

ARTIFICIAL INTELLIGENCE TECHNOLOGY

ARTIFICIAL INTELLIGENCE TECHNOLOGY HAS RAPIDLY EVOLVED OVER THE PAST DECADE, BECOMING A CORNERSTONE IN MODERN INNOVATION AND INDUSTRY TRANSFORMATION. THIS TECHNOLOGY ENCOMPASSES MACHINE LEARNING, NATURAL LANGUAGE PROCESSING, ROBOTICS, AND COMPUTER VISION, ALL AIMED AT ENABLING MACHINES TO PERFORM TASKS THAT TYPICALLY REQUIRE HUMAN INTELLIGENCE. AS BUSINESSES AND GOVERNMENTS INCREASINGLY ADOPT AI, ITS IMPACT SPANS HEALTHCARE, FINANCE, MANUFACTURING, AND MORE. UNDERSTANDING THE FUNDAMENTALS, APPLICATIONS, CHALLENGES, AND FUTURE TRENDS OF ARTIFICIAL INTELLIGENCE TECHNOLOGY IS ESSENTIAL FOR LEVERAGING ITS FULL POTENTIAL. THIS ARTICLE PROVIDES A COMPREHENSIVE OVERVIEW OF ARTIFICIAL INTELLIGENCE TECHNOLOGY, EXPLORING ITS CORE COMPONENTS, PRACTICAL USES, ETHICAL CONSIDERATIONS, AND EMERGING ADVANCEMENTS. THE FOLLOWING SECTIONS OUTLINE THE KEY AREAS COVERED IN THIS IN-DEPTH EXAMINATION.

- UNDERSTANDING ARTIFICIAL INTELLIGENCE TECHNOLOGY
- CORE COMPONENTS OF ARTIFICIAL INTELLIGENCE
- APPLICATIONS OF ARTIFICIAL INTELLIGENCE TECHNOLOGY
- CHALLENGES AND ETHICAL CONSIDERATIONS
- FUTURE TRENDS IN ARTIFICIAL INTELLIGENCE TECHNOLOGY

UNDERSTANDING ARTIFICIAL INTELLIGENCE TECHNOLOGY

ARTIFICIAL INTELLIGENCE TECHNOLOGY REFERS TO THE DEVELOPMENT OF COMPUTER SYSTEMS CAPABLE OF PERFORMING TASKS THAT NORMALLY REQUIRE HUMAN COGNITION. THESE TASKS INCLUDE REASONING, LEARNING, PROBLEM-SOLVING, PERCEPTION, AND LANGUAGE UNDERSTANDING. AI SYSTEMS UTILIZE ALGORITHMS AND VAST DATA SETS TO SIMULATE INTELLIGENT BEHAVIOR, ENABLING AUTOMATION AND DECISION-MAKING PROCESSES. THE EVOLUTION OF AI IS DRIVEN BY ADVANCEMENTS IN COMPUTING POWER, DATA AVAILABILITY, AND SOPHISTICATED ALGORITHMS, MAKING IT A VITAL TECHNOLOGY ACROSS MULTIPLE SECTORS.

DEFINITION AND SCOPE

ARTIFICIAL INTELLIGENCE TECHNOLOGY BROADLY COVERS SYSTEMS DESIGNED TO MIMIC HUMAN INTELLIGENCE. THIS INCLUDES NARROW AI, WHICH IS SPECIALIZED IN SPECIFIC TASKS, AND GENERAL AI, WHICH AIMS TO PERFORM ANY INTELLECTUAL TASK A HUMAN CAN. CURRENT AI APPLICATIONS PREDOMINANTLY FALL UNDER NARROW AI, SUCH AS VOICE ASSISTANTS, RECOMMENDATION SYSTEMS, AND AUTONOMOUS VEHICLES. THE SCOPE OF AI IS CONTINUALLY EXPANDING AS RESEARCH DEEPENS AND NEW METHODOLOGIES EMERGE.

HISTORICAL DEVELOPMENT

THE HISTORY OF ARTIFICIAL INTELLIGENCE TECHNOLOGY DATES BACK TO THE MID-20TH CENTURY, WITH INITIAL THEORETICAL CONCEPTS INTRODUCED BY PIONEERS LIKE ALAN TURING. EARLY AI FOCUSED ON SYMBOLIC REASONING AND RULE-BASED SYSTEMS BUT FACED LIMITATIONS DUE TO COMPUTATIONAL CONSTRAINTS. THE RESURGENCE OF AI IN RECENT YEARS IS LARGELY ATTRIBUTED TO BREAKTHROUGHS IN MACHINE LEARNING, ESPECIALLY DEEP LEARNING, WHICH HAVE ENABLED MORE COMPLEX AND ACCURATE MODELS.

CORE COMPONENTS OF ARTIFICIAL INTELLIGENCE

ARTIFICIAL INTELLIGENCE TECHNOLOGY RELIES ON SEVERAL FUNDAMENTAL COMPONENTS THAT WORK TOGETHER TO ENABLE INTELLIGENT BEHAVIOR. THESE ELEMENTS INCLUDE MACHINE LEARNING ALGORITHMS, NATURAL LANGUAGE PROCESSING, COMPUTER VISION, AND ROBOTICS. EACH COMPONENT CONTRIBUTES UNIQUELY TO THE FIELD, ALLOWING AI SYSTEMS TO ANALYZE DATA, INTERPRET INFORMATION, AND INTERACT WITH THE ENVIRONMENT EFFECTIVELY.

MACHINE LEARNING

MACHINE LEARNING IS A SUBSET OF ARTIFICIAL INTELLIGENCE TECHNOLOGY THAT ENABLES COMPUTERS TO LEARN FROM DATA WITHOUT EXPLICIT PROGRAMMING. IT INVOLVES TRAINING ALGORITHMS ON LARGE DATASETS TO IDENTIFY PATTERNS AND MAKE PREDICTIONS OR DECISIONS. KEY MACHINE LEARNING APPROACHES INCLUDE SUPERVISED LEARNING, UNSUPERVISED LEARNING, AND REINFORCEMENT LEARNING, EACH SUITED FOR DIFFERENT TYPES OF PROBLEMS.

NATURAL LANGUAGE PROCESSING

NATURAL LANGUAGE PROCESSING (NLP) ENABLES AI SYSTEMS TO UNDERSTAND, INTERPRET, AND GENERATE HUMAN LANGUAGE. NLP TECHNOLOGIES POWER APPLICATIONS SUCH AS CHATBOTS, LANGUAGE TRANSLATION, SENTIMENT ANALYSIS, AND VOICE RECOGNITION. ADVANCES IN NLP HAVE IMPROVED HUMAN-COMPUTER INTERACTION BY MAKING COMMUNICATION MORE NATURAL AND INTUITIVE.

COMPUTER VISION

COMPUTER VISION IS A FIELD OF ARTIFICIAL INTELLIGENCE TECHNOLOGY FOCUSED ON ENABLING MACHINES TO INTERPRET AND ANALYZE VISUAL DATA FROM THE WORLD. THIS INCLUDES IMAGE AND VIDEO RECOGNITION, OBJECT DETECTION, AND FACIAL RECOGNITION. COMPUTER VISION APPLICATIONS ARE CRITICAL IN AREAS LIKE SURVEILLANCE, AUTONOMOUS VEHICLES, AND MEDICAL IMAGING.

