AI TIME JOURNAL Presents

Al Trends 2024





20+ Industry Leaders on the Next Wave of Al Innovation



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Introduction

As we navigate the recent surge in Al developments, we're in the middle of what may be the most monumental shift in human history.

Amidst this rapid evolution of AI, we find ourselves at a crossroads that could redefine our societal and industrial landscapes.

For business leaders and professionals, this current shift is more than a technological

evolution; it's a call to rethink fundamentally how we operate, innovate, and compete.

Martin Russo
Co-Founder,
Al Time Journal, Al Frontier Network

The way we understand our customers, develop our products, and even the skills our teams need are all up for reevaluation.

This inflection point challenges us to consider not only how AI can enhance our current processes but also how it redefines the value we offer.

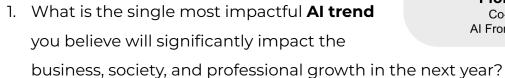
Embracing this change can propel us to unprecedented success, while ignoring it could lead to obsolescence.

The question for every leader today is not if AI will affect their business, but how they will act to ensure they emerge stronger in a transformed world.

We are thrilled to introduce this ebook featuring contributions from leading figures in technology and business.

Al Trends 2024

This eBook compiles insights and forecasts from over 20 leading experts on Al's transformative impact on business, society, and professional growth, focusing on four critical questions shaping Al's future:





- Co-Founder, Al Frontier Network
- 2. Which **AI companies** do you think are the ones to watch or invest in, and why?
- 3. What are your favorite **AI tools**, and how have they improved your productivity?
- 4. What **skills** are you currently focusing on developing or cultivating to stay ahead in the Al-driven future?

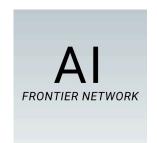
Impact on Business and Society: The eBook provides insights into how Al is reshaping industries, enhancing operational efficiencies, and contributing to economic growth, while also examining the societal implications of widespread Al adoption.

Essential Skills for the AI Era: Insights are provided into how AI is reshaping industries, enhancing operational efficiencies, and contributing to economic growth, while also examining the societal implications of widespread AI adoption.

Innovative Companies and Tools: Offering a look at the companies and tools leading the charge in Al innovation, key players and emerging technologies poised to shape the future of Al are identified.

Media Partners





Al Trends According to 20+ Experts

In this eBook, we explore the top trends in AI for 2024 and how they are transforming different sectors.

Multimodal AI: Significant emphasis is placed on the advancement and application of multimodal AI, illustrating its capability to process and integrate multiple forms of data. This trend indicates a move towards more complex and nuanced AI systems capable of understanding the world in a more human-like manner.

Generative AI and Large Language Models (LLMs): A considerable portion of the discussion is dedicated to the growth and influence of generative AI and LLMs, showcasing their potential to revolutionize content creation, decision-making processes, and personalized experiences.

Al Safety and Ethics: With the increasing integration of Al into every facet of life, there's a paramount importance of prioritizing safety and ethical considerations in Al development to ensure responsible usage and mitigate risks associated with Al technologies.

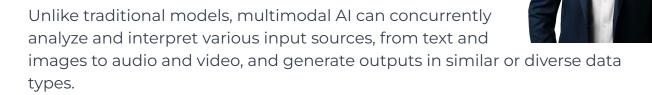
Democratization of AI: Highlighting the trend toward making AI tools and capabilities accessible to a broader audience, this topic explores how democratization efforts can foster innovation, equality, and inclusivity in the tech landscape.

Yuriy Adamchuk

Group CEO at Avenga

AI Trends

The current AI landscape is still primarily dominated by unimodal AI models that focus on a single type of data and are engineered to excel in specific tasks like image processing or speech recognition. However, the latest wave of innovation in AI technology, multimodality, transcends these limitations.



By learning from disparate data inputs simultaneously, multimodal AI enables a holistic understanding of the underlying data and its contextual nuances. On top of that, we will see multi-agent models working together as AI teams to address complex problems and achieve goals efficiently across an even wider range of applications.

This holistic approach will empower organizations to derive deeper insights, make more informed decisions, and unlock innovative solutions to complex challenges across diverse domains.

