Authors	Author full	Author(s) ID	Title	Year	Source title	DOI	Link	Abstract
G., Sa, Guo	Sa, Guodor	57205416800	AI-driven d	2025	Internation	10.1088/2(	https://ww	To meet th
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N.M., Tasm	Tasmurzay	57238311800	Digital Carc	2025	Sensors	10.3390/s2	https://ww	Cardiovascu
A., Nikiforo	Nikiforova,	57204202400	Theorizing	2025	Governmer	10.1016/j.g	https://ww	Public Data
Y., Zhang, Y	Zhang, Yua	57894720000	Fine-tuning	2025	Environme	10.1016/j.e	https://ww	Large langu
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K., Fotova (	Fotova Čikc	57751300400	The Nexus	2025	Journal of F	10.3390/jrf	https://ww	The interse
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E., Mandan	Mandana, I	60074761400	EVuLLM: Et	2025	Electronics	10.3390/el	https://ww	Smart cont
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S., Dai, Sun	Dai, Sunhac	57485632500	NExT-Searc	2025		10.1145/37	https://ww	Generative
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E., Sánchez	Sánchez, Es	59961008000	Artificial In	2025	Applied Sci	10.3390/ap	https://ww	Despite the
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M., Tang, M	Tang, Ming	52464583400	Metaverse	2025	Architectur	10.3390/ar	https://ww	This paper
S., Pimenov	Pimenow, S	59425587200	The Impact	2025	Sustainabil	10.3390/su	https://ww	The integra
Z., Li, Zong	Li, Zongxi (!	57209979800	Retrieval-a	2025	Computers	10.1016/j.c	https://ww	Advanceme
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J., Chen, Jia	Chen, Jiayo	60066080100	Research o	2025	Journal of I	10.13998/j	https://ww	Purpose/Sig
L., Qian, Li;	Qian, Li (57	57210576300	Agent Tech	2025	Journal of I	10.13998/j	https://ww	Purpose/Sig

C., Dong, C	Dong, Chac	357311724	Survey of L	2025	Dianzi Yu X	10.11999/J	https://ww	Significance
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A., Khurshi	Khurshid, A	328677983	The health	2025	Journal of t	10.1093/ja	https://ww	Objectives:
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Ü., Karakaş	Karakaş, Üı	571960631	Artificial In	2025	OMICS A Jc	10.1089/or	https://ww	Artificial int
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F., Pan, Fer	Pan, Feng (	600531288	A Survey on	2025		10.1109/CS	https://ww	Retrieval-au
P., Bhattacl	Bhattachar	572003063	LLM-Twins	2025		10.23919/S	https://ww	Healthcare
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H., Li, Haor	Li, Haoran (	5.99E+10	AI Foundat	2025	Advances in	10.2147/AI	https://ww	The integra
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J., Vedula, J	Vedula, Jag	597386991	Optimizing	2025		10.1109/IC	https://ww	A Primer fo
Z., Liu, Zhil	Liu, Zhilong	600386287	Acceleratin	2025	Lecture No	10.1007/97	https://ww	The deploy
B., Bilgin, B	Bilgin, Buse	572161854	Intent-Base	2025		10.1109/N	https://ww	The advent
L., Hughes,	Hughes, La	572054052	AI Agents a	2025	Journal of (	10.1080/10	https://ww	Artificial Int
Z., Ding, Ze	Ding, Zengl	571889636	Artificial int	2025	Progress in	10.1016/bs	https://ww	The conver
T., Mahmu	Mahmud, T	572239886	Testing And	2025		10.1109/Fc	https://ww	Third-party
Y., Himeur,	Himeur, Ya	556361998	Federated	2025		10.1109/IV	https://ww	This paper (
R.J., Tong, I	Tong, Richa	572101578	IEEE AI Star	2025		10.1109/CA	https://ww	This paper s
A., Dunton,	Dunton, Ar	600086935	InvadeAI: II	2025		10.1109/CA	https://ww	In this pape
Y., Wang, Y	Wang, Yun	572033721	Security of	2025	IEEE Open .	10.1109/O.	https://ww	With the ris
S., Jonnala,	Jonnala, Sri	579843684	Geopolitica	2025	Journal of F	10.57017/j	https://ww	Sovereign la
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M., Liu, Mi	Liu, Mingyu	599986382	Promoting	2025	BioScience	10.5582/bs	https://ww	SUMMARY:
J., Kevin, Ju	Kevin, Jun (	596661206	SmartLLM:	2025		10.1109/IC	https://ww	Smart cont
I.W.A.J., Pa	Pawana, I. '	588129609	Generative	2025		10.1109/IC	https://ww	As Web API
S., Tao, She	Tao, Sheng	563155406	Review and	2025	National Re	10.11834/j	https://ww	LiDAR (Ligh
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C., Afifi, Ch	Afifi, Chaim	594136912	BP-DSS3: a	2025	Internation	10.1504/IJI	https://ww	Nowadays,
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e extreme precision requirements of nanometer-scale semiconductor manufacturing and micrometer-le

ction of biosciences and technology has yielded transformative advancements, and Generative Artificial
apidly evolving healthcare environment, one technology stands at the forefront of innovation: large lan
ular disease remains the world's leading cause of mortality, yet everyday care still relies on episodic, syn
Ecosystems (PDEs) are increasingly viewed as dynamic socio-technical systems shaped by evolving inte
age models (LLMs) are revolutionizing specialized fields by enabling advanced reasoning and data synth
ast two decades, Web Intelligence (WI) has emerged as a key field driving the evolution of AI in the conn
ction of green finance and artificial intelligence (AI) represents a rapidly emerging and high-impact resea
creasingly threaten human life, ecosystems, and infrastructure, with events like the 2025 Palisades and
racts have become integral to decentralized applications, yet their programmability introduces critical se
ation serves as a critical foundation for artificial intelligence (AI) and machine learning (ML). Recently, AI
ehensive review maps the fast-evolving landscape in which artificial intelligence (AI) and deep-learning (
uage Models (LLMs) have become pivotal in reshaping the world by enabling advanced natural language
ive】 As an important engine for developing new quality productivity, large models play a crucial role in
of Large Language Models (LLMs) and generative AI is fundamentally transforming information retrieva
AI search driven by large language models (LLMs) is reshaping information retrieval by offering end-to-e
uing new goals, people often struggle to determine what actions to take. Large-language-model (LLM) ch
r explores the integration of generative artificial intelligence (GenAI) technologies, particularly large lan
ing the potential to support learning interactions, emerging AI applications like Large Language Models
ntelligence is recognized as a critical pathway for achieving efficient integration and collaboration amon
transformation of the Architecture, Engineering and Construction sector is accelerating the adoption of
pplication: The proposed intelligent filtering system can be seamlessly integrated into platforms utilizing
n spaces are essential for ecosystem functioning, human wellbeing, and social cohesion. Urban greening
investigates the feasibility and potential role of using Large Language Models (LLMs) to support systemic
nd unprecedented dominance of Artificial Intelligence (AI), particularly through Large Language Models
Artificial Intelligence has emerged as a transformative force across multiple domains of computer scien
ement of generative AI has profoundly impacted various aspects of society, including scientific research
g volume and complexity of medical imaging outpaces the available radiologist workforce, risking timely
transformative potential of artificial intelligence (AI), small and medium-sized enterprises (SMEs) contin
proposes an AI-assisted governance framework to enhance decision-making within decentralized autonc
explores the evolving relationship between Digital Twins (DT) and the Metaverse, two foundational yet
tion of artificial intelligence (AI) technologies is reshaping diverse domains of human activity, including r
ents in large language models (LLMs) have transformed AI-driven education, enabling innovative applica
ract vulnerabilities have emerged as a significant threat to blockchain system security under the Web 3.0
utterflies are generally viewed positively in society, whereas other insects, such as wasps or flies, are oft
examines the role of news media in the context of generative AI-enhanced search engines, focusing on t
ape of software engineering is undergoing a transformative shift driven by advancements in machine lea
development of Web Intelligence has heightened privacy concerns among end-users. Federated intellig
uage Models (LLMs) have transformed human-centric AI applications on the Web, yet they often exhibit
volution of Large Language Models (LLMs) has profoundly impacted social media, transforming how info
Twins (DT) have emerged as a digital transformation automation process with ubiquitous applications th
entary examines the dual role of artificial intelligence (AI) in shaping electoral integrity and combating m
guage has a powerful artificial intelligence algorithm library. This study adopts a project driven approach
gnificance] Through interdisciplinary comparison, the core connotation, common core and field differen
gnificance] Currently, large language models (LLMs) and agents have emerged as core technical paradigr

e The Low Altitude Intelligent Network (LAIN) has emerged as a critical productive force in recent years,
ual imperatives of global trade expansion and low-carbon transition, intelligent maritime shipping has e
(1) Describe the evolution of Health Information Exchanges (HIEs) into Health Data Utilities (HDUs); (2)
deeply explore the current research hotspots and development trends of ChatGPT generative artificial i
pplications of artificial intelligence (AI), such as virtual and physical service robots, generative AI, large la
e Micro-LED displays have excellent performance, such as high brightness, high resolution, vivid colors, l
explores the development and implementation of an intelligent incident management system leveraging
crease in ownership of Internet of Things (IoT) devices, there is a bigger demand for stronger implement
is less technologized than other language services, (partial) automation has also been witnessed in liter
uage Models have been incorporated into an astounding breadth of professional domains. Given their ca
ch explores the development of an Intelligent Collaborative Supply Chain Management (iCSCM) system,
children and teenagers on environmental issues is crucial, as they not only internalize the importance of
entary outlines Türkiye's significant progress in ad vancing its research, development, and innovation (R
Artificial Intelligence (GAI) has recently emerged as a promising solution to address critical challenges o
d/Objectives: Artificial intelligence (AI) is transforming healthcare, enabling advances in diagnostics, trea
uage models (LLMs) have revolutionized the field of artificial intelligence in both academia and industry,
eviews the role of artificial intelligence (AI) in enhancing healthcare through an analysis of physician-to-
reductionist biology at the dawn of the genome era yielded a 'parts list' of plant genes and a nascent u
model-enabled generative artificial intelligence facilitates the development and implementation of age
e: Advances in artificial intelligence (AI) must be matched by efforts to better understand and evaluate h
landscape of AI presents both opportunities and obstacles. Over the decades since the concept of Artific
ystems in the midst of digital transformation utilize technologies like Internet of Things (IoT), big data, a
uing, explosive developments in generative artificial intelligence (GenAI), built on large language models
utcomes: The case is designed taking into consideration the three learning domains of Bloom's Taxonom
ch examines the impact of Large Language Models (LLMs) on entrepreneurial development among micr
investigates the integration of cognitive agents powered by Large Language Models (LLMs) within the Sc
celligence (AI) and its applications in digital health, bioengineering, and society have significant material
artificial intelligence (GenAI) tools, such as large language models (LLMs), generate natural language an
e the arguments made by Onitiu and colleagues concerning the need to adopt a backward-walking logic
uage Models have become a foundational component of modern artificial intelligence, but their develop
The purpose of this research is to look backward the status quo of big data research in the construction i
re everywhere, and their detection is not an easy task at all. There are both manual rumour detection ap
lly evolving landscape of cloud-native computing, Organizations are increasingly adopting infrastructure
pid development of artificial intelligence, big data analytics, and high-performance computing, tradition
ence of generative AI (GenAI) is a major driving force behind the modern data science ecosystem, a field
ignificance] The evolution of smart libraries has ushered in a new era, marked by the integration of mult
radio-frequency integrated circuit (RFIC) design has traditionally been defined by its inherent complexit
creasing volume of data from buildings and affordable powerful computing, artificial intelligence (AI) ha
uage Models (LLMs) have achieved remarkable success across a variety of natural language processing ta

ears, large artificial intelligence models have become the focus of the global science and technology fiel
d: The rapid integration of Artificial Intelligence (AI) in education offers transformative opportunities to e
AI and Agent-Based Models (ABMs) are transforming marketing with the ability to develop accurate, ad
tion of artificial intelligence in educational settings holds great promise but also faces numerous challen
ugmented generation (RAG) seamlessly combines information retrieval with generative artificial intellige
5.0 leverages advanced models and artificial intelligence (AI) analytics to address complex health challe
on of smart, interconnected IoT devices is driving demand for higher performance, real-time processing