ROBOTICS

ROBOTICS INTEGRATES ARTIFICIAL INTELLIGENCE TECHNOLOGY TO CREATE MACHINES CAPABLE OF PERFORMING PHYSICAL TASKS AUTONOMOUSLY OR SEMI-AUTONOMOUSLY. AI-POWERED ROBOTS ARE USED IN MANUFACTURING, LOGISTICS, HEALTHCARE, AND EXPLORATION, ENHANCING EFFICIENCY AND PRECISION. ROBOTICS COMBINES HARDWARE AND INTELLIGENT SOFTWARE TO INTERACT DYNAMICALLY WITH THEIR SURROUNDINGS.

APPLICATIONS OF ARTIFICIAL INTELLIGENCE TECHNOLOGY

THE PRACTICAL APPLICATIONS OF ARTIFICIAL INTELLIGENCE TECHNOLOGY SPAN NUMEROUS INDUSTRIES, DRIVING INNOVATION AND OPERATIONAL IMPROVEMENTS. AI SYSTEMS OPTIMIZE PROCESSES, ENHANCE CUSTOMER EXPERIENCES, AND ENABLE NEW CAPABILITIES THAT WERE PREVIOUSLY UNATTAINABLE. THE FOLLOWING OUTLINES SOME OF THE MOST INFLUENTIAL APPLICATIONS ACROSS DIFFERENT SECTORS.

HEALTHCARE

ARTIFICIAL INTELLIGENCE TECHNOLOGY IN HEALTHCARE IMPROVES DIAGNOSTICS, TREATMENT PLANNING, AND PATIENT CARE. MACHINE LEARNING MODELS ANALYZE MEDICAL IMAGES, PREDICT DISEASE PROGRESSION, AND PERSONALIZE THERAPIES. AI ALSO SUPPORTS DRUG DISCOVERY AND ADMINISTRATIVE AUTOMATION, REDUCING COSTS AND IMPROVING OUTCOMES.

FINANCE

IN FINANCE, AI ENABLES FRAUD DETECTION, ALGORITHMIC TRADING, CREDIT SCORING, AND RISK MANAGEMENT. FINANCIAL INSTITUTIONS DEPLOY AI-DRIVEN CHATBOTS FOR CUSTOMER SERVICE AND USE PREDICTIVE ANALYTICS TO FORECAST MARKET TRENDS. THIS TECHNOLOGY ENHANCES SECURITY AND DECISION-MAKING EFFICIENCY.

MANUFACTURING

MANUFACTURING BENEFITS FROM ARTIFICIAL INTELLIGENCE TECHNOLOGY THROUGH PREDICTIVE MAINTENANCE, QUALITY CONTROL, AND SUPPLY CHAIN OPTIMIZATION. AI-POWERED ROBOTS AUTOMATE ASSEMBLY LINES, WHILE DATA ANALYTICS IMPROVE PRODUCTION PLANNING AND RESOURCE ALLOCATION.

RETAIL AND E-COMMERCE

AI TRANSFORMS RETAIL BY PERSONALIZING SHOPPING EXPERIENCES, MANAGING INVENTORY, AND OPTIMIZING PRICING STRATEGIES. RECOMMENDATION ENGINES POWERED BY MACHINE LEARNING INCREASE CUSTOMER ENGAGEMENT AND SALES. CHATBOTS AND VIRTUAL ASSISTANTS PROVIDE REAL-TIME SUPPORT, ENHANCING CUSTOMER SATISFACTION.

TRANSPORTATION

ARTIFICIAL INTELLIGENCE TECHNOLOGY DRIVES ADVANCEMENTS IN AUTONOMOUS VEHICLES, TRAFFIC MANAGEMENT, AND ROUTE OPTIMIZATION. AI SYSTEMS ANALYZE SENSOR DATA TO NAVIGATE COMPLEX ENVIRONMENTS, IMPROVING SAFETY AND EFFICIENCY IN TRANSPORTATION NETWORKS.

CHALLENGES AND ETHICAL CONSIDERATIONS

DESPITE THE NUMEROUS BENEFITS OF ARTIFICIAL INTELLIGENCE TECHNOLOGY, SEVERAL CHALLENGES AND ETHICAL CONCERNS MUST BE ADDRESSED. THESE INCLUDE DATA PRIVACY, ALGORITHMIC BIAS, JOB DISPLACEMENT, AND TRANSPARENCY. RESPONSIBLE AI DEVELOPMENT REQUIRES CAREFUL MANAGEMENT OF THESE ISSUES TO ENSURE FAIR AND BENEFICIAL OUTCOMES.

DATA PRIVACY AND SECURITY

AI SYSTEMS OFTEN REQUIRE EXTENSIVE DATA, RAISING CONCERNS ABOUT USER PRIVACY AND DATA PROTECTION. ENSURING SECURE DATA HANDLING AND COMPLIANCE WITH REGULATIONS IS CRITICAL TO MAINTAINING TRUST AND SAFEGUARDING SENSITIVE INFORMATION.

ALGORITHMIC BIAS

BIAS IN AI ALGORITHMS CAN LEAD TO UNFAIR OR DISCRIMINATORY OUTCOMES, PARTICULARLY WHEN TRAINING DATA REFLECTS EXISTING SOCIETAL PREJUDICES. ADDRESSING BIAS INVOLVES IMPROVING DATA QUALITY, TRANSPARENCY, AND INCLUSIVITY IN AI DEVELOPMENT PROCESSES.

EMPLOYMENT IMPACT

THE AUTOMATION CAPABILITIES OF ARTIFICIAL INTELLIGENCE TECHNOLOGY CAN DISRUPT LABOR MARKETS BY REPLACING CERTAIN JOBS. WHILE AI CREATES NEW OPPORTUNITIES, WORKFORCE RESKILLING AND SOCIAL POLICIES ARE NECESSARY TO MITIGATE NEGATIVE EFFECTS.

TRANSPARENCY AND ACCOUNTABILITY

AI decision-making processes are often complex and opaque, making it difficult to understand how conclusions are reached. Promoting explainable AI and accountability is essential for ethical deployment and user confidence.

FUTURE TRENDS IN ARTIFICIAL INTELLIGENCE TECHNOLOGY

The future of artificial intelligence technology promises continued innovation and expansion into new domains. Emerging trends include enhanced AI-human collaboration, advances in explainable AI, and integration with other technologies such as blockchain and quantum computing.

AI AND HUMAN COLLABORATION

Future AI systems will increasingly augment human capabilities rather than replace them. Collaborative AI aims to support decision-making, creativity, and complex problem-solving across various fields.

EXPLAINABLE AI

Explainable AI focuses on making AI models more transparent and understandable. This trend addresses ethical concerns by enabling users to interpret and trust AI decisions.