The extended support across a vast spectrum of tasks for all kinds of users will result in tremendous growth and impact businesses and society alike. For example, research conducted by Markets and Markets forecasts an exponential growth trajectory for multimodal AI, estimating a leap from a \$1 billion valuation in 2023 to a substantial \$4.5 billion by 2028.



Companies to watch

Everything that can be observed at the moment is, at best, a snapshot of a market that is yet to consolidate. Similar to cloud providers, a handful of universal generative AI model providers, coming from the US and China, will ultimately prevail. On top of them, an ecosystem of value-adding providers will build.

However, with all the valuable tools created so far, the really big hit, something we would consider a complete game-changer, has yet to materialize. And nobody can predict with certainty who will be the one to succeed – your guess is as good as mine.

Nevertheless, a famous business saying that has proven to be correct again and again is, "During a gold rush, sell shovels." Hence, it's worth keeping in mind that all those future AI players and the AI applications they are going to build must run on something. Companies that can supply the necessary hardware and meet ever-growing demands amid growing geopolitical instabilities, deglobalization, and intensifying trade wars will undoubtedly play an increasingly important role. It's no coincidence that Goldman Sachs proclaimed Nvidia the "most important stock on planet Earth" in February 2024.

That being said, and admittedly being biased, it's no secret that we are planning an IPO in New York in a few years ourselves. Therefore, I highly recommend keeping an eye out for Avenga. One of our main pillars will be custom-developed AI tools for best-in-class enterprises, and there are big things to come.

Mark Brady

Deputy Chief Data Officer for TRMC at KBR, Inc.

AI Trends

The trend is the increasing recognition that powerful forms of AI may be unsafe.

Currently, discussions about unsafe AI tend to be superficial, citing the danger but not offering any practical solutions.

To fill this gap I introduced five Laws of Safe AI in my book on Next Generation Data Management.



Since then I have added a sixth, forming the Six Laws of Safe Al.

I've discussed this in various podcasts and the Ai4 Conference 2023.

In addition, there are certain assumptions about dangerous AI that are not valid and these will be discussed.

Finally, I'll note the certainty that the laws will be violated at times and what we can do about it.

Alessandro Palmas

Senior R&D at Ubisoft

AI Trends

In the AI world, two trends stand out as key elements of transformative change: the proliferation of **Large Language Models (LLMs)** and diffusion models, and **Reinforcement Learning (RL)**.

These two trends, also often combined, are already significantly impacting businesses, society, and professional growth, and this all will continue in the coming year.



Reinforcement Learning offers a pathway to autonomous systems capable of navigating complex, dynamic decision-making tasks with unparalleled precision and efficiency. By harnessing the power of data-driven decision-making, RL enables businesses to optimize processes, enhance productivity, and unlock new avenues for growth. Moreover, RL's societal implications are profound, promising to reshape interactions with technology and automation, from personalized healthcare interventions to autonomous transportation systems.

In parallel, the rise of Large Language Models and diffusion models marks a pivotal moment in natural language processing and creative content generation. These models have already catalyzed transformative applications across various domains, offering new insights, enhancing communication, and fostering creativity. From personalized recommendation systems to natural language understanding, LLMs and diffusion models are revolutionizing how we interact with and derive value from data.

For professionals, mastering both RL and LLMs/diffusion models is essential in an increasingly Al-driven world. As businesses seek to leverage the full potential of these technologies, demand for skilled practitioners versed in their intricacies will soar.





Those who can adeptly navigate RL techniques and harness the power of LLMs and diffusion models will find themselves at the forefront of innovation, driving forward the adoption and implementation of these transformative technologies.

Skills to cultivate

To stay ahead in an Al-driven future, I am focusing on developing and cultivating a diverse set of skills that encompass both technical expertise and soft skills.

Firstly, I continue to work on my proficiency in cutting-edge AI techniques such as Reinforcement Learning, Large Language Models (LLMs), and diffusion models. This involves staying abreast of the latest research developments, experimenting with novel methodologies, and continuously refining my understanding of complex AI algorithms.