tion of artificial intelligence (AI) into China’s medical physiology education has emerged as a transforma
are a key pillar of the European Union's digital strategy, designed to facilitate secure, interoperable, an
r Cancer Center Leaders Session 2 Natural Language Processing for Biomedical Text Medical data is not
ment of large language models (LLMs) on edge devices faces significant challenges due to limited compu
of 6G networks is driving a paradigm shift toward AI-native infrastructures, embedding artificial intellig
telligence (AI) agents represent a transformative advancement in global Information Technology (IT) ma
gence of artificial intelligence (AI) and wearable biosensors is revolutionizing personalized healthcare, e
libraries (TPLs) are an integral part of Android app development, offering app developers essential tools
explores the potential of federated large language models (FLLMs) for privacy-preserving artificial intelli
synthesizes key insights from emerging IEEE Artificial Intelligence Standards Committee (AISC) standards
er, we introduce INvadeAI, a novel interactive advertising framework that leverages multimodal AI to mo
se of large language and vision-language models, AI agents have evolved into autonomous, interactive s
arge language models (LLMs), emerging as strategic assets in global information ecosystems, represent
d: Digital interventions have been proposed as a solution to meet the growing demand for mental health
evelopment of Artificial Intelligence (AI) systems, and particularly Large Language Models (LLMs), has al
cosystems, such as the Internet of Things (IoT), evolve, cyber threats have become increasingly sophistic
: In the context of the rising global prevalence of obesity, traditional intervention measures have proven
racts, integral to decentralized finance (DeFi) and blockchain ecosystems, are increasingly vulnerable to
ls become integral to modern digital ecosystems, their increasing complexity and widespread adoption h
t Detection and Ranging) is one of the most innovative technologies in the field of remote sensing, capa
uage models, a cutting-edge technology in artificial intelligence, are reshaping the new paradigm of chro
ive Artificial Intelligence (Gen AI) is evolving rapidly, there is a significant change in the approach by the
enerative artificial intelligence (GAI) has disrupted the information ecosystem due to its capacity to proc
to traditional digital technologies, generative artificial intelligence (GenAI) exhibits two facets—open-en
tion of artificial intelligence (AI) technologies into digital transformation processes in Turkey plays a sign
artificial intelligence and large model agents are revolutionizing the higher education, influencing every
explores the application of large language models (LLMs) in designing strategic mechanisms - including a
on to 6th generation (6G) mobile networks is a crucial step toward ubiquitous coverage, ultra-broadban
dings contain 16 papers. The special focus in this conference is on Intelligent Computers, Algorithms, an
nic seminar on "Wisdom and Service Libraries and Modern Civilization hosted by the School of Informati
r explores the emerging field of adopting artifical intelligence (AI)/machine learning (ML)-powered textu
roid operating system dominates the mobile ecosystem, its open-source nature has made it increasingly
deploying automated decision-making tools is a crucial requirement for conducting successful business
d: The integration of diverse clinical data sources requires standardization through models such as Obser
dings contain 29 papers. The special focus in this conference is on Applied Algorithms. The topics includ
e food requirements of the growing population worldwide, the agricultural domain is being technologica
rovides a thorough and unique overview of the challenges, opportunities and solutions related with dat
AI (GenAI) is disrupting global IT management and challenging established practice. The increasing use
uage Models (LLMs) are a significant advancement in artificial intelligence (AI), capable of learning from
moment of intense competition in the artificial intelligence (AI) field, DeepSeek has released foundatio
lease and application of open-source large language models (LLMs) represented by DeepSeek, open-sou
smart manufacturing environments, human involvement remains critical for addressing complex tasks th

evel aerospace component processing, the complexity of precision manufacturing equipment design has

Intelligence (GenAI) started to stand at the forefront of this synergy. In the field of life sciences, GenAI i
guage models (LLMs). Far more than a fleeting hype, LLMs represent a foundational shift in how healthc
nptom-driven interventions that detect ischemia, arrhythmias, and remodeling only after tissue damage
ractions among actors, infrastructures, data types, and governance mechanisms. Yet, most existing rese
esis. Environmental science, however, poses unique hurdles due to its interdisciplinary scope, specialize
ected world, addressing the demands of a future intelligent society. This paper provides a comprehensiv
arch domain with the potential to reshape sustainable economic systems. This study presents a compreh
Eaton fires in Los Angeles County underscoring the urgent need for more advanced prediction framewo
ecurity risks, exemplified by high-profile exploits such as the DAO and Parity Wallet incidents. Existing vu
l agents powered by large language models (LLMs) have emerged as effective solutions to longstanding
DL) techniques converge with the Internet of Things (IoT) to manage energy, comfort, and sustainability
processing tasks such as document analysis, content generation, and conversational assistance. Their al
supporting the transformation and upgrading of traditional industries and basic scientific research. The
l and processing on the Internet, bringing both great potential and significant concerns regarding conter
end answers to complex queries, reducing users' reliance on manually browsing and summarizing multip
hatbots can provide information and interactivity, and combining them with context awareness could en
guage models (LLMs) and retrieval-augmented generation (RAG), into multi-agent systems (MASs) for sr
(LLMs) come with ethical concerns. Grounding technology design in human values can address AI ethics
g humans, robots, and the physical world, with its core lying in the deep fusion of humans, robots, and t
digital platforms as critical enablers of data integration, stakeholder collaboration and process optimizat
large language models (LLMs), including customer service chatbots, educational tutors, healthcare assi
, as a dynamic process, requires citizen engagement to integrate their lived experiences. The value co-c
risk audits under the European Union's Digital Services Act (DSA). It examines how automated tools ca
(LLMs), has raised critical trust challenges in high-stakes domains like politics. Biased LLMs' decisions an
ce, including Web Engineering. By leveraging models such as Generative Pretrained Transformers, Diffus
, but its application in landscape research remains underexplored. In this study, large language models a
diagnosis. Comprehensive artificial intelligence (AI) that integrates multimodal imaging data, clinical no
nue to face significant challenges in its effective adoption. While prior studies have emphasized strategic
omous organizations (DAOs). By integrating chain-of-thought (CoT) reasoning with stakeholder-adaptive
often conflated digital paradigms in digital architecture. While DTs function as mirrored models of real-v
natural resource management, urban and rural planning, agri-food systems, industry, energy, education,
tions across various learning and teaching domains. However, LLMs still face several challenges, includin
0 ecosystem. According to recent research, large language models (LLMs) have demonstrated immense
en underappreciated despite their essential ecological roles. As biodiversity loss continues to pose a ma
he 2024 Taiwan presidential election. Using Microsoft's Copilot, we conducted a comparative analysis b
rning, Artificial Intelligence (AI), and autonomous systems. This roadmap article explores how these tec
ence offers a novel approach to restructuring Web Intelligence within a federated setting to better prote
stereotypes and biases, especially in sensitive contexts like cultural differences in low-resource languag
ormation is generated, disseminated, and analyzed. With their ability to process vast amounts of data, g
nat span various domains, including buildings, manufacturing, and healthcare. These virtual clones of ph
isinformation, with a focus on the 2025 Philippine elections. It investigates how AI has been weaponise
and fully utilizes graphical visualization programming tools such as Raptor and Orange3 to assist teachi
tiation of the Agent concept are revealed, the Agent-related concepts and theories contained in library s
ns in artificial intelligence, with their integration into scientific research scenarios holding profound sign

particularly with the growing strategic role of the low-altitude economy in national development plans.
merged as a central driver for the innovation of international logistics systems, now entering a critical w
Provide motivation for HDUs as a public strategic investment target. Materials and Methods: We exami
ntelligence in empowering higher education applications, this study conducted a detailed analysis of 178
nguage models and decision support systems, alter the nature of services. Most service research center
ong lifespan, and fast response speed. They are expected to become disruptive display technology follov
; artificial intelligence (AI), knowledge engineering, and mathematical modeling to optimize enterprise o
tation of security mechanisms and addressing zero-day vulnerabilities. This work is the first to provide a
ary translation. Since 2017, neural machine translation (NMT) systems such as DeepL and, subsequently
apabilities, many intellectual laborers naturally question to what extent these AI models will be able to u
driven by Large Language Models (LLMs), to enhance operational efficiency and facilitate collaboration
ecological preservation but can also share this knowledge at home, spreading awareness within their fa
DI) ecosystem, led by TÜBİTAK in alignment with the National Technology Move and the Twelfth Develo
f blockchain technology, including scalability, security, privacy, and interoperability. In this paper, we firs
tment optimization, and patient care. Yet, its integration raises ethical, regulatory, and societal challeng
transforming how we communicate, search for information, and create content. However, these model
physician communication. It seeks to identify the best practices for extracting value from professional m
nderstanding of complex biological processes. Today, with the genomics era in full swing, advances in hi
nts, which can leverage distinguished reasoning and language processing capabilities to takes a proactiv
ow AI performs across health care and biomedicine as well as develop appropriate regulatory framewor
ial Intelligence (AI) was initiated, AI has witnessed waves of development, from early attempts to create
nd artificial intelligence (AI) to elevate citizens' well-being and champion sustainable development. Nota
and related algorithms, has led to much excitement and speculation about the potential impact of this
y (Bloom et al., 1956) – cognitive, i.e. knowledge and thinking; affective, i.e. feelings and attitude; and p
entrepreneurs in Barranquilla, Colombia. Through a mixed-methods investigation, the study evaluates
caled Agile Framework (SAFe) to reinforce software project management. By deploying virtual agents in
impacts on the environment owing to AI's vast energy demands and energy consumption, carbon footpr
d other types of content to perform a wide range of tasks. This represents a significant technological adv
to manage the risks arising from the use of Large Language Models (LLMs) adapted for a medical purpo
ment is often hindered by inadequate data governance, resulting in challenges such as hallucinations, ir
industry in the last 15 years, from 2010 to 2024 and look forward the research frontiers and openings fo
proaches like reader-added context supported by some social media platforms, and automatic approac
models that emphasize scalability, flexibility, and efficiency. Kubernetes has become the de facto standa
al homogeneous architectures are increasingly unable to meet the growing computational demands, pa
that exploits data as the central asset for actionable insights. Analogously, GenAI is a form of artificial in
imodal learning technologies that combine information from various modalities such as speech, images,
y, reliance on manual iterations, and dependence on domain-specific heuristics. Recently, however, this
s been explored in various applications for building energy modeling (BEM), including collecting input da
asks, with larger architectures often exhibiting superior performance. This scaling behavior has fueled in

d with their excellent performance and wide application potential. Large models usually refer to deep lea
enhance teaching and learning. Among these innovations, Large Language Models (LLMs) like ChatGPT h
aptive, and consumer-centered strategies. ABMs model interactions among agents such as consumers,
ges and critical issues. This paper provides a macro-level analysis of the factors influencing the impleme
ence, allowing large language models (LLMs) to enhance the accuracy and relevance of responses by dyn
nges. With the rise of digital twins in industrial automation, the focus has shifted toward creating cyber
, and self-∗ capabilities (self-adaptation, self-reconfiguration, self-healing) across heterogeneous platfor

ıtive strategy to modernize pedagogical practices and address systemic challenges in healthcare training
d sovereign data sharing across various sectors while ensuring regulatory compliance. These ecosystems
only numeric but also composed of unstructured text. These algorithms listen to various medical imagin
ıtational resources, memory bandwidth, and strict power constraints. While RISC-V architecture offers a
ence deeply across multiple operational layers. This evolution necessitates transparency, trustworthines
nagement, introducing autonomous, goal-driven systems capable of reasoning, adapting, and executing
nabling continuous monitoring, early detection of health issues, which enhances the efficiency of data p
s for enhancing app functionality, design, and integration capabilities. However, the fast-paced evolution
gence (AI) and intelligent management in emerging fifth-generation (5G) and sixth-generation (6G) wire
; - P3394 and P3428 - that are shaping agent-based software engineering for intelligent systems. IEEE P3
onetize Large Language Models (LLMs) while enhancing digital advertising experiences. Our multi-stage f
ystems capable of perception, reasoning, and decision-making. As they proliferate across virtual and phy
advanced AI system developed under distinct national governance regimes. This study examines how m
ı support. Large language models (LLMs) have emerged as a promising technology for creating more per
ready started changing how software is written in industry. In this work, we categorize two important fe
:ated, posing greater challenges for Network Intrusion Detection Systems (NIDS). Artificial intelligence, p
ı insufficient to meet the demands of personalized and sustainable health management, necessitating th
exploits due to coding errors and complex attack vectors. Traditional static analysis tools and existing vu
nave made them appealing targets for cyberattacks. Effective detection and prevention mechanisms are
ble of accurately reconstructing the three-dimensional (3D) structures of the objects being measured. O
nic ocular diseases management. In this study, we comprehensively examined the current status and tre
contact center industry with respect to work culture. Historically, customer service agents working in a
duce large language models. Defining clear regulatory strategies for GAI policies is crucial to achieving th
dedness and inscrutability—that create challenges for the value co-creation of complementors in GenAI
ıificant role in the dissemination of high-tech products. Large Language Models (LLMs) and Natural Lang
thing from talent development frameworks and teaching methodologies to knowledge acquisition proce
ıuctions, contracts, and games- for specific purposes in communication networks. Traditionally, strategic
ıd connectivity, and comprehensive support for Internet of Things (IoT) applications such as autonomous
d Applications. The topics include: Artificial Intelligence Modelling Paths for Reasoning Argumentation M
on Management at Wuhan University and the editorial department of the Journal of Library Science in C
ıal analysis for instructional improvement within the structure of the Instructional Core Framework. It re
vulnerable to sophisticated malware attacks. Traditional security techniques, such as static and dynami
activities and efficient transactions. Hence, leveraging emerging artificial intelligence (AI) techniques, co
rvational Medical Outcomes Partnership (OMOP). However, mapping data elements to OMOP concepts
e: On the Characterization of Eulerian es-Splitting p-Matroids; approximability of Edge-Vertex Dominatic
ally empowered to produce more with fewer resources and investments. Fortunately, the faster maturit
a protection in the age of AI and ML technologies. It investigates the interface of data protection and ne
of GenAI technology is redefining localization, transforming existing workforce roles, outsourcing strateg
vast textual datasets and excelling in tasks such as text generation and translation. However, the curren
nal large language models (LLM) such as V3/R1, with performance comparable to leading international c
ırce innovation has played an increasingly important role in the rapid development of global artificial int
nat require adaptability and decision-making, despite the growing presence of automation and artificial