INTEGRATION WITH EMERGING TECHNOLOGIES

Artificial intelligence technology is converging with other cutting-edge technologies. For example, combining AI with blockchain enhances data security and integrity, while quantum computing promises to exponentially increase AI processing power.

AI IN EDGE COMPUTING

Edge AI involves deploying artificial intelligence technology on local devices rather than centralized servers. This approach reduces latency, enhances privacy, and supports real-time applications in areas like autonomous vehicles and IoT devices.

- INCREASED PERSONALIZATION AND CONTEXT-AWARENESS
- ENHANCED NATURAL LANGUAGE UNDERSTANDING AND GENERATION
- GREATER EMPHASIS ON SUSTAINABILITY AND ENERGY EFFICIENCY

FREQUENTLY ASKED QUESTIONS

WHAT IS ARTIFICIAL INTELLIGENCE TECHNOLOGY?

Artificial intelligence technology refers to the development of computer systems that can perform tasks

TYPICALLY REQUIRING HUMAN INTELLIGENCE, SUCH AS LEARNING, REASONING, PROBLEM-SOLVING, AND UNDERSTANDING NATURAL LANGUAGE.

How is Artificial Intelligence Used in Healthcare?

AI IS USED IN HEALTHCARE FOR DIAGNOSTICS, PERSONALIZED TREATMENT PLANS, DRUG DISCOVERY, MEDICAL IMAGING ANALYSIS, AND PREDICTING PATIENT OUTCOMES, IMPROVING ACCURACY AND EFFICIENCY IN MEDICAL SERVICES.

What are the Ethical Concerns Surrounding Artificial Intelligence?

ETHICAL CONCERNS INCLUDE DATA PRIVACY, ALGORITHMIC BIAS, JOB DISPLACEMENT, ACCOUNTABILITY FOR AI DECISIONS, AND ENSURING AI SYSTEMS ARE TRANSPARENT AND DO NOT PERPETUATE DISCRIMINATION.

How does Machine Learning relate to Artificial Intelligence?

MACHINE LEARNING IS A SUBSET OF ARTIFICIAL INTELLIGENCE THAT INVOLVES TRAINING ALGORITHMS ON DATA SO THEY CAN LEARN PATTERNS AND MAKE DECISIONS OR PREDICTIONS WITHOUT BEING EXPLICITLY PROGRAMMED FOR SPECIFIC TASKS.

What Industries are being transformed by Artificial Intelligence Technology?

INDUSTRIES SUCH AS FINANCE, HEALTHCARE, AUTOMOTIVE, RETAIL, MANUFACTURING, AND CUSTOMER SERVICE ARE BEING TRANSFORMED BY AI THROUGH AUTOMATION, PREDICTIVE ANALYTICS, AND ENHANCED DECISION-MAKING.

What is the difference between Narrow AI and General AI?

NARROW AI IS DESIGNED TO PERFORM SPECIFIC TASKS, LIKE VOICE RECOGNITION OR RECOMMENDATION SYSTEMS, WHILE GENERAL AI AIMS TO PERFORM ANY INTELLECTUAL TASK A HUMAN CAN DO, WHICH REMAINS LARGELY THEORETICAL AT THIS STAGE.

How does Artificial Intelligence impact Job Markets?

AI CAN AUTOMATE REPETITIVE TASKS, LEADING TO JOB DISPLACEMENT IN SOME SECTORS, BUT ALSO CREATES NEW OPPORTUNITIES IN AI DEVELOPMENT, MAINTENANCE, AND ROLES REQUIRING HUMAN-AI COLLABORATION.

What Role does Natural Language Processing play in AI Technology?

NATURAL LANGUAGE PROCESSING (NLP) ENABLES AI SYSTEMS TO UNDERSTAND, INTERPRET, AND GENERATE HUMAN LANGUAGE, FACILITATING APPLICATIONS LIKE CHATBOTS, VIRTUAL ASSISTANTS, AND LANGUAGE TRANSLATION.

What Advancements are driving the current growth of Artificial Intelligence Technology?

ADVANCEMENTS IN COMPUTING POWER, BIG DATA AVAILABILITY, IMPROVED ALGORITHMS, AND CLOUD INFRASTRUCTURE ARE DRIVING THE RAPID GROWTH AND ADOPTION OF AI TECHNOLOGIES ACROSS VARIOUS FIELDS.

Additional Resources

1. *Artificial Intelligence: A Modern Approach*

THIS COMPREHENSIVE TEXTBOOK BY STUART RUSSELL AND PETER NORVIG IS WIDELY REGARDED AS THE DEFINITIVE GUIDE TO AI. IT COVERS A BROAD SPECTRUM OF TOPICS INCLUDING MACHINE LEARNING, REASONING, ROBOTICS, AND NATURAL LANGUAGE PROCESSING. IDEAL FOR BOTH STUDENTS AND PRACTITIONERS, THE BOOK COMBINES THEORETICAL FOUNDATIONS WITH PRACTICAL APPLICATIONS.

2. *Deep Learning*

AUTHORED BY IAN GOODFELLOW, YOSHUA BENGIO, AND AARON COURVILLE, THIS BOOK OFFERS AN IN-DEPTH EXPLORATION OF DEEP LEARNING TECHNIQUES. IT COVERS THE MATHEMATICAL AND CONCEPTUAL BACKGROUND NECESSARY TO UNDERSTAND NEURAL NETWORKS AND THEIR ARCHITECTURES. THE TEXT IS SUITABLE FOR RESEARCHERS AND ENGINEERS AIMING TO PUSH THE BOUNDARIES OF AI.

3. *SUPERINTELLIGENCE: PATHS, DANGERS, STRATEGIES*

NICK BOSTROM EXAMINES THE POTENTIAL FUTURE IMPACTS OF ARTIFICIAL INTELLIGENCE SURPASSING HUMAN INTELLIGENCE. THE BOOK DISCUSSES EXISTENTIAL RISKS AND ETHICAL CONSIDERATIONS SURROUNDING THE CREATION OF SUPERINTELLIGENT MACHINES. IT IS A THOUGHT-PROVOKING READ FOR ANYONE INTERESTED IN THE LONG-TERM IMPLICATIONS OF AI.

4. *MACHINE LEARNING YEARNING*

WRITTEN BY ANDREW NG, THIS BOOK FOCUSES ON HOW TO STRUCTURE MACHINE LEARNING PROJECTS EFFECTIVELY. IT PROVIDES PRACTICAL ADVICE ON IMPROVING AI SYSTEM PERFORMANCE AND TROUBLESHOOTING COMMON ISSUES. THE CONTENT IS ACCESSIBLE TO BOTH BEGINNERS AND EXPERIENCED AI PRACTITIONERS.

5. *HUMAN COMPATIBLE: ARTIFICIAL INTELLIGENCE AND THE PROBLEM OF CONTROL*

STUART RUSSELL EXPLORES THE CHALLENGES OF ALIGNING AI SYSTEMS WITH HUMAN VALUES AND ENSURING THEIR SAFE DEPLOYMENT. THE BOOK DISCUSSES THE IMPORTANCE OF BUILDING AI THAT COLLABORATES WITH HUMANS RATHER THAN REPLACES THEM. IT OFFERS A BALANCED PERSPECTIVE ON THE FUTURE OF AI GOVERNANCE AND ETHICS.