Beyond technical skills, I am also investing in cultivating critical thinking, problem-solving, and communication abilities. As AI becomes increasingly intertwined with diverse industries and societal contexts, the ability to analyze complex problems, devise innovative solutions, and effectively communicate insights will be indispensable.

Furthermore, I am committed to fostering a collaborative mindset and nurturing my ability to work effectively in interdisciplinary teams. The interdisciplinary nature of AI demands collaboration across various domains, from engineering to healthcare to finance. By fostering strong interpersonal skills and embracing diverse perspectives, I can leverage collective intelligence to drive innovation and tackle complex challenges more effectively.

Pritesh Tiwari

Founder at Data Science Wizards

Skills to cultivate

In the rapidly evolving landscape of AI, staying ahead requires a proactive approach to skill development. Currently, my focus lies on honing skills in the burgeoning field of **Generative AI** (GenAI). Enterprises are transitioning from AI experimentation to real value production, and GenAI is proving to be instrumental in this journey. To adapt effectively, I am immersing myself in understanding diverse types of **Large Language Models (LLMs)** and exploring their applications in addressing various business challenges.



As a data scientist, embracing continuous learning and adaptation is paramount. As the technology advances, so must our skill sets. GenAl represents a frontier where creativity intersects with data science, offering boundless possibilities for innovation. By delving into this domain, we can expand our toolkit and leverage LLMs to develop novel solutions that drive tangible business outcomes.

In essence, the evolution of data scientists necessitates a proactive engagement with emerging technologies like GenAl. Embracing this evolution empowers us to remain at the forefront of the Al-driven future, equipped with the skills needed to navigate and shape its trajectory

Abhishek Biswas

Founder & CEO of AMPLITELLIGENCE

AI Trends

Democratic AI. One of the AI trends that I believe will have a huge impact in the next year is the **democratization of AI**. This means making AI and Data Solutions more accessible, affordable, and understandable to everyone, regardless of their background, education, or industry. As, MSMEs (Micro, Small & Medium Enterprises) are nowadays making revolutionary growth using tailored Data solutions at feasible prices.



At, AMPLITELLIGENCE we are on a mission to make sure every segment of business can get tailored solutions and services at feasible prices. Democratization of AI will enable more people to leverage the power of AI to solve various problems by creating new opportunities in every industry. At the same time, it will also foster more innovative collaboration, and diversity in AI and the Data world.

Companies to watch

We have seen a drastic revolution in the AI industry in the last five years, and many generations are experiencing such a faster technological evolution for the first time. But, during this phase, we have seen many bottlenecks in the quick development of AI and their disadvantages from industry to environment; even if it is passive.

That's why those Companies are focusing on the combinational **practice** of **Sustainable AI and Ethical AI** is the best to invest in now to achieve continuous business growth with failsafe solutions.

Tools

I have many favorite techniques and mechanisms in AI practice but not any specific tools. I prefer to choose tools according to the use case which can eventually develop actual tailored solutions as per the needs of clients, partners, and stakeholders. Started my journey with Matlab, and Python once but day by day adapting to Driverless AI and AutoML tools as we all Data practitioners are on a journey towards Codeless AI shortly.

Skills to cultivate

As a Founder and CEO of AMPLITELLIGENCE, I have a strong urge to discover **the intersection of AI and businesses** related to various domains of diverse scale along with my one-decade technological experience.

Nowadays, our Amplitelligence team is working like a Data Hawk to find industries that have not received Al adaptation yet up to the mark and discover new use cases every day to deploy Al successfully to reduce the pain points of various stakeholders, clients, and partners to stay ahead in an Al-driven future.

Sandeep Khuperkar

CEO & Founder of Data Science Wizards

AI Trends

The most transformative AI trend set to reshape business, society, and professional growth is **breaking the luxury barrier of AI adoption.**

By making AI more accessible and affordable, we enable a broader spectrum of enterprises to leverage this technology. This shift not only catalyzes innovation across sectors but also ensures that the benefits of AI—ranging from personalized healthcare, customized education, and sustainable environmental practices, to



financial inclusion and enhanced customer service—reach every corner of society.