exceeded the capabilities of traditional design methodologies. Conventional experience-driven design a

s emerging as a catalyst, accelerating drug discovery by swiftly generating and predicting novel molecul
are professionals interact with and derive value from data. From simplifying clinical note-writing to supp
has begun, limiting the effectiveness of therapy. A narrative review synthesized 183 studies published b
arch remains static or domain-specific, offering limited insight into the temporal and co-evolutionary dy
d jargon, and heterogeneous data from climate dynamics to ecosystem management. Despite progress
ve review of WI's contributions since its inception in 2000, spanning three distinct phases: Wisdom Wor
nensive bibliometric and network analysis aimed at mapping the scientific landscape, identifying researc
rks. Existing physics-based and deep-learning models struggle to capture dynamic wildfire spread across
ılnerability detection methods, including static and dynamic analysis, as well as machine learning-based
challenges in data annotation, such as scalability, consistency, cost, and limitations in domain expertise.
across smart environments. A PRISMA-guided search of four databases retrieved 1358 records; after ap
bility to process and generate human-like text has unlocked unprecedented opportunities across differe
forestry and grassland industry is characterized by vast geographical coverage, complex types, and high
nt authenticity and reliability. This paper presents a novel quantitative approach to shed light on the con
ole web pages. However, while this paradigm enhances convenience, it disrupts the feedback-driven imp
nhance the relevance and proactivity of action recommendations. However, there is a gap in understanc
mart urban mobility. The proposed framework leverages intelligent transportation systems (ITS) data, ac
and ensure adoption. To this end, we apply Value-Sensitive Design—involving empirical, conceptual anc
:he physical environment, to enhance the capabilities of agents in perception, cognition, and collaborati
tion. This paper presents a systematic review of 125 peer-reviewed journal articles (2015–2025), selecte
stants, and code-generation tools. By dynamically identifying and mitigating harmful, biased, or unethica
reation approach offers a promising framework to facilitate citizen involvement in shaping urban green
n enhance the work of DSA auditors and other ecosystem actors by enabling scalable, explainable, and l
d misinformation undermine democratic processes, and existing trust models fail to address the intricac
sion Models, and Large Language Models, developers can now automate, augment, and innovate traditi
are applied to analyze cultural ecosystem services, which are a key connection between humans and nat
otes, and large language models has the potential to support radiologists. Accordingly, the U.S. Food and
benefits and readiness models, there remains a lack of operational guidance tailored to SME realities—
recommendations, the framework improves decision alignment, increases voter participation, and enha
world systems—integrating IoT, BIM, and real-time analytics to support decision-making—Metaverses ar
and healthcare. However, the impact of AI on the sustainability of local ecosystems remains insufficien
ıg hallucination and static internal knowledge, which hinder their reliability in educational settings. Retri
potential in smart contract security audits but still lack the capability for effective vulnerability detectio
ıjor challenge for humankind, it necessitates a re-evaluation of these biases to support the protection of
y prompting election news in five languages: English, Traditional Chinese, Simplified Chinese, German, a
hnologies are reshaping the field, positioning humans not only as end users but also as critical compone
ect privacy. Additionally, the advent of large foundation models has notably enhanced the capability of i
es such as Bengali. In this work, we investigate cultural bias in LLMs by evaluating their performance in E
rasp contextual nuances, and engage in human-like dialogue, LLMs present new opportunities and challe
ysical systems provide relevant insights, enhance decision-making processes, and optimize operations, a
d to manipulate narratives and suggests strategies to counteract disinformation. Drawing on case studie
ng. At the same time, with the help of large models to assist programming, the cultivation of mathemati
science are revealed, and the innovative value of AI Agent driven by large language models to the core s
ificance for transforming research paradigms. Traditional scientific research is facing an increasing numb

As an integral part of smart city infrastructure and advanced air mobility systems, LAIN contributes both
indow period for the deep integration of Internet technologies and automated port infrastructure. Whil
ne trends in developing HIEs into HDUs and compare their criticality to that of the national highway syst
3 articles related to ChatGPT+higher education in the knowledge Resource Database. By using software t
's on the division between human and AI resources. Less attention has been paid to analyzing the entang
wing liquid crystal display (LCD) and organic light emitting diode (OLED), especially in fields like micro-pro
perations. Enterprise incident resolution can be conceptualized as a complex network of interdependen
platform that combines featureless approaches with artificial intelligence (AI) algorithms, which are dee
, large language models (LLMs) such as ChatGPT have been drastically changing, if not revolutionizing, th
usurp their own jobs. As behavioral scientists, we performed an effort to examine the extent to which ar
among academic, governmental, and private sectors in advancing University Holding Companies (UHCs)
milies and communities about these delicate matters. In this work, we introduce an innovative approacl
pment Plan. Key strategic objectives include fostering high-technology production, enabling digital and g
st introduce GAI techniques, outline their applications, and discuss existing solutions for integrating GAI
ges. Key concerns include data privacy risks, algorithmic bias, and regulatory gaps that struggle to keep p
s face knowledge cutoffs and costly updates, driving a new ecosystem for LLM-based applications that le
nedical chats (PMCs) and assess the impact of AI on patient outcomes and healthcare systems, emphasiz
gh-definition genomics enabled precise temporal and spatial analyses of biological systems down to the
e, autonomous role to pursue users' goals. Nevertheless, there is a lack of systematic knowledge to guic
rks. This Special Communication reviews the history of the US Food and Drug Administration's (FDA) regu
e human-like conversational agents to the recent surge in deep learning and big data. The 21st century h
ably, LLMs such as GPT-3 or GPT-4, crafted by OpenAI, and Google's AI tools like Gemini and Bard, stand
new technology. Claims include artificial intelligence (AI) being poised to revolutionize business and soci
psychomotor, i.e. specific applied skills. Accordingly, these learning objectives are identified:▪ to frame
two LLM interventions, Claude Sonnet and Chat GPT 3.5, in comparison to conventional entrepreneursh
simulated software environments, this study explores their potential to fulfill fundamental roles in IT pr
rints, and water usage to cool data centers and generate electricity to power the data centers. Yet, the e
vancement that poses opportunities and challenges to educational research and practice. This comment
se. We examine what lessons can be learned from existing multi-use technologies and applied to specia
ntellectual property violations, and security vulnerabilities. In light of emerging regulatory requirements,
r future research. In recent years, big data has increasingly become a new research hot spot in the cons
hes like AI models that detects rumours using various architectures. Both methods take some time to d
ard for orchestrating containerized applications in these environments. However, the inherent complexi
rticularly in parallel computing and immediate data processing scenarios. The application of heterogene
ntelligence which learns from massive datasets to generate new data, showcasing human-like creativity
, and video. This cutting-edge technology is revolutionizing traditional information service systems by pr
landscape has been undergoing a transformative shift propelled by advancements in Artificial Intelliger
ata, creating and tuning energy models, managing simulation runs, and extracting insights from large vol
tense competition in generative AI, supported by projected investments that exceed $1 trillion to develo

arning models with massive parameters, such as OpenAI's GPT series, Google's BERT, etc., which can har
old immense potential for instructional design, personalized learning, and administrative efficiency. Hov
firms, and influencers to reveal behavioral patterns and campaign optimization. At the same time, Large
ntation of generative large models in foreign language education. Eight dimensions are identified, each
namically retrieving and integrating contextual knowledge from external databases. In education, RAG ho
twins (CT) models that simulate patient conditions, reducing the risk of misdiagnosis on actual patients.
ms. CPUs, GPUs, and FPGAs now provide exceptional compute power but greatly complicate software t

. Current initiatives leverage AI-driven tools such as machine learning algorithms for physiological simula
s enable seamless data exchange among businesses, governments, and individuals, fostering advanceme
g, genomic data, and electronic health records to find correlations that can predict different diseases. U
dvantages in edge computing through its modularity, scalability, and open-source ecosystem, the LLM i
s, and explainability to foster reliable and accountable network decisions. Explainable AI (XAI) technique
decisions across distributed IT ecosystems. By leveraging Large Language Models (LLMs) and advanced
rocessing and real-time decision-making. Multimodal Large Language Models (MLLMs) play a pivotal rol
n of Android APIs introduces compatibility issues not only in Android apps but also in TPLs as they rely he
less networks. Using federated learning (FL), FLLMs enable decentralized model training at the network
394 (LLM Agent Interface) defines a Universal Message Format (UMF) and communication protocols for
framework integrates YOLOv8 for product detection in visual media, BLIP3 and OCR for caption generati
ysical domains, the Internet of Agents (IoA) has emerged as a key infrastructure for enabling scalable and
odel origin and governance context influence AI-generated narratives on international territorial dispute
rsonalized and adaptive mental health chatbots. While LLMs generate responses based on statistical pat
eatures of modern AI systems - structured outputs and tool-use - and explain how the security of each is
particularly Large Language Models (LLMs), enhances cybersecurity through log analysis, anomaly detect
ıe exploration of innovative solutions through innovative technologies. This study explores how advance
ılnerability detection methods often fail to address these challenges comprehensively, resulting in high f
crucial, and machine learning (ML) techniques provide promising solutions for identifying anomalous A
ver the past few decades, LiDAR technology has advanced rapidly, significantly promoting research in th
ends in the application of large language models in major blinding chronic ocular diseases such as glauco
contact center used to depend significantly on static scripts and fragmented information systems, which
e objective of information governance in the digital and intelligent era. Furthermore, this is the appropr
platform ecosystems. For example, complementors lack standardized, reusable functionality that powe
uage Processing (NLP) techniques are supported by innovative solutions developed by HAVELSAN. Durin
esses and research paradigms. Meanwhile, in the context of digital transformation and technological inn
c mechanism design in telecommunications has relied on human expertise to craft solutions based on ga
s driving, remote control, and more. This leap will be facilitated by the integration of space-air-ground-s
Methods for Criminal Evidence; parallel Decomposition Method for Deep Learning Models Based on Imp
China focused on multiple themes of "wisdom and service in the context of the new era. The sub-forum
eviews existing studies on AI/ML applications in analyzing teacher, student, and content data, emphasizi
c code analysis, often fail to detect modern malware due to issues like code obfuscation and limited sca
njugated with natural language processing (NLP) will strengthen the decision support systems (DSS) tha
demands significant technical expertise and time. While large health care systems often have resources
on in Unit Disk Graphs; density Extrema of Integer Points in Standard Hexagons; Dilution with Digital Mic
y and stability of digital (digitization and digitalization) technologies and tools have laid a stimulating an
ew technologies, emphasising the growing need to safeguard personal and confidential data from unautl
gy, and team dynamics. Simultaneously, GenAI's security complexities have prompted the rethinking of e
t general LLMs often do not meet the specific requirements of the public sector and other entities in Eu
organizations like OpenAI. This not only demonstrates China's technological innovation capabilities in AI
elligence (AI) technology. Through technological innovation, cost reduction, performance improvement
intelligence. This paper introduces SAMBA - Service-Augmented Manufacturing-Based Approach, an inn

approaches exhibit fundamental limitations when confronting high-dimensional parameter spaces, comp

es. This expedites the identification of potential drug candidates, significantly reducing time and costs co
porting patient engagement and enhancing administrative processes, LLMs have the power to transform
between 2016 and 2025 that were located through PubMed, MDPI, Scopus, IEEE Xplore, and Web of Scie
namics of PDEs. To address this gap, this study adopts a theory-building approach to examine how PDEs
in subdomains like hydrology and climate modeling, no integrated framework exists to generate high-qu
ld Wide Web (WI 1.0, 2000–2009), Wisdom Web of Things (WI 2.0, 2010–2017), and Wisdom Web of Ev
h hotspots, and highlighting methodological trends at this nexus. A dataset of 268 peer-reviewed public
both 2D and 3D domains, especially when incorporating real-time, multimodal geospatial data. This pa
approaches, often struggle with emerging threats and rely heavily on large, labeled datasets. This study
These agents facilitate intelligent automation and adaptive decision-making, thereby enhancing the effi
plying inclusion criteria, 143 peer-reviewed studies published between January 2019 and April 2025 we
nt domains such as healthcare, education, finance, and more. However, commercial LLM platforms face
work difficulty. However, current professional models in this industry suffer from insufficient generality
nplex information dynamics arising from the growing use of generative AI tools. Despite their significant
rovement loop that has historically powered the evolution of traditional Web search. Web search can co
ding the role that such technologies can play in taking a holistic view of the user's multiple goals, comple
dvanced analytics, and simulation models, enabling GenAI agents to provide tailored, context-aware, and
l technical investigations—to centre human values in the development and evaluation of LLM-based cha
on toward the physical world. The key components and technological pathways of embodied intelligenc
d through a PRISMA-guided search using the Scopus database, with inclusion criteria focused on English
al outputs in real time, the system significantly enhances the safety and reliability of LLM-powered appli
spaces. Without successful translation of these experiences into tangible value during the implementati
egally grounded content analysis. An interdisciplinary expert workshop with twelve participants from leg
ies of trust in LLMs. Currently, oversimplified, one-directional approaches have largely overlooked the n
onal processes involved in the design, development, and maintenance of web systems. This chapter exp
ure, reflecting the intangible benefits that ecosystems provide. Social media texts from the Lushan Scen
Drug Administration has cleared more than 770 AI medical devices that focus on radiology, primarily ba
-particularly regarding implementation barriers, resource constraints, and emerging demands for respon
ances governance transparency. Through simulations based on historical KlimaDAO data, the system ach
e typically fictional, immersive, multi-user environments shaped by social, cultural, and speculative narr
tly systematized. This highlights the need for a comprehensive review that considers spatial, sectoral, ar
eval-Augmented Generation (RAG) enhances LLMs by retrieving relevant information from an external k
n. Consequently, leveraging the capabilities of LLMs to effectively enhance the performance of smart co
biodiversity as a whole. With large language model (LLM) chatbots becoming increasingly integrated in
nd Swedish. While Copilot uses mainly professional news media, provides quick access to synthesized in
nts within expansive software ecosystems. We examine the challenges and opportunities arising from th
ndividual agents to address complex problems and has reshaped the Web ecosystem. Numerous large la
Bengali cultural dialects of Hindu and Muslim majority. We evaluated widely used Web-enabled models,
enges for understanding online interactions. The SocialLLM 2025 workshop builds on the foundation laic
long with allowing the prediction of future operations. Artificial intelligence (AI) has been instrumental i
s from the Philippines, Taiwan, and India - regions in the Indo-Pacific with vibrant democracies, high dig
cal thinking, logical thinking, AI thinking, engineering thinking, and programming training are integrated
ervices of libraries is analyzed to promote the transformation of knowledge services to intelligent and co
ber of challenges such as inefficient literature searches, the processing of massive amounts of data, repe