6. *LIFE 3.0: BEING HUMAN IN THE AGE OF ARTIFICIAL INTELLIGENCE*

MAX TEGMARK DELVES INTO THE FUTURE SCENARIOS THAT AI DEVELOPMENT MIGHT BRING ABOUT. COVERING TOPICS FROM JOB AUTOMATION TO AI ETHICS, THE BOOK ENCOURAGES READERS TO THINK CRITICALLY ABOUT SHAPING AI'S ROLE IN SOCIETY. IT BLENDS SCIENTIFIC INSIGHT WITH PHILOSOPHICAL QUESTIONS ABOUT CONSCIOUSNESS AND IDENTITY.

7. *PATTERN RECOGNITION AND MACHINE LEARNING*

CHRISTOPHER BISHOP'S BOOK IS A FOUNDATIONAL TEXT FOR UNDERSTANDING STATISTICAL TECHNIQUES IN MACHINE LEARNING. IT COVERS TOPICS SUCH AS BAYESIAN NETWORKS, CLUSTERING, AND KERNEL METHODS. SUITABLE FOR GRADUATE STUDENTS AND RESEARCHERS, THE BOOK EMPHASIZES MATHEMATICAL RIGOR AND PRACTICAL ALGORITHMS.

8. *THE MASTER ALGORITHM: HOW THE QUEST FOR THE ULTIMATE LEARNING MACHINE WILL REMAKE OUR WORLD*

PEDRO DOMINGOS PRESENTS A UNIFYING THEORY OF MACHINE LEARNING, PROPOSING THE EXISTENCE OF A "MASTER ALGORITHM" THAT CAN LEARN ANYTHING. THE BOOK EXPLAINS DIFFERENT MACHINE LEARNING PARADIGMS AND THEIR POTENTIAL IMPACT ON VARIOUS INDUSTRIES. IT IS WRITTEN FOR A BROAD AUDIENCE INTERESTED IN THE FUTURE OF AI.

9. *AI SUPERPOWERS: CHINA, SILICON VALLEY, AND THE NEW WORLD ORDER*

KAI-FU LEE PROVIDES AN INSIDER'S PERSPECTIVE ON THE GLOBAL AI RACE, FOCUSING ON CHINA AND THE UNITED STATES. THE BOOK DISCUSSES TECHNOLOGICAL ADVANCEMENTS, ECONOMIC IMPLICATIONS, AND THE SOCIETAL TRANSFORMATIONS DRIVEN BY AI. IT ALSO ADDRESSES THE CHALLENGES OF JOB DISPLACEMENT AND INNOVATION COMPETITION.

[Artificial Intelligence Technology](#)

Find other PDF articles:

<http://www.speargroupllc.com/anatomy-suggest-005/pdf?trackid=hZw25-5752&title=dogfish-shark-anatomy-diagram.pdf>

artificial intelligence technology: Artificial Intelligence Christian Farsley, 2020-04-10 In this comprehensive guide, you'll learn the basics about: - The applications we have in AI. - How AI can be a threat and an opportunity. - The historical context of AI. - The effects AI can have on the future. - How AI is applied in marketing. - What big data and neural networks are. - Generation Z and the uses of AI. And a lot more. Don't wait and give yourself this knowledge by getting the book.

artificial intelligence technology: Artificial Intelligence Technology Huawei Technologies Co., Ltd., 2022-10-21 This open access book aims to give our readers a basic outline of today's research and technology developments on artificial intelligence (AI), help them to have a general understanding of this trend, and familiarize them with the current research hotspots, as well as part of the fundamental and common theories and methodologies that are widely accepted in AI research and application. This book is written in comprehensible and plain language, featuring clearly explained theories and concepts and extensive analysis and examples. Some of the traditional findings are skipped in narration on the premise of a relatively comprehensive introduction to the evolution of artificial intelligence technology. The book provides a detailed elaboration of the basic concepts of AI, machine learning, as well as other relevant topics, including deep learning, deep learning framework, Huawei MindSpore AI development framework, Huawei Atlas computing platform, Huawei AI open platform for smart terminals, and Huawei CLOUD Enterprise Intelligence application platform. As the world's leading provider of ICT (information and communication technology) infrastructure and smart terminals, Huawei's products range from digital data communication, cyber security, wireless technology, data storage, cloud computing, and smart computing to artificial intelligence.

artificial intelligence technology: *Artificial Intelligence Technology in Healthcare* Neha Sharma, Durgesh Srivastava, Deepak Sinwar, 2024-09-05 *Artificial Intelligence Technology in Healthcare: Security and Privacy Issues* focuses on current issues with patients' privacy and data security including data breaches in healthcare organizations, unauthorized access to patients' information, and medical identity theft. It explains recent breakthroughs and problems in deep learning security and privacy issues, emphasizing current state-of-the-art methods, methodologies, implementation, attacks, and countermeasures. It examines the issues related to developing artificial intelligence (AI)-based security mechanisms which can gather or share data across several healthcare applications securely and privately. Features: Combines multiple technologies (i.e., Internet of Things [IoT], Federated Computing, and AI) for managing and securing smart healthcare systems. Includes state-of-the-art machine learning, deep learning techniques for predictive analysis, and fog and edge computing-based real-time health monitoring. Covers how to diagnose critical diseases from medical imaging using advanced deep learning-based approaches. Focuses on latest research on privacy, security, and threat detection on COVID-19 through IoT. Illustrates initiatives for research in smart computing for advanced healthcare management systems. This book is aimed at researchers and graduate students in bioengineering, artificial intelligence, and computer engineering.

artificial intelligence technology: Applications of Block Chain technology and Artificial Intelligence Mohammad Irfan, Khan Muhammad, Nader Naifar, Muhammad Attique Khan, 2024-05-27 Today, emerging technologies offer a new pathway for advancing the economy in the fields of banking, finance, and capital markets. Blockchain applications play a crucial role in ensuring trust and security within these industries by relying on transparency and visibility through peer-to-peer networks. The banking industry has also witnessed increased operations speed, better transparency, efficiency enhancement, fraud extenuation at less cost while sharing real-time data between various parties. Thus, the adoption of blockchain in the Banking and Insurance industry is developing very fast. It has emerged as the commonly accepted default platform for the banking and insurance industry. This book explores how blockchain technology optimizes and integrates transactions and operations, facilitating easier access to information. This, in turn, has the potential to reduce communication costs and minimize minor data transfer errors. Additionally, the book delves into the current applications of blockchain technology in the financial industry, discusses its limitations, and outlines its future prospects for broader accessibility. This book is aimed at students and researchers in financial engineering and fintech and it can serve as a reference for identifying problem areas and their possible solutions.

artificial intelligence technology: *Handbook of Research on Artificial Intelligence and Knowledge Management in Asia's Digital Economy* Ordóñez de Pablos, Patricia, Zhang, Xi,