As AI becomes integral to our daily lives, its impact will extend well beyond improving bottom lines, touching human lives in deeply meaningful ways, and fostering a more equitable, efficient, and sustainable world for all.

Emily Reid

CEO of AI4ALL

AI Trends

There will start to be more prominent discussion surrounding who is developing AI technology, and a greater call to action to diversify the talent base. Currently, the AI workforce is not reflective of our population as a whole, yet thousands of us use it regularly at work and in our personal lives.

Most professionals developing and investing in AI are white men, and AI systems can exhibit biases that stem from their programming and data sources. In



short, our human biases can translate to the Al tools we're building. Cultivating diversity in the Al workforce is imperative to ensure the ethical, fair development and implementation of a technology that is poised to increasingly impact our lives in many ways.

Skills to cultivate

I'm focused on ways we can maintain a human-centric approach to the development of AI-powered tools. I am very much a believer that AI can ultimately help and support us as humans rather than "replace" us. The key to making sure that's the case is fundamental ethics training for future and current technologists.

We must focus on the real-world impacts of these AI models and tools, and support the agency of underrepresented AI creators. AI is a significant part of our existence – that we cannot change – and we have the power to use it responsibly. The train has left the station; let's make sure it's headed in the right direction.





Steve Marshall

Chief Product Officer at Aidentified, Inc.

AI Trends

The honing of predictive analytics using AI will become an immensely powerful tool for brands, marketers, advertisers, and others. For quite some time now, our behavior in digital spaces has helped brands learn about all of us and our unique preferences. Even small movements online can be a helpful indication for businesses to identify an individual as a qualified prospect.

We've all been served ads on social media after searching a related topic; Al will power this further to gain predictive abilities. Before long, brands may know of your imminent purchase plans even before you do and will be able to satisfy your needs before you are even aware of them.

Skills to cultivate

More than focusing on a skill, I'm paying close attention to where the money is going in the Al space.

What companies and technologies are attracting the most investment capital? Monitoring those trends will help serve as an indication of the future of AI – how it will evolve, how it will support business, and more.

Keeping a close eye on the development and growth of AI will help us stay competitive and consistently improve what we can to best serve our customers and prospective customers.



Surya Sanchez

Founder @ DeepIdea Lab

AI Trends

The broad deployment of **AI-powered autonomous systems** is the most important AI trend that, in my opinion, will have a major impact on society, business, and professional development in the upcoming year.

These technologies, which range from automated industrial processes and smart city infrastructure to self-driving cars, have the power to completely transform several sectors. Autonomous systems may



increase productivity, save costs, and improve safety by utilizing deep learning models and powerful AI algorithms. In addition to changing conventional business models, their implementation will spur innovation and open up new doors for possibilities in the global economy.

Companies to watch

There are a few notable AI startups that are worth keeping an eye on or investing in. OpenAI is a well-known business that has made significant contributions to the fields of natural language processing, reinforcement learning, and AI safety. Modern technologies from OpenAI, like the GPT family of language models, have proven very capable and have a plethora of uses across several sectors. **NVIDIA**, a pioneer in AI hardware solutions including deep learning task-optimized GPUs, is another significant participant. Large-scale AI model training and AI applications in industries like autonomous driving, healthcare, and finance depend on NVIDIA's powerful GPU accelerators.

Furthermore, businesses like Google, Microsoft, and Amazon are strong candidates for long-term leadership in AI since they continue to make significant investments in the field due to their comprehensive AI ecosystems and market dominance.





Tools

As an AI practitioner, I've discovered that a few AI technologies are essential for increasing output and streamlining processes. **TensorFlow** is an open-source machine learning framework created by Google that is one of my favorite tools. Building and implementing AI models in a variety of fields, including computer vision, natural language processing, reinforcement learning, and generative adversarial networks, is made easier with TensorFlow's adaptability and scalability.

PyTorch, a deep learning toolkit that is popular for its user-friendly interface and dynamic computational graph features, is another crucial tool. Researchers and developers may more effectively iterate on Al projects because of PyTorch's fast prototyping and experimentation capabilities.