ı to economic growth and to airspace security. By integrating unmanned aerial vehicles, fifth-generation
e existing research predominantly focuses on isolated applications of intelligent technologies, systemati
em as an investment in the public good. Results: We propose that investment in HDUs is essential for ou
tools such as Power BI, SPSS, and Excel, this study conducted a visual analysis of core authors, research f
gled resource relations and interactions between humans and AI entities. Thus, the purpose of this pape
ɔjection, near-eye displays, and others. However, these fields urgently require display devices with high
ıt systems, where disruptions in one area propagate through interconnected decision nodes and resolut
ep learning and large language models, to uncover IoT security vulnerabilities based on network traffic d
ne language industry. LLMs have larger context windows than NMT systems and allow for translations to
ı AI can perform our roles. To achieve this, we utilized commercially available AIs (e.g., ChatGPT 4) to pe
. Despite significant progress in AI-driven supply chain management, challenges remain in effectively alig
ı to raising awareness of environmental challenges faced by the Mar Menor lagoon by blending childrer
green transitions, and boosting global competitiveness. TÜBİTAK plays a central role in supporting artific
into blockchains. Then, we discuss emerging solutions that demonstrate the effectiveness of GAI in addı
ace with AI advancements. This study aims to synthesize a multidisciplinary framework for trustworthy A
everage interaction techniques to extend capabilities and facilitate knowledge updates. As these models
zing the integration of ethical and responsible AI practices. We conducted an extensive systematic literat
single-cell level. These insights, coupled with artificial intelligence-driven in silico design, are propelling
de practitioners in designing the agents considering challenges of goal-seeking (including generating instı
ulation of AI; presents potential uses of AI in medical product development, clinical research, and clinica
ıas seen remarkable breakthroughs, with applications spanning various industries, including technology,
as pivotal components, holding immense potential to revolutionize EVs in smart city initiatives. Generat
ety and dramatically change personal life. However, it is not clear how this technology, with its significar
a data and insights-driven design challenge and communicate product and solution design ideas clearly
ip education approaches. A cohort of 105 microentrepreneurs engaged in a structured training program
oject development, thereby optimizing project outcomes through intelligent automation. Particular emp
environmental footprints of AI remain underappreciated and inadequately acknowledged. This is signific
cary brings together contributions from nine experts working in the intersection of learning and technolo
lized LLMs, notwithstanding their novelty, and explore the appropriate respective roles of device provid
, this paper presents a Collaborative Safe AI Framework (CSAIF) for building safe AI systems through robu
truction industry and has rapidly developed into a new research branch of project management. Howev
etect and label a piece of information as a rumour. In this paper, we present a novel approach for realtir
ty of cloud-native ecosystems introduces significant challenges, particularly in the form of misconfigurat
eous hardware technology has overcome the bottlenecks in computational power and energy efficiency,
in text, images to code, speech, and video. Two critical pillars of the GenAI technology are large languag
roviding a more interactive, efficient, and personalized user experience. Unlike traditional studies that fo
ıce (AI) and Machine Learning (ML). This survey provides a systematic and forward-looking review of AI-
ume of simulation output to inform decision making across a building's life cycle for energy efficiency, d
op increasingly sophisticated LLMs. This competition has in turn nurtured a vibrant ecosystem, inspiring

ndle complex natural language tasks and show amazing levels of intelligence. As a new stage in the deve
wever, integrating these tools into resource-constrained settings such as Nigeria presents significant cha
Language Models (LLMs) are elevating content creation, customer experience, and campaign managem
comprising multiple sub-factors. These dimensions are interwoven, interdependent, and mutually influe
olds transformative potential, facilitating personalized learning path recommendations, automated ques
In our proposed framework, patient data from real-time sensors, wearables, and electronic health reco
oolchains. We envision AI-COMPILER, an LLM-driven, domain-specific framework that automates co-con

ations and virtual reality (VR) for immersive clinical training, aiming to standardize educational outcomes
ents in artificial intelligence, big data analytics, and digital services. However, despite their potential, it re
sing convolutional neural networks to analyze images and recurrent neural networks to process sequen
nference framework llama.cpp struggle to leverage the full potential of the RISC-V Vector Extension (RV
es have emerged as crucial tools to ensure that AI-driven network operations are interpretable and align
AI frameworks, they enhance operational efficiency, decision-making, and cross-border IT collaboration
e in this ecosystem by offering advanced capabilities in analyzing complex health data, understanding nu
eavily on these Android APIs too. These challenges necessitate continuous updates and compatibility che
edge while maintaining data locality and compliance with privacy regulations. Key challenges - such as c
Large Language Model (LLM) agents, establishing standard message envelopes, semantic payload, ager
on and text extraction, and multimodal LLMs for product link retrieval. Unified within an interactive use
d secure coordination among heterogeneous agents. This survey offers a comprehensive examination of
es. The study compares outputs from three prominent sovereign LLMs-OpenAI's GPT-4o (United States),
terns in training data rather than through conscious reasoning, they can be designed to support importa
, inherently, a LangSec problem. We provide anecdotal evidence from the San Francisco startup ecosyst
ion, and threat intelligence. However, optimizing NIDS for real-time detection in dynamic, resource-limi
ed digital technologies, including Internet of Things (IoT) and Artificial Intelligence (AI), can manage weigl
false-positive rates and an inability to detect dynamic vulnerabilities. This paper introduces SmartLLM, a
PI traffic and addressing emerging threats. However, the effectiveness of ML-based security models is li
ne field of ecology and geosciences. This paper systematically reviews and explores the potential future c
ma, cataract, and diabetic retinopathy through a systematic scoping review approach. We conducted th
thereby resulted in delayed resolutions, cognitive overload, and made them deliver inconsistent custor
iate role for the country in promoting the governance of cyberspace. Design/methodology/approach: By
ers their applications and struggle to consistently generate desired outputs. To identify how complemen
ng this process, Turkey's AI development capacity is increasing, and its competitiveness is being strengthe
novation, data as a production factor and emerging productive forces are reshaping the requirements an
ame theory, auction theory, and contract theory. However, the evolving landscape of telecom networks,
ea integrated networks (SAGSINs), which improve coverage for high-throughput applications such as Ear
roved Dual Population Genetic Algorithm; Integrating CNNs and Transformers for Mid-price Prediction in
"Seeking the Treasure of Knowledge-Library and Preservation of Modern Civilization focuses on two the
ng the transformative potential of technologies like large language models (LLMs) and generative AI in e
lability. This paper explores the limitations of these methods and suggests incorporating advanced Deep
t are imperative for elaborating strategic planning. In this perspective, the deployment of the emerging
for OMOP conversion, smaller clinical trials and studies frequently lack such support, leaving valuable re
rofluidic Biochips: Unbalanced Split-Error Correction with SIMOP; social Evolution of Published Text and
d sparking foundation for large-scale production of food items with minimal time, talent, and treasure. T
horised access and change. The authors emphasize the crucial need of strong data protection regulation
existing risk frameworks to meet a new set of challenges from GenAI enhanced cyber threats. This article
rope due to various limitations, including in particular language coverage gaps. In response, the Europea
but also provides a Chinese innovative pathway for global AI development. Firstly, through low-cost trai
, and application demonstration, DeepSeek has opened up a disruptive innovation path and improved th
ovative framework designed to optimize human-in-the-loop processes in smart manufacturing. The prob

olex multidisciplinary coupling effects, and dynamic performance prediction requirements, rendering tria

ompared to traditional methods. Beyond drug discovery, GenAI contributes to protein folding prediction
nearly every corner of the healthcare ecosystem. In Large Language Models (LLMs) for Healthcare, Jere
ence. This review examines CVD diagnostics using innovative technologies such as digital cardiovascular
evolve over time and to define a forward-looking research agenda. Drawing on empirical insights from
uality, domain-specific training data or evaluate LLM performance across the discipline. Here we introdu
erything (WI 3.0, since 2018). For each phase, we examine key advancements, challenges, and future di
ations (2014–June 2025) was retrieved from the Web of Science Core Collection, filtered by the Busines
per explores how generative artificial intelligence (AI) models—such as GANs, VAEs, and transformers—
investigates the effectiveness of open-source, lightweight large language models (LLMs) fine-tuned usin
iciency and reliability of annotation workflows across various fields. Despite the growing interest in this
re analyzed. This review shows that AI-driven controllers—especially deep-reinforcement-learning agen
several limitations, including data privacy concerns, context size restrictions, lack of parameter configu
y, adaptability, complex problem-solving capabilities, and collaborative decision-making abilities, making
impact on the digital ecosystem, these dynamics remain largely uncharted and poorly understood. We
ontinuously improve their ranking models by collecting large-scale, fine-grained user feedback (e.g., clicl
x contexts, and constraints over time. We developed a technology probe of a personalized context-awa
d human-centric solutions. By pairing LLM agents with retrieval agents and task-specific agents, the MAS
atbots within a high school environmental science curriculum. Representing multiple perspectives and e
e are systematically investigated through 5 focused dimensions: A task-oriented multimodal active perc
-language academic literature on platform-enabled digitalization in the built environment. Studies were
cations. This approach supports the responsible deployment of generative artificial intelligence (AI) tech
on phase, co-creation efforts may revert to mere participatory practices in which citizen involvement is
gal, technical, and social science backgrounds explored prompting strategies for LLM-assisted auditing. T
many relationships between trustor (user) contextual factors (e.g. ideology, perceptions) and trustee (LLI
lores the integration of generative AI in Web Engineering, with a focus on current applications, architect
ic Area, known for its rich cultural ecosystem services, were analyzed. The methodology involved adapti
ased on deep learning. However, algorithm development and validation remain challenging. Limitations
nsible AI use. This study presents an analysis of AI adoption in SMEs by integrating the technology–organ
ieved a 97% alignment with past decisions, a projected 40% increase in participation, and a 35% improv
ratives. Through several research projects, the team investigate the divergence between DTs and Metav
d socio-economic characteristics of regions, as well as interdisciplinary approaches to sustainable devel
nowledge base and incorporating it into the LLM's generation process. This approach improves factual a
ntract vulnerability detection remains a critical challenge. In this paper, we propose Agent4Vul, a novel
to daily life for information dissemination and education purposes, understanding their inherent biases
formation, and exhibits source transparency, it frequently creates misinformation and misattributes nev
is human-centered paradigm, including ethical considerations, fairness, and the intricate interplay betw
anguage models and domain-specific foundation models underpin various applications, linking end-user
including ChatGPT, Gemini, and Microsoft Copilot, using a curated data set to analyze their handling of
d by SocialNLP, expanding the scope to explore the capabilities and implications of LLMs in social media
in enhancing the functionalities of DT. This survey paper explores recent developments in advanced AI a
ital engagement, and recent experiences with election-related misinformation - it highlights the risks of
into Python language course teaching in a step-by-step and progressive manner, forming a robust teach
ollaborative paradigms. Understanding the interdisciplinary nature of Agents will help library science, int
titive experimental tasks, and barriers to collaborative innovation. Agents, empowered by LLMs, offer a

