remainder ofthis paper is structured as follows. In the next section, weoutline the process of conducting a literature review