Almunawar, Mohammad Nabil, 2022-11-11 Artificial intelligence (AI) and knowledge management can create innovative digital solutions and business opportunities in Asia from circular and green economies to technological disruption, innovation, and smart cities. It is essential to understand the impact and importance of AI and knowledge management within the digital economy for future development and for fostering the best practices within 21st century businesses. The Handbook of Research on Artificial Intelligence and Knowledge Management in Asia's Digital Economy offers conceptual frameworks, empirical studies, and case studies that help to understand the latest developments in artificial intelligence and knowledge management, as well as its potential for digital transformation and business opportunities in Asia. Covering topics such as augmented reality, Convolutional neural networks, and digital transformation, this major reference work generates enriching debate on the challenges and opportunities for economic growth and inclusion in the region among business executives and leaders, IT managers, policymakers, government officials, students and educators of higher education, researchers, and academicians.

artificial intelligence technology: Achieving Sustainable Business through AI, Technology Education and Computer Science Allam Hamdan, 2024-11-08 This book aims to explore the intersection of AI, technology education, and computer science with sustainable business practices. It delves into the application of cutting-edge technologies such as artificial intelligence, machine learning, and blockchain in various business domains, including healthcare, education, government services, and digital transformation.

artificial intelligence technology: *Advances in Artificial Intelligence, Big Data and Algorithms* Gheorghe Grigoras, Pascal Lorenz, 2023-12-15 Computers and automation have revolutionized the lives of most people in the last two decades, and terminology such as algorithms, big data and artificial intelligence have become part of our everyday discourse. This book presents the proceedings of CAIBDA 2023, the 3rd International Conference on Artificial Intelligence, Big Data and Algorithms, held from 16 - 18 June 2023 as a hybrid conference in Zhengzhou, China. The conference provided a platform for some 200 participants to discuss the theoretical and computational aspects of research in artificial intelligence, big data and algorithms, reviewing the present status and future perspectives of the field. A total of 362 submissions were received for the conference, of which 148 were accepted following a thorough double-blind peer review. Topics covered at the conference included artificial intelligence tools and applications; intelligent estimation and classification; representation formats for multimedia big data; high-performance computing; and mathematical and computer modeling, among others. The book provides a comprehensive overview of this fascinating field, exploring future scenarios and highlighting areas where new ideas have emerged over recent years. It will be of interest to all those whose work involves artificial intelligence, big data and algorithms.

artificial intelligence technology: The 2021 International Conference on Machine Learning and Big Data Analytics for IoT Security and Privacy John Macintyre, Jinghua Zhao, Xiaomeng Ma, 2021-10-27 This book presents the proceedings of the 2020 2nd International Conference on Machine Learning and Big Data Analytics for IoT Security and Privacy (SPIoT-2021), online conference, on 30 October 2021. It provides comprehensive coverage of the latest advances and trends in information technology, science and engineering, addressing a number of broad themes, including novel machine learning and big data analytics methods for IoT security, data mining and statistical modelling for the secure IoT and machine learning-based security detecting protocols, which inspire the development of IoT security and privacy technologies. The contributions cover a wide range of topics: analytics and machine learning applications to IoT security; data-based metrics and risk assessment approaches for IoT; data confidentiality and privacy in IoT; and authentication and access control for data usage in IoT. Outlining promising future research directions, the book is a valuable resource for students, researchers and professionals and provides a useful reference guide for newcomers to the IoT security and privacy field.

artificial intelligence technology: Artificial Intelligence, Medical Engineering and Education Z.B. Hu, Qingying Zhang, Matthew He, Felix Yanovsky, 2024-02-15 Artificial Intelligence

(AI) is a rapidly developing field of computer science which now plays an increasingly important role in many disciplines. A catalyst for significant change, research into AI is of particular importance in fields such as medicine and education, and as such has become an area to watch for many people worldwide. This book presents the proceedings of AIMEE 2023, the 7th International Conference on Artificial Intelligence, Medical Engineering and Education, held on 9 and 10 November 2023 in Guangzhou, China. The conference brought together top international researchers from around the world to exchange research results and address open issues in AI, medical engineering and education. A total of 238 submissions were received for AIMEE 2023, of which 89 papers were selected for presentation and publication after a rigorous international peer review process. The book is divided into 3 sections, covering artificial intelligence and scientific methodology; systems engineering and analysis: concepts, methods, and applications; and education reform and innovation. Presenting papers which explore and discuss many novel concepts and methodologies contributing to the rapid evolution of artificial intelligence and its applications, the book will be of interest to all those working in the relevant fields.

artificial intelligence technology: From Machine Learning to Artificial Intelligence
Abdalmuttaleb M. A. Musleh Al-Sartawi, Manaf Al-Okaily, Anas Ali Al-Qudah, Fadi Shihadeh, 2025-02-01 The world is on a cusp of something great. Technology has advanced from solving simple issues to complex issues in both human life and other aspects such as social, economic, and environmental issues. The significance of machine intelligence as a tool to propel human as well as economic development is an important and hot topic today. This book is about how modern machine intelligence, AI, and machine learning applications can be used by governments and firms for financial and economic inclusion, as well as for providing solutions to bridge the digital divide. It aims to cover philosophical discussions, frameworks, and applications on central topics in machine intelligence, deep learning, mesh networks, frugal engineering, frugal innovation, blockchain technology, alternate networks, and intelligent digital financial inclusion system architectures. This book also aims to discuss the initiatives, policies, strategies, and governance issues related to furnishing technologies for technology access, financial inclusion and in turn economic growth. Financial inclusion is defined as the proportion of people and corporations that use financial services. It further describes the fair, equal, and attainable access to financial services (Rawat et al., 2023). Financial inclusion is key to economic inclusion and economic growth as it enables the poor to improve their lives. Chapters in the book will improve our understanding of the advances and challenges of applying machine intelligence for financial inclusion and economic growth in different contexts including financial markets, governments, and corporations in both developing and developed countries. Access to financial services is essential to development efforts of markets, economies and eventually societies. Hence, in this context, financial inclusion can be explained as the process of ensuring that individuals particular impoverished people have access to essential financial services in the formal financial sector. Financial inclusion, recently, has been receiving traction from scholars and policymakers whereby it is one of the major strategies used by economies and societies in achieving UN's sustainable development goals. Rawat et al. (2023) argues that it is vital to increase the use of "low-cost digital methods" for the economically marginalized and under-served people and sectors. There is a need for financial inclusion for the rapidly dynamic Industry 4.0. Therefore, linking technology, more particularly machine intelligence with financial inclusion and technology access is quite crucial given the current technological environment. Additionally, financial inclusion helps in enhancing the level of economic and social inclusion in many societies and developing countries as well as help in reducing poverty levels. Policy makers in several countries continue to commit significant resources and technologies to increase the level of financial inclusion in their countries to reduce financial exclusion. In developing countries, financial inclusion remains below potential in part due to the digital divide, limited technology access and the challenge for financial institutions in developing products for the low-income mass market (Hook IV, 2019; Marimuthu et al., 2022). These matters are important topics to be researched and discussed, especially with the advancement of technology such as artificial intelligence, machine learning,

blockchain, business intelligence, online education, in the current post-pandemic environment which catalysed these digital transformations. Therefore, this book has been proposed to discuss a very important and emerging topics which contributes significantly to policy and the SDGs in the digital economy.