communication technologies, and artificial intelligence, LAIN enables real-time monitoring and provide
c evaluations of the synergistic effects of technological integration on maritime ecosystems, policy com
ur nation's healthcare data ecosystem. This investment will address the increased need for healthcare de
unding, research topics, author institutions, discipline areas, and related indicators in the literature. The
r is to extend our metatheoretical understanding of resource integration and value cocreation by analyz
light efficiency and good directivity. The light extraction efficiency and beam shaping of Micro-LEDs hav
ion workflows. The system integrates advanced natural language processing (NLP) for incident classifica
ata directly without manual feature selection. The platform correctly identifies vulnerable and secure Io
be adapted to various reception situations. For instance, a text can be simultaneously translated and st
rform each step of the research process, culminating in an AI-written manuscript. We attempted to inte
gning academic research with industry demands, resulting in suboptimal resource utilization and missed
's art with conversational artificial intelligence. We built an interactive narrative visualization where use
ial intelligence, quantum technolo gies, and aerospace advancements through national infrastructure, h
ressing various challenges of blockchain, such as detecting unknown blockchain attacks and smart contra
AI in healthcare, focusing on transparency, accountability, fairness, sustainability, and global collaboratio
grow more complex, understanding their internal workings becomes increasingly challenging, posing sig
ture review using the Web of Science Core Collection. Searches encompassed English-language articles p
the development of the first synthetic plants. By integrating reductionist and systems approaches, resea
rumental goals and plans), such as hallucinations inherent in foundation models, explainability of reasor
l care; and presents concepts that merit consideration as the regulatory system adapts to AI's unique ch
healthcare, and education. Efforts to address AIś impact on society are evident in the development of e
tive AI and LLM integration prove influential in optimizing EV functionalities, enhancing security, and for
ntly distinct features from past AI technologies, has transformative potential or how researchers in infor
(LO 1);▪ to understand and apply the design thinking process for data science and AI-enabled digital pr
, with outcomes assessed across multiple entrepreneurial competency domains. Quantitative analysis u
phasis is placed on the adaptability of these agents to Agile methodologies and their transformative imp
ant, particularly in this era of climate emergency and ongoing threats to planetary energy and water sup
ogy and presents critical reflections on the opportunities, challenges, and implications related to GenAI t
ers and regulators within the ecosystem of technological oversight. © 2025 Elsevier B.V., All rights reser
ust data lifecycle management and ecosystem collaboration. This paper analyzes governance principles
er, few works were done to map the global study in this field, easily causing a neglect in new technologi
me rumour detection in news feeds using a combination of RoBERTa and Elastic Weight Consolidation (E
tions that can compromise both security and performance. This study explores the potential of Large La
and has been widely adopted in cloud and edge computing domains. However, challenges such as the c
e models (LLMs) and vector data. In particular, LLMs are a category of genAI models that emphasize on
ocus on single-mode interactions, this research examines the role of multimodal technologies in transfor
enabled methodologies—including evolutionary algorithms, Bayesian optimization, reinforcement learn
emand flexibility, climate resilience, and occupant comfort and health. However, significant challenges r
new open-source models such as DeepSeek, and motivating application developers to harness state-of-

lopment of libraries, smart libraries integrate advanced technologies such as the Internet of Things, big
llenges, including inadequate infrastructure, digital inequities, and teacher readiness. Despite the growi
ment. This survey addresses where these technologies overlap to power contemporary marketing innova
ential, collectively shaping the ecosystem for the deployment of large models in education. The paper fu
stion-answering systems, knowledge retrieval, generation of teaching resources, and adaptive evaluatio
rds (EHRs) are collected and securely stored across decentralized personal web servers using Solid PoDs.
npilation and optimization of heterogeneous applications in smart cities, smart transportation, and real-

s, enhance student engagement, and improve readiness for complex clinical scenarios. However, the rap
emains unclear whether they provide the necessary tools to fully support efficient and user-friendly expl
tial data, AI systems improve diagnostic accuracy and minimize the risk of human error. Additionally, de
V), leading to suboptimal performance. This study has achieved efficient LLM deployment in resource-cc
ed with human expectations, thus addressing inherent reliability issues like model degradation and risks
. Their impact spans finance, healthcare, supply chain management, and enterprise IT services, where th
uanced health contexts, and generating tailored health recommendations instantaneously. This study pr
ecks to maintain apps as well as TPL's compatibility across Android's diverse ecosystem. Prior research p
ommunication overhead, security vulnerabilities, and the adaptability of large language models (LLMs) t
nt roles, session management, and interaction patterns. IEEE P3428 (LLM Agents for Education) specifies
r interface, INvadeAI enables seamless product discovery and purchasing, creating a potential new rever
f the security and privacy landscape in IoA systems. We begin by outlining the IoA architecture and its di
DeepSeek-R1 (China), and Mistral (European Union), across 12 high-profile territorial conflicts. Statistic
nt psychological processes. Prospection—the ability to envision and plan for future outcomes—represe
em to illustrate how companies are currently using, deploying, and securing AI systems with these featu
ted contexts remains a significant challenge. This survey paper provides a comprehensive overview of m
ht and enhance full-lifecycle health in individuals with obesity under simulated high-altitude hypoxic cor
novel approach leveraging fine-tuned LLaMA 3.1 models with Retrieval-Augmented Generation (RAG) t
mited by the scarcity of realistic, up-to-date datasets and the rapid obsolescence of static training data i
developments in LiDAR hardware and algorithms, as well as their applications in ecology and geoscience
is review based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extended t
ner experiences. This study explores the paradigm shift that's occurring in contact service centers throu
y dissecting the information governance dilemma triggered by GAI content, this paper employs the PMC
tors mitigate these challenges, we conducted an embedded case study of complementors in the OpenAI
ened. HAVELSAN addresses public and private sector demands by developing national products, aiming
d demands for cultivating high-level interdisciplinary engineering talents. This paper draws on the joint
characterized by increasing abstraction, emerging use cases, and novel value creation opportunities, ca
th observation and intelligent transportation. With the increasing demand for communication and com
n High-Frequency Trading; hierarchical Recurrent Network for Active Stereo Matching; Research on Mult
mes "structural optimization and long-term preservation of library resource construction laying the four
enhancing instructional efficiency and effectiveness. Through case studies, it illustrates how these techn
) Neural Networks as more effective solutions for malware detection in Android environments. Addition
chatbots' technology in the area of business processes (BP) offers large capabilities for decision-making
esearch data siloed. Objective: This study aims to develop and validate a user-friendly tool that leverage
the Emergence of Artificial Intelligence Through Large Language Models and the Problem of Toxicity an
The penetration and pervasiveness of the Internet of Things (IoT) sensors and actuators are considered t
s, focusing on the consequences of AI and ML breakthroughs for privacy and individual rights. This book
e explores these complex and converging factors, providing a roadmap to address GenAI's significant im
n Commission's Directorate-General for Translation (DGT), in the context of its partnership with the Dir
ning and inference, break the monopolistic barriers of high-end computing power and lower research ar
ne research and application level of AI in China and its international influence. In order to further promo
blem addressed involves the challenge of effectively integrating human operators with advanced autom

al-and-error iterative optimization processes inefficient and incapable of achieving optimal solutions. Int

s, genomics research, disease diagnosis and biomarker identification, enhancing our understanding of d
emy Harper shines a spotlight on this transformative potential. With clarity and practicality, he explores
twins, which involve the collection of data from wearable IoT devices (electrocardiography (ECG), photo
five European countries, we investigate how key meta-characteristics and attributes of PDEs manifest, s
ce a unified pipeline to address this gap. It comprises EnvInstruct, a multi-agent system for prompt gene
rections from the perspectives of both intelligent machines and human experts, highlighting significant s
s Economics category. Analytical techniques employed include Bibliometrix in R, VOSviewer, and science
can serve as transformative tools for wildfire prediction and simulation. These models offer superior cap
ıg parameter-efficient techniques, including Quantized Low-Rank Adaptation (QLoRA), for smart contrac
area, a systematic understanding of the role and capabilities of AI agents in annotation is still underexplo
ıts—deliver median energy savings of 18–35% for HVAC and other major loads, consistently outperformi
rability, and limited evaluation capabilities. These shortcomings hinder their effectiveness, particularly in
g them unable to meet the industry's demands and restricting the high-quality development of the fores
propose a stochastic model to characterize the generation, indexing, and dissemination of information i
ks, dwell time) at the document level. In contrast, generative AI search operates through a much longer
re LLM chatbot and deployed it with 14 participants for 2-4 weeks for their 2024 New Year's resolutions
s can efficiently process traffic data, interpret user queries, and interact with simulations or optimization
xpertise, the chatbots help students refine their causal models of climate change's impact on local marin
eption framework is first proposed, combining embodied interaction and active navigation to establish a
grouped into six thematic domains, i.e., artificial intelligence in construction, digital twin integration, lif
ınologies by ensuring adherence to ethical standards and regulatory frameworks while simultaneously p
superficial. Since Large Language Models (LLMs) have the potential to streamline user feedback, this stu
hematic analysis of the sessions identified key challenges and design considerations, including prompt e
Ms) systemic elements (e.g. scientists, tool's features). In this work, we introduce a bowtie model for ho
tural enhancements, tooling implications, ethical concerns, and emerging research directions. It critically
ing the model using few-shot learning to classify cultural ecosystem services and associated sentiments.
include sparse expert-annotated data and regulatory hurdles. Clinical implementation and the adaptatic
ıization–environment (TOE) framework with selected attributes from the diffusion of innovations (DOI) t
vement in governance clarity. To support quantitative analysis in tokenomics, we developed a tailored C
erses through the lens of their purpose, data structure, immersion, and interactivity, while highlighting a
opment. This study presents a scoping review of 198 peer-reviewed publications published between 20
accuracy and enables dynamic knowledge updates, making LLMs particularly suitable for educational ap
framework utilizing multimodal LLM agents to enhance smart contract vulnerability detection. Specifica
is vital. In this study, we tested 10 popular Western LLM chatbots using simple prompts to assess how th
ws sources. The analysis highlights variations in Copilot's sourcing behavior, showing a strong reliance or
veen technical and human factors. By recognizing humans at the heart of the software lifecycle - spannir
s to the connected Web. This tutorial presents federated intelligence as a strategy to develop a Web-ba
culturally specific terms and approaches to mitigating social biases. By addressing bias in language techr
research. This year's workshop at TheWebConf 2025 focuses on three pivotal themes: leveraging LLMs f
lgorithms tailored for DT in building settings. Moreover, a wide spectrum of AI techniques designed to a
AI-driven content and the innovative measures used to address its spread. The commentary advocates f
ıing ecosystem. Under the innovative teaching mode, students have gained sufficient practical training t
formation science and other related disciplines to better design and apply AI technologies and achieve th
promising solution to these bottlenecks by enabling intelligent automation and adaptive collaboration a

s services for urban traffic, agriculture, and disaster management. This integration optimizes resource al
patibility, and contributions to global carbon emission governance remain under-explored. Leveraging b
elivery and public health data. Discussion: HDUs can meet the current and future needs of healthcare de
e aim of the study is to analyze the current status of ChatGPT research in higher education applications a
zing different human–AI resource relations in service ecosystems. Design/methodology/approach: The c
e become pressing challenges for researchers and industry. Light extraction technologies, such as Micro-
tion, rule-based expert systems for actionable recommendations, and multi-objective optimization techı
T devices just by raw network traffic! Experimental results show that the proposed study detects vulner
ylistically raised or lowered, and its literary form can be adapted in the target language. LLMs can also b
rvene as little as possible in the AI-led idea generation, empirical testing, analysis, and reporting. This all
opportunities for commercialization. This study seeks to address these issues by proposing an AI-driven
rs can learn about the ecosystem while exploring related drawings created by children and engaging in
uman capital development, and international cooperation. High lights include the development of Türki
act vulnerabilities, designing key secret sharing schemes, and enhancing privacy. Moreover, we present
on. It moves beyond high-level ethical discussions to provide actionable strategies for implementing trus
gnificant issues for transparency, interpretability, and explainability. This paper proposes a novel approa
ublished between January 2019 and July 2023 using keywords related to AI, machine learning, natural la
archers are not only reimagining plants as sources of food, fiber, and fuel but also as 'environmental ther
ning process, complex accountability, etc. To address this issue, we have performed a systematic literatu
allenges. Observations: The FDA has authorized almost 1000 AI-enabled medical devices and has receiv
thical guidelines and regulations. Countries and regions around the world are working on refining legal f
tifying data privacy. This chapter delves into battery technology, battery capacities, energy storage, char
rmation systems should react to it. In this paper, we consider the evolving and emerging trends of AI in c
oduct ecosystem innovation (LO 2);▪ to deploy a structured methodology for adapting a data science
tilizing Hierarchical Linear Modeling and Bayesian Analysis revealed significant enhancements in busines
act on decision-making, problem-solving, and collaboration dynamics. The research leverages the Cogni
plies. The vocabulary attached to AI often aims to mimic positive human capacities such as "warmness"
echnologies in the context of education. In the commentary, it is acknowledged that GenAI's capabilitie

drawn from the U.S. Blueprint for an AI Bill of Rights and the EU AI Act, emphasizing transparency, tracea
cal trends in the construction industry. Design/methodology/approach – This research conducts a holist
WC), a continual learning algorithm. Our method integrates data collected from news feeds via the 'nev
nguage Models (LLMs) in identifying Kubernetes misconfigurations. We introduce a comprehensive taxo
complexity of heterogeneous hardware co-design, fragmentation of software ecosystems, and resource
generating new text contents. On the other hand, there is also an upsurge of dense, high-dimensional, b
rming library services and increasing user engagement. The study highlights its unique contributions to th
ing, deep learning, and large language models—as applied to key design and measurement stages: circu
remain to address, including AI-ready data, selecting fit-for-purpose AI models or tools, BEM workforce t
the-art LLMs for real-world deployments. However, the extensive memory and computational requirem

data and artificial intelligence, aiming to provide users with more intelligent and personalized services. T
ng research on AI adoption, limited studies focus on developing regions, leaving a critical gap in understa
ations, resolving for privacy, scalability, and ethics. Drawing on empirical case studies and current advanc
rther analyzes the complex relationship among these influencing factors. Successful implementation rec
n frameworks. Its strengths, such as efficiency, precision, personalization, and interactivity, streamline th
. We connect the Solid PoDs via blockchain that ensures that data remains immutable and accessible on
-time analytics. Tackling multi-objective goals - power efficiency, reliability, and dynamic reconfiguration

ɔid adoption of AI introduces critical challenges, including widening resource disparities between urban a
loitation. This paper presents a preliminary vision aimed at identifying usability challenges within datasp
ep learning algorithms targets patient-oriented drug administration by predicting therapeutic responses
ɔnstrained environments by optimizing critical operators in the llama.cpp framework using RVV instructi
s associated with large language models (LLMs), including hallucinations. Complementing these advance
ıey act as virtual team members, automating infrastructure management, optimizing workflows, and en
ovides insights into how machine learning, deep learning algorithms, and MLLM can work together to fa
ɾimarily focused on detecting compatibility issues induced by native Android APIs in Android apps falling
:o dynamic network conditions - are examined. The study also highlights the role of FLLMs in optimizing
a modular agent architecture and lifecycle tailored to adaptive learning environments. It standardizes a
ıue stream for computationally intensive AI systems. We applied a fine-tuned YOLOv8 model trained on
stinct vulnerabilities compared to traditional networks, focusing on four critical aspects: identity authen
ally significant differences in each model's sentiment distribution and geopolitical framing are identified
nts a transdiagnostic process altered across various mental health conditions that could be effectively ta
res. Based on these observations and our analysis of current practices, we identify three concrete resea
ıodern AI-driven methodologies for enhancing NIDS, focusing on transformer-based techniques, graph-b
ıditions (HC). The findings suggest that integrating simulated HC with digital health technologies offers a
o enhance the accuracy and efficiency of smart contract auditing. By integrating domain-specific knowle
n the face of evolving attack methodologies. To address these challenges, we present an approach that
s. We first pointed out that, driven largely by the rapid advancements of autonomous driving technolog
:o characterize the application of large language models in the field of chronic ocular diseases. The study
gh implementing Gen AI. Real-time intent recognition, contextual response generation, and personalize
index model and combines it with the MatLab tool to quantitatively evaluate and analyze the texts of s
l platform ecosystem. We identified four value co-creation mechanisms of embedded and stand-alone c
for an 18.79% resource saving in enterprise content management and a 34.46% reduction in informatio
educational achievements between Beijing University of Posts and Telecommunications and Queen Mar
ılls for more adaptive and efficient approaches. We propose leveraging LLMs to automate or semi-auton
puting resources, cloud and edge collaboration is increasingly being used to ensure low latency and high
tidimensional Evaluation Technology of Teachers' Digital Literacy for LLM as a Judge; research on the Ac
ıdation of modern civilization knowledge ecology and "digital transformation and knowledge productio
ɔlogies can provide actionable insights and generate new instructional materials, thereby advancing pro
ally, the integration of Large Language Models (LLMs) offers new possibilities for understanding comple
activities and yields several benefits. In fact, the ability of these conversational tools to handle and inter
s large language models to automate the OMOP conversion process for clinical trials, electronic health r
d Bias; HITgram: A Platform for Experimenting with n-Gram Language Models; Overlapping Community
:he first and foremost aspect of advanced and adaptive agriculture. Further, the device ecosystem for au
emphasizes the multifarious aspect of data protection, which goes beyond technological solutions to in
pact on global IT management. We advocate the responsible adoption of GenAI and importance of build
ectorate-General for Communications Networks, Content and Technology (DG CONNECT) under the Digi
ıd development thresholds. Secondly, through full-stack and comprehensive open-source strategies, sup
te the construction of China's AI open source innovation ecosystem and promote the continuous innova
ation technologies to reduce errors and increase process adaptability. The framework employs Large La

elligent design offers new pathways to overcome these limitations through the integration of artificial i

iseases and health conditions, fostering the development of personalized medicine. In agribusiness, Gen
how these advanced artificial intelligence (AI) tools can reshape clinical workflows, optimize administrat
plethysmography (PPG), and mechanocardiography), clinical records, laboratory biomarkers, and genet
hift, and co-evolve in practice. Leveraging a recent multi-generational model as an analytical lens, we as
eration; ChatEnv, a balanced 100-million-token instruction dataset spanning five core themes (climate ch
societal impacts. To advance WI research, we propose a large language model-based learning framework
e mapping tools such as thematic mapping, trend topic analysis, co-citation networks, and co-occurrence
pabilities in managing uncertainty, integrating multimodal inputs, and generating realistic, scalable wildf
t vulnerability detection. We introduce the EVuLLM dataset to address the scarcity of diverse evaluation
ored. This paper seeks to fill that gap by providing a comprehensive review of how LLM-driven agents su
ing rule-based and model-predictive baselines. The evidence further reveals a rapid diversification of me
n scenarios involving sensitive information, large-scale document analysis, or the need for customized ou
try and grassland industry. Therefore, it is imperative for the forest and grassland industry to deeply inte
n response to new topics. This scenario particularly challenges current LLMs, which often rely on real-tir
search pipeline-spanning query decomposition, document retrieval, and answer generation-yet typically
. We observed users achieve a high adoption rate of actions and greater success in the pursuit of goals i
n services. This approach aims to improve scalability, accessibility, and responsiveness in managing conge
ne ecosystems, communities and individuals. We first perform an empirical investigation leveraging part
a vision-language-behavior collaborative environmental sensing system; Dynamic task decomposition ar
ecycle cost management, BIM-GIS for underground utilities, energy systems and public administration, b
reserving a high-quality user experience. This paper proposes a technological framework designed to mi
dy examines whether LLMs can enhance citizen engagement in the co-creation of value for urban green
ngineering, model interpretability, legal alignment, and user empowerment. Findings highlight the pote
listically conceptualizing and formulating trust in LLMs, with a core component comprehensively explori
y analyzes how generative AI reshapes paradigms within the field and offers a roadmap for its responsib
Prompts were specifically designed to optimize model performance. The validation process compared t
on of the radiologic community is also lagging behind. Additionally, technical barriers exist regarding data
theory to examine adoption dynamics through a dual structural and perceptual lens. Empirical insights fr
oT reasoning strategy, effectively reducing information asymmetry and generating structured, trustwort
areas of convergence driven by emerging technologies in Artificial Intelligence (AI) and Extended Reality
10 and March 2025, focusing on applied cases of AI deployment in local contexts. Special attention is giv
plications. In this paper, we comprehensively review existing research that integrates RAG into educatio
lly, we design two LLM-based agents: Commentator and Vectorizer. The Commentator agent generates
ney portray bees and wasps. Butterflies, moths, flies, and mosquitoes were also included for comparisor
n English-language sources, particularly those from the UK and US, across different prompting languages
ng professional engineers, end users, and end user developers - we emphasize the importance of inclusiv
sed collective intelligence system by leveraging existing foundations and applications. In this framework
nologies that underpin the modern Web, our study contributes to advancing human-centered NLP and LI
or mental health support, enhancing emotion detection in textual interactions, and improving misinforn
ddress the challenges posed by DT in buildings are categorized and reviewed, including convolution neu
for a balanced approach that incorporates technological solutions, regulatory frameworks, and digital lit
hrough graphic visualization programming, large model assisted programming, Python program writing
he core mission of connecting humans and knowledge in a more efficient, accurate and humane way. It
across research workflows. Beyond basic task assistance, they play a pivotal role in facilitating knowledg

llocation and enhances public safety. However, the rapid development of LAIN results in a vast array of c
ibliometric analysis, this study systematically examines 488 publications from the Web of Science (WoS)
elivery and public health surveillance. Their structure and capabilities will underpin their success to supp
nd to explore the hot issues surrounding ChatGPT empowerment in higher education.The study points c
onceptual paper adapts a novel framework from postphenomenology, specifically cyborg intentionality.
-LED sidewall repair, surface random roughening, and surface photonic crystal technology, have been de
niques for resource allocation. By modeling incident interactions as a dynamic network, we apply netwo
ability with great accuracy by using pre-trained deep learning and LLM models, which facilitates direct e
e useful for translating neologisms and other playful or creative textual elements. Despite the advantag
lowed us to assess the limits of AIs in a behavioral research context and propose guidelines for behavior
framework to optimize collaboration within this ecosystem. Employing system design frameworks, arch
voice conversations with a chatbot powered by generative AI. To validate our approach, we conducted a
ye's national supercomputer, a Turkish Large Language Model, and breakthroughs in quantum sens ing
a case study to demonstrate that GAI, specifically the generative diffusion model, can be employed to o
stworthy AI in clinical contexts. Methods: A structured literature review was conducted using PubMed, S
ach to interpretability by shifting the focus to understanding the model's functionality within specific cor
anguage processing, and physician communication. Of the 247 articles screened, 13 met the inclusion cr
rmostats' capable of mitigating the impacts of a changing climate. © 2025 Elsevier B.V., All rights reserv
re review to understand the state-of-the-art foundation model-based agents and the broader ecosyster
ed hundreds of regulatory submissions for drugs that used AI in their discovery and development. Healt
frameworks for AI. While research and technology advancements are rapid, the commercialization of AI
rging infrastructure optimization, autonomous driving, educational outreach, energy management, and
order to examine its present and predict its future impacts. Many existing papers on GenAI are either too
and AI-enabled digital product ecosystem in diverse markets (LO 3); and▪ to create a digital product m
ss model development, market analysis capabilities, and strategic decision-making among LLM intervent
Sim ecosystem, a platform designed to simulate real-world software engineering challenges, such as alig
' and "care." However, these attempts to humanize AI and digital technology come with an anthropocer
s can enhance some teaching and learning practices, such as learning design, regulation of learning, auto

ability, explainability, and auditability. Existing industry practices are reviewed to identify current streng
ic literature review mainly based on bibliometrics approaches. A total of 2, 986 bibliographic records fro
vs-please' scraper and augments it using LLaMa 3, a Large Language Model based data augmentation te
nomy of common misconfiguration types, offering a structured framework to better understand and ca
allocation optimization remain significant. This paper provides an in-depth analysis of the divergence tre
billion-scale vector data from deep learning models that embed complex data, e.g., text, multimedia, gra
he field of library science, particularly in improving knowledge dissemination, enhancing user-centered s
it topology and structure synthesis, circuit optimization, layout automation, and post-silicon calibration
training, standard benchmark datasets and methods. This perspective article describes how AI is transfo
ents of large models present serious obstacles for small-medium organizations, leading to significant sc

This study comprehensively uses a variety of research methods, and strives to comprehensively and dee
anding how educators perceive and adopt these technologies. Methods: We adopted a hybrid approach
ces in multimodal and reinforcement learning, the book targets hybrid frameworks as well as future patl
quires balancing technical capabilities, pedagogical needs, and external environments while continuousl
he acquisition and utilization of educational resources, ultimately fostering improved pedagogical outco
ly to authenticated stakeholders via robust access control matrices. The core of the framework uses larg
- AI-COMPILER aims to transform how IoT and edge infrastructures are developed, deployed, and main

and rural institutions due to over-reliance on technology, risks to data privacy in educational and clinical
aces and exploring how human users can better interact with them. In particular, we investigate whethe
of individual patients, enhancing treatment response. Incorporating AI into clinical workflows allows us
ons. We first identify performance bottlenecks, such as the f16 vector dot product and layer normalizat
ments, Intent-Driven Management (IDM), standardized by 3GPP, enables translation of high-level user i
suring 24/7 global system continuity. Despite these benefits, challenges persist in trust management, et
acilitate the analysis of physiologic data for real-time monitoring and early warning systems as well as co
g short in detecting the incompatible APIs associated with TPLs due to the additional layer of abstractior
resource allocation, improving cybersecurity, and supporting real-time decision making. Future directio
gent components, lifecycle states, and orchestration mechanisms to enable plug-and-play integration o
25 custom product classes-achieving mAP@ 50 of 0.535-alongside the base YOLOv8 model's 64 produc
tication threats, cross-agent trust issues, embodied security, and privacy risks. We then review existing
using a mixed-methods approach that combines sentiment analysis with statistical evaluation (chi-squa
argeted through such interventions. We designed “Future Me,” an LLM-powered chatbot designed to fa
rch directions where the LangSec community can contribute to securing both the parsing of LLM output
based models, and hybrid approaches incorporating explainable AI. LLMs, as transformer-based models,
novel and safe approach to obesity rehabilitation. By leveraging environmental stimuli, real-time monit
edge from ERC standards and employing advanced techniques such as QLoRA for efficient fine-tuning, Sn
employs Large Language Models (LLMs) to generate synthetic Web API attack datasets. By leveraging LL
y, LiDAR hardware has demonstrated a trend towards diversification and enhanced precision. Types of r
/ reveals that large language models demonstrate comparable efficacy to experts in disease screening, d
d engagement across channels are some novel capabilities introduced by Gen AI by adopting Large Lang
even GAI policies around the world. Findings: After analyzing overall policy evaluation results, we identif
omplements that mitigate the challenges: (1) utilizing system instructions, (2) providing context data, (3
n access time through digital assistants. The solutions safeguard user data in compliance with internatio
y University of London, focusing on the coconstruction and sharing of experimental resources, as well a
nate the process of strategic mechanism design, from intent specification to final formulation. This para
ly reliable services. This article explores collaborative computing at the network edge and highlights the
ademic Rubric for Innovative Talents in Ordinary High Schools Based on Classroom Settings; explaining t
n of library resource organization building a moat for modern civilization knowledge services. The attenc
fessional development, classroom observations, student assessments, and content analysis. The chapte
x malware behaviors and patterns. We also discuss Android's security architecture, highlighting key vuln
pret textual data reflecting BP executions significantly enriches the DSS ecosystem by extending its perf
ecords, and registry data. Methods: We developed a 3-tiered semantic matching system using GPT-3 en
Detection Using Dynamic Residual Deep GCN; DeepUIR-Net: Underwater Image Restoration Using Resid
utomated and accelerated agriculture processes and practices grows consistently. The robots and drone
clude ethical, legislative and societal factors. This book explores into the complexity of data protection i
ling resilient, value-driven, globally consistent IT ecosystems able to adapt to the significant challenges a
ital Europe programme, aims to leverage its high-quality multilingual data coming from all the European
pport customizable and local deployment that benefits various industries. This technological innovation
ation and iteration of AI technology, this study analyzes the outstanding problems in China’s AI innovatic
nguage Models to extract procedural specifications from unstructured sources and convert them into st

ntelligence (AI) with traditional engineering workflows. However, the transition from theoretical concep