artificial intelligence technology: The 2020 International Conference on Machine Learning and Big Data Analytics for IoT Security and Privacy John MacIntyre, Jinghua Zhao, Xiaomeng Ma, 2020-11-04 This book presents the proceedings of The 2020 International Conference on Machine Learning and Big Data Analytics for IoT Security and Privacy (SPIoT-2020), held in Shanghai, China, on November 6, 2020. Due to the COVID-19 outbreak problem, SPIoT-2020 conference was held online by Tencent Meeting. It provides comprehensive coverage of the latest advances and trends in information technology, science and engineering, addressing a number of broad themes, including novel machine learning and big data analytics methods for IoT security, data mining and statistical modelling for the secure IoT and machine learning-based security detecting protocols, which inspire the development of IoT security and privacy technologies. The contributions cover a wide range of topics: analytics and machine learning applications to IoT security; data-based metrics and risk assessment approaches for IoT; data confidentiality and privacy in IoT; and authentication and access control for data usage in IoT. Outlining promising future research directions, the book is a valuable resource for students, researchers and professionals and provides a useful reference guide for newcomers to the IoT security and privacy field.

artificial intelligence technology: Artificial Intelligence (AI) S. Kanimozhi Suguna, M Dhiyva, Sara Paiva, 2021 This book aims to bring together leading academic scientists, researchers, and research scholars to exchange and share their experiences and research results on all aspects of Artificial Intelligence. The book provides a premier interdisciplinary platform to present practical challenges and adopted solutions. The book addresses the complete functional framework workflow in Artificial Intelligence technology. It explores the basic and high-level concepts and can serve as a manual for the industry for beginners and the more advanced. It covers intelligent and automated systems and its implications to the real-world, and offers data acquisition and case studies related to data-intensive technologies in AI-based applications. The book will be of interest to researchers, professionals, scientists, professors, students of computer science engineering, electronics and communications, as well as information technology.

artificial intelligence technology: Proceedings of the 7th China Aeronautical Science and Technology Conference Chinese Soc. of Aeronautics&Astronautics, 2025-03-17 This book contains the selected papers from the 7th China Aeronautical Science and Technology Conference. Topics include, but are not limited to: key technologies for aircraft (including fixed-wing, rotorcraft, new concept aircraft, etc.) design and overall optimization; aerodynamics; flight mechanics; structural design; advanced aviation materials (including composite materials); advanced aviation manufacturing; and design and overall optimisation; aerodynamics and flight mechanics; structural design; advanced aeronautical materials (including composite materials); advanced aeronautical manufacturing technology; advanced aeronautical propulsion technology; navigation, guidance and control technology; airborne systems, electromechanical technology; environmental control, life-saving technology; key technologies for multi-electric aircraft and all-electric aircraft; aviation testing technology; critical technologies in the vicinity of space vehicles; unmanned aerial vehicles and related technologies; general aviation flight safety, civil aviation transportation and air quality; aviation science and technology and industrial development policy and planning; other related technologies. Make this book a valuable resource for researchers, engineers and students.

artificial intelligence technology: Emerging Technology-Based Services and Systems in Libraries, Educational Institutions, and Non-Profit Organizations Chiu, Dickson K. W., Ho, Kevin K. W., 2023-08-10 The global economy and organizations are evolving to become service-oriented and driven by technology, and this is not just limited to commercial work. Further study on this evolution is required to fully understand the phenomenon. Emerging Technology-Based

Services and Systems in Libraries, Educational Institutions, and Non-Profit Organizations covers IT-enabled creation, curation, representation, communication, storage, retrieval, analysis, and use of records, documents, files, data, learning objects, and other contents. It also acts as a forum for interdisciplinary and emerging topics such as socio-information studies, educational technologies, knowledge management, big data, artificial intelligence, personal information protection, digital literacy, other media, and technology innovation topics in their applications to libraries, as well as other areas such as education, information, government, and NGOs. Due to this, it is ideal for industry professionals, librarians, administrators, policymakers, higher education faculty, researchers, academicians, scholars, practitioners, instructors, and students.

artificial intelligence technology: *Proceedings of the 2nd International Conference on Internet, Education and Information Technology (IEIT 2022)* Ahmed El-Hashash, Fonny Dameaty Hutagalung, Ahmed Said Ghonim, Kun Zhang, 2023-02-10 This is an open access book. As a leading role in the global megatrend of scientific innovation, China has been creating a more and more open environment for scientific innovation, increasing the depth and breadth of academic cooperation, and building a community of innovation that benefits all. These endeavors have made new contribution to globalization and creating a community of shared future. To adapt to this changing world and China's fast development in this new area, the 2nd International Conference on Internet, Education and Information Technology (IEIT 2022) is to be held in April 15-17, 2022. This conference takes "bringing together global wisdom in scientific innovation to promote high-quality development as the theme and focuses on research fields including information technology, education, big data, and Internet. This conference aims to expand channels of international academic exchange in science and technology, build a sharing platform of academic resources, promote scientific innovation on the global scale, improve academic cooperation between China and the outside world. It also aims to encourage exchange of information on research frontiers in different fields, connect the most advanced academic resources in China and abroad, turn research results into industrial solutions, bring together talents, technologies and capital to boost development.aaaa

artificial intelligence technology: *AI-generated Content* Feng Zhao, Duoqian Miao, 2023-11-01 This book constitutes the revised selected papers of the First International Conference, AIGC 2023, held in Shanghai, China, during August 25-26, 2023 The 30 full papers included in this volume were carefully reviewed and selected from 62 submissions. The volume focuses on the remarkable strides that have been made in the realm of artificial intelligence and its transformative impact on content creation. As delving into the content of the proceedings, the readers will encounter cutting-edge research findings, innovative applications, and thought-provoking insights that underscore the transformative potential of AI-generated content.

artificial intelligence technology: *Proceedings of the 2022 International Conference on Educational Innovation and Multimedia Technology (EIMT 2022)* Chew Fong Peng, Lixin Sun, Yongjun Feng, Siti Hajar Halili, 2023-02-10 This is an open access book. As a leading role in the global megatrend of scientific innovation, China has been creating a more and more open environment for scientific innovation, increasing the depth and breadth of academic cooperation, and building a community of innovation that benefits all. These endeavors have made new contribution to globalization and creating a community of shared future. 2022 International Conference on Educational Innovation and Multimedia Technology (EIMT 2022) was held on March 25-27, 2022 in Hangzhou, China (Due to the epidemic, the meeting was moved to online). The aim of the conference is to bring together innovative academics and industrial experts in the field of Educational Innovation and Multimedia Technology to a common forum. The primary goal of the conference is to promote research and developmental activities in the related field.