ıAI proves instrumental in optimizing crop breeding and improving agricultural productivity. It can gener
ive tasks, and ultimately create a more responsive, patient-centered model of care. Over the course of t
ic markers, as well as their integration with artificial intelligence (AI), including machine learning and dee
sess its alignment with real-world trajectories, identify overlooked and emerging features, and revise its
ıange, ecosystems, water resources, soil management, and renewable energy); and EnvBench, a 4998-it
k for topic analysis and trend prediction. Moving beyond single-perspective approaches, we emphasize t
e clustering. Results indicate an annual growth rate of 53.31%, with China leading in both productivity ar
ire scenarios. We adopt a new paradigm that leverages large language models (LLMs) for literature synth
ı resources and demonstrate that our fine-tuned models achieve up to 94.78% accuracy, surpassing the
ıpport advanced reasoning strategies, adaptive learning, and collaborative annotation efforts. We analyz
ethods: graph-neural-network models now capture spatial interdependencies in dense sensor grids, fede
utput. This underscores the need for a tool that combines the power of LLMs with enhanced privacy, fle
egrate artificial intelligence (AI) technologies represented by industry large models with forestry and gra
ne Retrieval-Augmented Generation (RAG) techniques to overcome their static knowledge limitations. C
/ receives only coarse-grained feedback on the final answer. This introduces a feedback loop disconnect,
n the first week, as well as the rapidly evolving user needs over time. We discuss how to best leverage c
estion, enhancing road safety, and reducing emissions. We discuss how GenAI-powered MASs can perso
icipatory design to explore the values that motivate students and educators to engage with the chatbots
ıd structured planning are then enabled via world models and task symbolization techniques, ensuring t
oased on a combination of literature precedent and domain relevance. Unlike existing reviews focused c
itigate the inherent risks associated with the deployment of artificial intelligence (AI) in decision-making
ıing. Using a survey experiment designed to prompt participation in urban greening initiatives, this study
ntial of LLMs to improve annotation workflows and expand audit scale, while underscoring the continue
ing trust by tying its two sides, namely the trustor and the trustee, as well as their intricate relationships

he performance of three base models (GLM-4-0520, ERNIE-4.0-8K, and Moonshot-v1-8k) alongside five
a availability, large language model explainability, deep learning model generalization, and clinical integr
rom sectoral and regional contexts are also incorporated. Ten critical challenges are identified and analy
hy recommendations. These results underscore the potential of AI to foster more inclusive and transpa
(XR).This study aims to investigate the convergence of DTs and the Metaverse in digital architecture, ex
en to the role of AI in monitoring water, forest, and agricultural ecosystems, facilitating the digital trans
nal scenarios. We first clarify the definition and workflow of RAG, and following the indexing mechanism
comments for the source code, while the Vectorizer agent converts contents into vector representation
ı to evaluate broader societal perceptions. Our results show that bees and butterflies are indeed depicte
. Such reliance raises concerns about the homogenization of information and the marginalization of regi
/ity, human-aligned workflows, and the seamless integration of AI-augmented socio-technical systems. A
, agents collaboratively enhance their intelligence by acquiring complementary knowledge and making f
LM auditing. Through a detailed exploration of bias causes and evaluation methods, our goal is to promo
nation detection through active learning. The selected papers illustrate cutting-edge advancements in th
ıral networks (CNN), recurrent neural networks (RNNs), and generative adversarial networks (GANs), am
eracy to safeguard democratic processes and promote informed public participation. The rise of genera
and debugging, etc., mastering the Python language and gaining intuitive understanding of engineering p
will also enable library science to more accurately integrate the essence of the six major disciplines and
e fusion, accelerating breakthroughs in frontier areas, and reshaping traditional research models. This st

distributed aircraft and ground equipment that generate large volumes of heterogeneous data in various
Core Collection (2000–2024), yielding three pivotal findings: firstly, China dominates the research lands
ort data-driven decision-making. Conclusion: Transforming HIEs into HDUs is essential to realizing the vis
out that current research in higher education in the era of artificial intelligence mainly focuses on introdu
This framework is used to analyze what kinds of human–AI resource relations enable resource integrati
eveloped. For beam shaping, there are Micro-LED beam modulation designs based on structures like mic
rk-based AI techniques to optimize resource distribution and minimize systemic congestion. A three-mo
xtraction of vulnerability features from the dataset and therefore helps speed up the identification proc
es of AI-based translation processes, some AI critics want literary translation to remain the sole preserv
al researchers wanting to utilize AI. We found that the AIs were adept at some parts of the process and
nitectural evaluation matrices, and expert surveys, the study evaluates the proposed system's effectiver
a preliminary evaluation of the prototype during the European Researchers' Night 2024 where we gathe
and post-quantum cryptography. TÜBİTAK also mobilizes young talent through TEKNOFEST and Deneyap
ptimize blockchain network performance metrics. Experimental results clearly show that, compared to a
scopus, and Web of Science. Studies were selected based on relevance to AI ethics, governance, and poli
ntexts through interaction techniques. Rather than dissecting the LLM itself, we explore how contextual
iteria given their in-depth analysis of AI in healthcare communication, methodological soundness, and r

n. In this paper, we present a pattern catalogue consisting of 18 architectural patterns with analyses of t
h AI regulation needs to be coordinated across all regulated industries, the US government, and with int
encounters persistent barriers. Despite significant progress, ethical debates concerning AIś interaction v
predictive maintenance. In particular, LLMs address EV challenges by optimizing routes, speeds, and beh
o technical for most information systems researchers or lack the depth needed to appreciate the potent
anagement and go-to-market roadmap for tapping new markets (LO 4). Case overview/synopsis: Stones
ion participants. Mediation analysis identified increased motivation and self-efficacy as key mechanisms
gning technical capabilities with business objectives, managing interdependencies, and maintaining proje
ntric gaze and blind spots that bracket out the environmental impacts and footprints of AI and privilege h
omated content, feedback, and assessment. Nevertheless, we also highlight its limitations, potential disr

ths and limitations. This paper then introduces an approach that treats data as verifiable digital assets ar
m the Web of Science core collection database were collected and the tool of CitespaceV, Statistical An
chnique. This framework can help in solving numerous problems and as a case study we use it to provide
tegorize these issues. Additionally, we conduct an empirical evaluation of state-of-the-art detection too
ends of cloud and edge computing within the heterogeneous hardware ecosystem. Additionally, it explo
aphs, and tables into vector representations aiming to preserve semantic similarity. Since LLMs operate
services, and addressing emerging challenges in digital information management. These findings not onl
and fault diagnosis. By mapping these intelligent techniques to each phase of the analog and RFIC devel
rming BEM workflows and the larger ecosystem focusing on four major AI themes of data, models, comp
alability concerns. This paper offers a comprehensive review of recent techniques to improve LLM efficie

ply analyze the innovative ecological construction path of intelligent library enabled by AI large model. It
, combining Partial Least Squares Structural Equation Modelling (PLS-SEM) and Artificial Neural Network
hs in ethical AI, green algorithms, and additional personalization. © 2025 Elsevier B.V., All rights reserve
optimizing the model to ensure its safety and compliance, thereby facilitating widespread adoption of
mes. Nonetheless, several challenges remain, such as integrating interdisciplinary knowledge, addressin
ge language models (LLMs) in the CT design process. The LLM enhances the system by interpreting heter
tained. We examine critical issues such as generalization to new hardware, human-AI collaborative tuni

data management, and potential erosion of humanistic care in training environments. These challenges
er Large Language Models (LLMs) can bridge the gap between raw, machine-oriented datasets and intuit
to synthesize vast datasets in real-time, provide clinicians with action items, and advocate for evidence
ion, through runtime profiling. These operators are then redesigned with RVV's SIMD capabilities, includ
ntents into actionable, automated network decisions, enhancing flexibility, efficiency, and resilience. Thi
hical accountability, and legacy system integration. As AI agents take on complex roles, concerns over sa
mplex decision support mechanisms. In addition, the emergence of clinical decision support systems (CI
they introduce as well as the obfuscation used by the TPL developers.In this paper, we propose LibCT t
ns include integration with Digital Twin frameworks, Explainable AI (XAI), and blockchain technologies fo
f multiple AI-driven agents in an adaptive instructional system. Together, P3394 and P3428 promote mo
t classes, enabling detection of products across 89 consumer categories. We integrated BLIP3 for image
and emerging defense mechanisms and highlight persistent challenges. Finally, we identify open researc
re tests and analysis of variance, ANOVA) on responses to 300 standardized prompts. The findings indica
cilitate future-oriented thinking and promote goal pursuit using evidence-based interventions including
s and the safe deployment of LLM-powered tools. This work should be read as a call-to-action for the La
are effective in analyzing complex network data for better anomaly detection and threat prediction. Gra
oring through wearable devices, and intelligent evaluation using large language models (LLMs), this met
martLLM achieves superior performance compared to static analysis tools like Mythril and Slither and zer
Ms, researchers can access abundant, customizable, and domain-specific synthetic data that closely sim
ear-ground LiDAR platforms have been particularly enriched, enabling efficient and high-resolution data
diagnostic decision-making, personalized precision treatment recommendation, and accessibility of healt
uage Models (LLMs). Organizations can reduce Average Handling Time (AHT), improve First Contact Reso
fied one perfect, three excellent, and three good policy types. The study revealed good policy consistenc
) curating user inputs, and (4) revising AI model outputs. Depending on the complement type, complem
nal ISO 27001 and GDPR standards. The proliferation of high-tech products has increased the number of
s innovation-driven entrepreneurship education. It introduces a digital-intelligence-powered educationa
digm shift introduces both semi-automated and fully-automated design pipelines, raising crucial questio
critical role of artificial intelligence (AI) agents in enabling cross-domain collaboration. We present an A
o a Computer: Enhancing Student Assessment with Programming and Simulating Execution; research on
ding experts responded to the key issues of library resource construction and knowledge organization in
r concludes with future research directions, advocating for the integration of AI/ML methodologies with
erabilities and attack surfaces. Through this study, we suggest a forward-thinking approach to enhancin
ormances with a valuable layer that improves decision-making tasks. In this work, the potential of NLP t
nbeddings to transform heterogeneous clinical data to the OMOP Common Data Model. The system pro
ual-UNet with Optimized Efficient Channel Attention Network Integration; deepfake Image Detection Us
space advancements are fascinating, as they are set to transform the industry. Connected robots, drone
n the age of AI and ML. It investigates how massive volumes of personal and sensitive data are utilized t

Union (EU) institutions to contribute to the European ecosystem of LLMs through continued pre-trainir
and open-source practice from DeepSeek deserves in-depth discussion and learning. This study summar
on ecosystem and the deficiencies of relevant policies, and puts forward suggestions to accelerate the co
ructured instructions. By integrating these instructions with Extended Reality technologies to assist hum

ts to manufacturing practice encounters three critical technical bottlenecks: the sparsity and heterogen

ate new crop varieties with desired traits by analyzing vast datasets comprising genomic and ecological
:his book, you will discover new opportunities-learn how LLMs can reduce manual documentation burde
ep learning, graph and transformer networks for interpreting multi-dimensional data streams and creati
; structure accordingly. In doing so, we theorize PDE evolution as a multi-generational process shaped by
:em benchmark assessing analysis, reasoning, calculation, and description tasks. Applying this pipeline, w
:he Connected Intelligence Ecosystem defined by the HIGH5 scheme comprising one goal, two twins, thr
ıd impact, followed by Vietnam and the United Kingdom. The most prolific affiliations and authors, prim
hesis, classification, and knowledge extraction, conducting a systematic review of recent studies applyin
performance of larger proprietary models, while significantly reducing computational requirements. Mc
ze agent architectures, integration patterns within workflows, and evaluation methods, along with real-v
erated-learning pilots address data-privacy constraints, and early integrations of large language models h
xibility, and usability. To address these challenges, we present EvidenceBot, a local, Retrieval-Augmente
ssland business operations to achieve innovative empowerment. This study aims to explore effective pa
Our findings suggest that the rapid pace of generative AI adoption, combined with increasing user reliand
, where user feedback for the final output cannot be effectively mapped back to specific system compor
ontext-awareness for AI agent design, and the novel roles that AI could adopt for an ecosystem of servic
nalize route guidance, support traffic operators and planners with strategic insights, and improve public
s. Then, we conceptualize the values that emerge from the empirical investigation by grounding them in
he generalizable decision-making abilities of agents; A virtual-to-real migration technology chain is subs
ɔn single technologies or sectors, this work offers a cross-sectoral synthesis, highlighting shared challeng
and task execution within the management processes. The Agreement Validation Interface (AVI) functic
found that the demo of LLM significantly increases citizens' participation at initial stage and their engag
ed importance of human oversight, iterative testing, and cross-disciplinary collaboration. This study offer
. We uncover these relationships within the proposed bowtie model and beyond to its sociotechnical ec

prompts. The cultural ecosystem services within the study area were subsequently analyzed based on n
ation. Advances in few-shot learning, self-supervised models, and centralized platforms may support co
zed across the TOE dimensions, ranging from data access and skill shortages to cultural resistance, infra
rent DAO governance. Future work will explore deploying lightweight AI models and extending this appr
amining how emerging technologies—such as AI, XR, and Large Language Models (LLMs)—are blurring t
formation of businesses and territories, assessing ecosystem services, managing energy systems, and su
ı of RAG, we introduce different types of retrievers and generation optimization methods. As the main f
ıs. Subsequently, we develop a multimodal learning architecture comprising the semantic branch and th
ed positively by the LLM chatbots and moths somewhat positively, while wasps, flies, and mosquitoes ar
onal perspectives. The study underscores the critical role and dilemma of news media, which, while serv
As software systems evolve to become more intelligent and human-centric, software engineering practic
ine-grained adaptations, enabling them to manage complex tasks across diverse web environments. The
ote fairness and inclusion for more than 300 million Bengali speakers in the evolving ecosystem of the W
ese areas, demonstrating how LLMs can be fine-tuned for therapeutic dialogue generation, assessed fo
ong other cutting edge transformative technologies. Furthermore, the integration of reinforcement lear
tive AI tools has significantly amplified the risks of disinformation, such as deepfakes, and algorithmic bi
project development, and enabling them to have preliminary research and development capabilities for
transform the traditional three-subject relationship of readers, librarians and systems into a new collab
tudy aims to clarify the core techniques and applications of agents in scientific research, highlighting the

s formats. The absence of a unified representation standard significantly hinders the efficient utilization
scape, with a 38.5% contribution share, where Artificial Intelligence (AI), the Internet of Things (IoT), and
sion of a distributed and connected healthcare data system. Public funding is critical for this model's suc
ucing ChatGPT, the characteristics and connotations of large language models, and discussing the oppor
ion and value cocreation in service ecosystems. Findings: We conceptualize seven different human–AI re
crolenses, metasurfaces, and resonant cavities. Due to these technologies, Micro-LEDs can be effectively
onth pilot study demonstrated significant improvements in efficiency, with a 33% reduction in response t
cess. In addition, the design of the platform ensures that the models are accessible and can be easily app
e of humans. They speak of the impending destruction of the literary industry, a sensitive ecosystem, or
wholly inadequate at others. Our overall recommendation is that behavioral researchers use AIs judicio
ness, demonstrating a high level of suitability (Mean = 4.73, SD = 0.30). The findings underscore the trans
red positive feedback through user tests and questionnaires, proving the potential of combining childre
o Ateliers while strengthen ing bilateral scientific ties. The establishment of the National Quan tum Instit
a baseline traditional AI approach, the proposed generative diffusion model approach can converge faste
icy in healthcare, prioritizing peer-reviewed articles, policy analyses, case studies, and ethical guidelines
information and interaction techniques can elucidate the model's thought processes. To this end, we int
elevance to clinical outcomes. The review provides insights into interprofessional communication dynan

the context, forces, and trade-offs as the outcomes from the previous literature review. We propose a d
ernational organizations. Regulators will need to advance flexible mechanisms to keep up with the pace
with human society are still heated, and AI applications also grapple with unresolved issues in pertinent
naviors, reducing energy usage and emissions. They facilitate the smart integration of EVs and renewable
ial impacts of GenAI. We, therefore, attempt to bridge the technical and organizational communities of
S2Milestones (S2M), a pioneering Indian EdTech company founded in 2009, is preparing to script a first-c
s driving these improvements. Qualitative insights from semi-structured interviews highlighted participa
ect agility. Through iterative simulations, cognitive agents demonstrate advanced capabilities in task del
humans and technology over nonhuman animals and planetary ecological limits. In medicine, the enviro
ruptions, ethical consequences, and potential misuses. The identified avenues for further research inclu

nd a Data Container architecture to encapsulate both content and governance metadata. This design en
alysis Toolkit for Informatics 3.2 and Python 3.9.0 were adopted for this research. Findings – This resear
e a robust solution for addressing the challenges posed by misinformation propagation in the digital age
ls to benchmark their effectiveness. Furthermore, we analyze the Kubernetes objects most prone to mis
res the root causes and impacts of the complexity of heterogeneous hardware co-design, the fragmenta
on vector data at various stages consisting of pre-training, fine-tuning, inference, and retrieval-augment
y enrich the theoretical framework of smart libraries, but also provide practical insights into the design a
lopment pipeline, we identify emerging trends, persistent challenges such as generalization and data eff
puting, and applications, highlighting the associated opportunities, challenges, and future trends. © 202
ency through four categories: parameter-centric, architecture-centric, training-centric and data-centric.

t is mainly reflected in the following aspects: First, multi-perspective integration, breaking through the li
cs (ANN) to uncover both linear and nonlinear dynamics influencing behavioral intention (BI) of 260 Nige

generative large models in specific educational contexts. It should be acknowledged that there are still r
g generative hallucinations, and navigating ethical considerations in data usage. Future advancements a
rogeneous data streams, providing real-time natural language summaries, and supporting decision-maki
ng, and semantic coherence across multiple DSLs, arguing that AI-COMPILER can usher in more agile, res

s are further compounded by concerns over academic integrity—evidenced by student use of large langu

-based medicine. However, problems including data privacy, model interpretability, and the need for lar
ling half-precision floating-point support via the "zvfh" extension, to maximize parallel computation. Exp
is paper presents a comprehensive end-to-end (E2E) Explainability Orchestration framework integrated
afety, security, transparency, bias, and decision-making accountability become critical for many organiza
DSS) driven by AI and MLLM provides comprehensive recommendations. Looking ahead, the potential co
hat leverages a pre-trained Large Language Model (LLM), GPT-4, for detecting incompatible APIs in Andr

odular, interoperable, and scalable design of intelligent agent ecosystems. We highlight how P3394's uni
captioning, achieving an average CLIPScore of 0.2852, and utilized advanced LLMs for product link retrie
ch directions to advance the development of resilient and privacy-preserving IoA ecosystems. © 2025 Els
ate model provenance substantially shapes the tone and stance of outputs, with each LLM reflecting dist
visualization, implementation intentions, and values clarification. Objective: This study aims to understa
ngSec community to tackle outstanding, and growing, security problems catalyzed by AI. © 2025 Elsevie
aph-based models, including Knowledge Graphs (KGs) and Graph Neural Networks (GNNs), are well-suite
thod enables more scientific weight loss, prevents rebound weight gain, and fosters proactive healthy lif
ro-shot LLM prompting (e.g., ChatGPT-3.5 and GPT-4). Experimental results demonstrate a perfect recall
ulate contemporary traffic patterns. This eliminates privacy and security concerns associated with real-v
a acquisition at unprecedented spatial and temporal scales. Meanwhile, due to the progress of artificial i
thcare resources by integrating multimodal clinical data. However, the application of the technology still
olution (FCR), and enhance Customer Satisfaction (CSAT) scores by integrating Gen AI into core workflow
cy but issues like unclear industry service types in legislation, limited credible application functions, and
entors employ these mechanisms, leverage synergies between mechanisms, and unlock previously not
f AI-based solutions by 48.27%, and patented solutions have boosted the success rate of technological p
l platform aimed at fostering internationally-minded, innovative, and outstanding talents. The platform'
ns about faithfulness to intents, incentive compatibility, algorithmic stability, and the balance between
I-native task orchestration framework that allows us to improve the ecosystem and develop efficient ec
Intelligent Traffic Surveillance Video Compression Quality Assessment Method; evaluating the Perform
the new information environment from different perspectives. On the one hand as a social device for ci
educational domain knowledge to foster an adaptive, inclusive, and equitable educational ecosystem. (
g Android malware detection using machine learning models, envisioning the future of security in the Ar
echniques to build a generative pre-trained transformer (GPT)-based chatbot is exploited. The develope
cesses input terms by generating vector embeddings, computing cosine similarity against precomputed
sing Light-Weight Attention Integrated MobileNetV3 Model; AI-Driven Monitoring System for Detecting
es, and other agriculture equipment, appliances, instruments, and machinery are flourishing towards int
o train and develop AI models, demanding novel privacy-preserving strategies such as anonymization, d

ng of open-source models. This paper presents these ongoing efforts on the supercomputers provided b
izes DeepSeek's innovative model from three perspectives, namely, compensating hardware with softw
onstruction of China's AI open source innovation ecosystem from four dimensions: top-level design, infra
an operators, SAMBA aims to minimize errors and adapt processes to complex, dynamic production env

eity of design data constrain the development of domain-specific large models, hallucination phe

ve fine-tune an 8-billion-parameter model, EnvGPT, which achieves 92.06 ± 1.85 % accuracy on th
ee fundamentals, four functions, and five services that are realized through WI 3.0. This vision serves

int at natural-language analytics and control interfaces for heterogeneous IoT devices. Yet la

nents, making it difficult to improve each intermediate stage and sustain the feedback loop. To

research in ethical AI design, human values, human-AI interactions and environmental education.

nodel outputs. The findings indicated superior performance by the Moonshot-v1-8k model, achieving

e graph branch, which collectively integrate features from the source code, generated comment

ces must adapt to this new reality. This article provides a comprehensive examination of this
e tutorial provides an in-depth review of recent advancements and potential directions in federated i

r their emotional intelligence, and optimized for misinformation detection with minimal labeled dat

esource relations, namely background, embodiment, hermeneutic, alterity, cyborg, immersion

times and a 25.7% increase in resource utilization. Additionally, customer satisfaction improved by

sformative potential of large language models in enhancing collaborative supply chain process

ute and the successful launch of the indigenous satellite TÜRKSAT 6A are key milestones. This in

nts' improved ability to identify market opportunities and develop innovative solutions to business chall
egation, inter-agent communication, and project lifecycle management. By employing natur
nmental impacts of large language models range from water consumption and carbon emission

, offering a promising tool for news verification and trustworthiness assessment in online information
sconfiguration and evaluate the severity of the identified issues. By leveraging advanced mac
ation of the software ecosystem, and highlights the fundamental challenges and latest progress in resou

silient IoT ecosystems through flexible, context-aware code generation and adaptation. © 2025 E

perimental results on a RISC-V-based BananaPi BPI-F3 platform demonstrate substantial impro

ations. This study examines these complexities from a global IT perspective. We review the rec
onvergence of digital people, meta-universes and world models with wearable biosensors present

versal message protocols and P3428's standardized agent lifecycle complement each other in suppor
eval. While our implementation of LLaMA3 achieved up to 0.97 accuracy in matching products to thei

nd how users engage with Future Me, evaluate its effectiveness in supporting future-oriented thin

ed for relational data modeling and multistage attack identification. Hybrid frameworks combine

world datasets and ensures a continuously adaptable data source for training and refining ML

employable mechanisms. We contribute to research by revealing two novel logics—the reap logic and th
rojects by 40.12%. National AI products have expanded their domestic market share by 30%, r
's core philosophy, development strategy, functional modules, and technical framework are deta

ance of Complex Text Generated by Large Language Models; a Benchmark Dataset and Evaluation of Co
ivilization inheritance and cultural dissemination libraries need to continuously optimize the comp

Observational Health Data Sciences and Informatics vocabulary embeddings, and ranking potential mat
People Using Mobile Phones in Restricted Zone; integrated Analysis of Voice Patterns and Semantic Fea

y the European High Performance Computing Joint Undertaking (EuroHPC JU), with a focus on
are, acquiring users through open source, and ecosystem priority. Meanwhile, it analyzes the cu
astructure construction, cultivation of multiple participants, and improvement of open sour
vironments. The framework proposes the enhancement of Manufacturing Execution Systems by incorpo

ɔrating Artifici