artificial intelligence technology: *ICICA 2022* Johan Debayle , Guangwei Bai, Shuangming Yang, 2023-03-27 The 2022 2nd International Conference on Information, Control and Automation (ICICA 2022) was held on December 2nd-4th, 2022 in Chongqing, China (virtual event). Invited and contributed papers present the state-of-the-art research in information, control and automation. This

workshop always welcomes a fruitful mix of experienced researchers and students, to allow a better understanding of related fields. The 2022 session of the information, control and automation was doubtlessly a great success. The program covered a wide variety of topics, namely Numerical Analysis, Information Theory, Genetic Algorithm, Distributed Control System, Industrial Control, Motors and Appliances, etc. The conference agenda was divided into two parts, including Keynote Speeches and Oral Presentations. ICICA 2022 is to bring together innovative academics and industrial experts in the field of Information, Control and Automation to a common forum. The primary goal of the conference is to promote research and developmental activities in Information, Control and Automation and another goal is to promote scientific information interchange between researchers, developers, engineers, students, and practitioners working all around the world. The conference will be held every year to make it an ideal platform for people to share views and experiences in Information, Control and Automation and related areas. Everyone interested in these fields were welcomed to join the online conference and to give comments and raise questions to the speeches and presentations.

artificial intelligence technology: Control, Mechatronics and Automation Technology

Dawei Zheng, 2015-12-30 This proceedings volume contains selected papers presented at the 2014 International Conference on Control, Mechatronics and Automation Technology (ICCMAT 2014), held July 24-25, 2014 in Beijing, China. The objective of ICCMAT 2014 is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over th

artificial intelligence technology: Impact of ICTs on Event Management and Marketing

Birdir, Kemal, Birdir, Sevda, Dalgic, Ali, Toksoz, Derya, 2020-12-04 Conferences, symposiums, and other large events that take place at far away hotels require many hours of preparation to plan and need a capable event staff to market. Without the innovative technologies that have changed the face of the tourism industry, many destinations would be unequipped to handle such a task. Impact of ICTs on Event Management and Marketing is a collection of innovative research on the methods and applications of information and communications technologies on almost all facets of hospitality and tourism-related businesses including hotels, restaurants, and other tourism areas. While highlighting topics including digital marketing, artificial intelligence, and event tourism, this book is ideally designed for business managers, event planners, and marketing professionals.

Related to artificial intelligence technology

Artificial intelligence (AI) | Definition, Examples, Types 3 days ago What is artificial intelligence? Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual

Artificial Intelligence (AI): At a Glance | Britannica Artificial intelligence (AI) is a computer's ability to do tasks commonly associated with human intelligence. The term is applied to the project of developing systems endowed with

Artificial Intelligence | Pros, Cons, Debate, Arguments, Computer Artificial intelligence (AI) is the use of "computers and machines to mimic the problem-solving and decision-making capabilities of the human mind," according to IBM. [1]

History of artificial intelligence | Dates, Advances, Alan Turing This article covers the history of artificial intelligence from its beginnings with the work of Alan Turing to advancements at the turn of the 21st century

Artificial intelligence - Machine Learning, Robotics, Algorithms Artificial intelligence - Machine Learning, Robotics, Algorithms: AI research follows two distinct, and to some extent competing, methods, the symbolic (or "top-down") approach,

Artificial intelligence - Reasoning, Algorithms, Automation 4 days ago Many diverse problems have been solved by artificial intelligence programs. Some examples are finding the winning move (or sequence of moves) in a board game, devising

How Is AI Regulated? Examples, Benefits, & Drawbacks - Britannica Whether you're excited about artificial intelligence (AI), frightened by it, or a little bit of both—you may be wondering how

AI is regulated, and whether regulators are keeping up with the rapid

Rise, Technologies, Impact, & Global Response - Britannica Money The incident underscored both the security challenges facing AI platforms and the increasingly adversarial nature of the global race to dominate AI development

Machine learning | Data Science, Algorithms & Automation Machine learning, in artificial intelligence (a subject within computer science), discipline concerned with the implementation of computer software that can learn autonomously

ChatGPT, Sam Altman, Microsoft, & History - Britannica Money OpenAI was founded in December 2015 as a nonprofit organization dedicated to researching and advancing AI technology. Founded by a consortium of technologists and entrepreneurs, its key

Artificial intelligence (AI) | Definition, Examples, Types 3 days ago What is artificial intelligence? Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual

Artificial Intelligence (AI): At a Glance | Britannica Artificial intelligence (AI) is a computer's ability to do tasks commonly associated with human intelligence. The term is applied to the project of developing systems endowed

Artificial Intelligence | Pros, Cons, Debate, Arguments, Computer Artificial intelligence (AI) is the use of "computers and machines to mimic the problem-solving and decision-making capabilities of the human mind," according to IBM. [1]

History of artificial intelligence | Dates, Advances, Alan Turing This article covers the history of artificial intelligence from its beginnings with the work of Alan Turing to advancements at the turn of the 21st century

Artificial intelligence - Machine Learning, Robotics, Algorithms Artificial intelligence - Machine Learning, Robotics, Algorithms: AI research follows two distinct, and to some extent competing, methods, the symbolic (or "top-down") approach,

Artificial intelligence - Reasoning, Algorithms, Automation | Britannica 4 days ago Many diverse problems have been solved by artificial intelligence programs. Some examples are finding the winning move (or sequence of moves) in a board game, devising

How Is AI Regulated? Examples, Benefits, & Drawbacks - Britannica Whether you're excited about artificial intelligence (AI), frightened by it, or a little bit of both—you may be wondering how AI is regulated, and whether regulators are keeping up with the rapid

Rise, Technologies, Impact, & Global Response - Britannica Money The incident underscored both the security challenges facing AI platforms and the increasingly adversarial nature of the global race to dominate AI development

Machine learning | Data Science, Algorithms & Automation Machine learning, in artificial intelligence (a subject within computer science), discipline concerned with the implementation of computer software that can learn autonomously

ChatGPT, Sam Altman, Microsoft, & History - Britannica Money OpenAI was founded in December 2015 as a nonprofit organization dedicated to researching and advancing AI technology. Founded by a consortium of technologists and entrepreneurs, its key

Artificial intelligence (AI) | Definition, Examples, Types 3 days ago What is artificial intelligence? Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual

Artificial Intelligence (AI): At a Glance | Britannica Artificial intelligence (AI) is a computer's ability to do tasks commonly associated with human intelligence. The term is applied to the project of developing systems endowed

Artificial Intelligence | Pros, Cons, Debate, Arguments, Computer Artificial intelligence (AI) is the use of "computers and machines to mimic the problem-solving and decision-making capabilities of the human mind," according to IBM. [1]

History of artificial intelligence | Dates, Advances, Alan Turing This article covers the history of artificial intelligence from its beginnings with the work of Alan Turing to advancements at the

turn of the 21st century

Artificial intelligence - Machine Learning, Robotics, Algorithms Artificial intelligence - Machine Learning, Robotics, Algorithms: AI research follows two distinct, and to some extent competing, methods, the symbolic (or “top-down”) approach,

Artificial intelligence - Reasoning, Algorithms, Automation | Britannica 4 days ago Many diverse problems have been solved by artificial intelligence programs. Some examples are finding the winning move (or sequence of moves) in a board game, devising

How Is AI Regulated? Examples, Benefits, & Drawbacks - Britannica Whether you’re excited about artificial intelligence (AI), frightened by it, or a little bit of both—you may be wondering how AI is regulated, and whether regulators are keeping up with the rapid

Rise, Technologies, Impact, & Global Response - Britannica Money The incident underscored both the security challenges facing AI platforms and the increasingly adversarial nature of the global race to dominate AI development

Machine learning | Data Science, Algorithms & Automation Machine learning, in artificial intelligence (a subject within computer science), discipline concerned with the implementation of computer software that can learn autonomously

ChatGPT, Sam Altman, Microsoft, & History - Britannica Money OpenAI was founded in December 2015 as a nonprofit organization dedicated to researching and advancing AI technology. Founded by a consortium of technologists and entrepreneurs, its key

Artificial intelligence (AI) | Definition, Examples, Types 3 days ago What is artificial intelligence? Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual

Artificial Intelligence (AI): At a Glance | Britannica Artificial intelligence (AI) is a computer’s ability to do tasks commonly associated with human intelligence. The term is applied to the project of developing systems endowed with

Artificial Intelligence | Pros, Cons, Debate, Arguments, Computer Artificial intelligence (AI) is the use of “computers and machines to mimic the problem-solving and decision-making capabilities of the human mind,” according to IBM. [1]

History of artificial intelligence | Dates, Advances, Alan Turing This article covers the history of artificial intelligence from its beginnings with the work of Alan Turing to advancements at the turn of the 21st century

Artificial intelligence - Machine Learning, Robotics, Algorithms Artificial intelligence - Machine Learning, Robotics, Algorithms: AI research follows two distinct, and to some extent competing, methods, the symbolic (or “top-down”) approach,

Artificial intelligence - Reasoning, Algorithms, Automation 4 days ago Many diverse problems have been solved by artificial intelligence programs. Some examples are finding the winning move (or sequence of moves) in a board game, devising

How Is AI Regulated? Examples, Benefits, & Drawbacks - Britannica Whether you’re excited about artificial intelligence (AI), frightened by it, or a little bit of both—you may be wondering how AI is regulated, and whether regulators are keeping up with the rapid

Rise, Technologies, Impact, & Global Response - Britannica Money The incident underscored both the security challenges facing AI platforms and the increasingly adversarial nature of the global race to dominate AI development

Machine learning | Data Science, Algorithms & Automation Machine learning, in artificial intelligence (a subject within computer science), discipline concerned with the implementation of computer software that can learn autonomously

ChatGPT, Sam Altman, Microsoft, & History - Britannica Money OpenAI was founded in December 2015 as a nonprofit organization dedicated to researching and advancing AI technology. Founded by a consortium of technologists and entrepreneurs, its key

Related to artificial intelligence technology

TECH360 conference will explore artificial intelligence (The Mercury on MSN2h) The implications and capabilities of artificial intelligence will be the focus of the 2025 TECH360 business technology conference on Wednesday, Oct. 15. The conference is being hosted by the

TECH360 conference will explore artificial intelligence (The Mercury on MSN2h) The implications and capabilities of artificial intelligence will be the focus of the 2025 TECH360 business technology conference on Wednesday, Oct. 15. The conference is being hosted by the

Sam Altman predicts AI will surpass human intelligence by 2030 (3d) OpenAI CEO Sam Altman, expects AI will exceed human intelligence by 2030. He emphasized AI's potential in scientific

Sam Altman predicts AI will surpass human intelligence by 2030 (3d) OpenAI CEO Sam Altman, expects AI will exceed human intelligence by 2030. He emphasized AI's potential in scientific

Robots and artificial intelligence are transforming jobs from manufacturing to sports (Fox Business2mon) Artificial Intelligence and automation are often used interchangeably. While the technologies are similar, the concepts are different. Automation is often used to reduce human labor for routine or

Robots and artificial intelligence are transforming jobs from manufacturing to sports (Fox Business2mon) Artificial Intelligence and automation are often used interchangeably. While the technologies are similar, the concepts are different. Automation is often used to reduce human labor for routine or

AI-powered CRISPR technology turbocharges gene therapy development (The Brighterside of News on MSN6h) Stanford researchers and their collaborators have revealed a new device that could change the way scientists conduct

AI-powered CRISPR technology turbocharges gene therapy development (The Brighterside of News on MSN6h) Stanford researchers and their collaborators have revealed a new device that could change the way scientists conduct

What's Next for These 3 Artificial Intelligence (AI) Stocks? (1don MSN) These stocks have reacted to AI in surprising ways, but investors should also consider their future prospects

What's Next for These 3 Artificial Intelligence (AI) Stocks? (1don MSN) These stocks have reacted to AI in surprising ways, but investors should also consider their future prospects

Amazon Artificial General Intelligence VP Departs: Report (CRN3d) Amazon AGI vice president has departed the company as tech vendors battle for talent in the war to win the artificial

Amazon Artificial General Intelligence VP Departs: Report (CRN3d) Amazon AGI vice president has departed the company as tech vendors battle for talent in the war to win the artificial

Artificial intelligence is here. Will it replace teachers? (25d) In a Pew Research Center study released last spring, 31% of AI experts, whose work or research focuses on the topic, said

Artificial intelligence is here. Will it replace teachers? (25d) In a Pew Research Center study released last spring, 31% of AI experts, whose work or research focuses on the topic, said

Oklo Versus Bitcoin: Which Has Been the Better Investment During the Artificial Intelligence (AI) Revolution? The Answer Might Blow Your Mind. (4don MSN) Oklo and Bitcoin have been two opportunities that have experienced outsize momentum throughout the artificial intelligence

Oklo Versus Bitcoin: Which Has Been the Better Investment During the Artificial Intelligence (AI) Revolution? The Answer Might Blow Your Mind. (4don MSN) Oklo and Bitcoin have been two opportunities that have experienced outsize momentum throughout the artificial intelligence

OpenAI teams up with Walmart to train millions of workers in artificial intelligence (24d) OpenAI announced a new AI certification initiative to help workers gain valuable AI skills with Walmart as a launch partner

OpenAI teams up with Walmart to train millions of workers in artificial intelligence (24d)

OpenAI announced a new AI certification initiative to help workers gain valuable AI skills with Walmart as a launch partner

What Is One of the Smartest Artificial Intelligence (AI) Stocks to Buy Today? (1don MSN)

CrowdStrike › Artificial intelligence (AI) isn't a new technology, but it has undoubtedly made more of a splash over the past

What Is One of the Smartest Artificial Intelligence (AI) Stocks to Buy Today? (1don MSN)

CrowdStrike › Artificial intelligence (AI) isn't a new technology, but it has undoubtedly made more of a splash over the past

Prediction: This Magnificent Artificial Intelligence (AI) Stock Could Double Once Again in a Year (3don MSN) The healthy demand for memory chips has led to a remarkable surge in this chip stock this year, and it could sustain its

Prediction: This Magnificent Artificial Intelligence (AI) Stock Could Double Once Again in a Year (3don MSN) The healthy demand for memory chips has led to a remarkable surge in this chip stock this year, and it could sustain its

Back to Home: <http://www.speargroupllc.com>