Additionally, pre-trained models and automated machine learning are among the AI services provided by cloud-based platforms such as **Microsoft Azure and Amazon Web Services** (AWS) and scalable infrastructure, streamlining the development and deployment of AI applications.

Skills to cultivate

Maintaining your competitive edge in the AI-driven future of today requires ongoing education and skill improvement. In light of this, my current focus is developing my knowledge of cutting-edge AI approaches and technology, including **federated learning**, **meta-learning**, **and neurosymbolic AI**. These state-of-the-art methods show promise in addressing existing AI system constraints such as data privacy issues, sampling efficiency, and symbolic reasoning skills.

To address the societal and ethical ramifications of AI deployment, I am also improving my talents in multidisciplinary domains including ethics, explainable AI, and human-AI collaboration. By adopting a comprehensive approach to skill development, my goal is to efficiently negotiate the complexity of the AI ecosystem and make a significant contribution to its evolution.





In conclusion, the convergence of industrial disruption, technical innovation, and societal upheaval is reflected in the AI trends for 2024, which provide possibilities and challenges to professionals, enterprises, and society at large. People may put themselves in a position to succeed in a world that is becoming more and more AI-driven by being educated, making wise investments, using effective tools, and placing a high priority on skill development.

Cassandra Gucwa

Founder & SEO Geek at an Enterprise SEO Agency, Menerva Digital

AI Trends

The **generative AI** trend is transforming businesses and professional growth since users are beginning to understand how to automate their tasks and make better, more informed decisions.

Companies to watch

OpenAI because of ChatGPT which currently has 180.5 million users.

Perplexity because their search tool seems to be the most accurate.



Tools

ChatGPT is one of my favorite AI tools as this has increased my efficiency and helped me deliver better work.

Skills to cultivate

I plan on using and testing new AI tools as they get released and understand how I can incorporate them into my everyday activities.

David Regalado

Founder at Data Engineering Latam

Skills to cultivate

I'm very picky about what I dive into. I am currently focusing my time and energy on getting sharp on **building RAG apps with Google's LLM Gemini,**LangChain, embeddings, and vector databases, among other technologies.

These skills will be in high demand in all kinds of industries because they tackle the "hallucination problem" with LLMs. It will be a game-changer, no doubt about it.



Kent Lewis

pdxMindShare & Anvil Media Founder

AI Trends

I believe access to free **generative AI engines like ChatGPT**, Claude, Copilo, and Gemini democratize access to incredible intelligent computing power is by far the most important and impactful AI trend, hands down.

With the rapid improvement in GPT logic and the exponential growth of data from which to pull, anyone with an internet connection can become an expert on any topic, generate code, analyze data, and do it all extremely quickly. This impacts sales, marketing, operations, and customer service... essentially all aspects of a business.

On the personal size, AI provides an opportunity to streamline daily tasks, giving us more time to be human.

Companies to watch

Beyond betting on the industry leaders (Google, Microsoft, Apple, Meta, and Open.AI) there are a host of up-and-coming players, including Anthropic, CrowdStrike, Snowflake, and Cohere. While the biggest players are the safe investments, the evolving AI players have the greatest potential upside, as they will either "breakthrough" or be acquired for high multiples in the coming months.



Tools

I prefer to keep it cost-effective as a solopreneur. As such, I rely on the **big 4 GPT engines**: OpenAI's ChatGPT, Anthropic's Claude, Microsoft's Copilot, and Google's Gemini. The data sources continue to expand, making premium accounts unnecessary for small businesses.

I use GPT to research ideas for my articles and speeches, to refine and improve my articles and blog posts, and to synthesize reports and other documents. I estimated I've gained 80% in time savings in developing Thought Leadership content, as compared to pre-Al.

Skills to cultivate

I'm continually refining my prompt engineering skills, to get more value out of existing platforms. I also read various newsletters and publications to stay up on the AI evolving industry.

Michael Borrelli

Director at Al & Partners

AI Trends

The rise of **AI-driven personalization** is poised to revolutionize businesses, societies, and professional growth by enhancing customer experiences, optimizing operations, and unlocking new opportunities for innovation and efficiency in the next year.

Companies to watch

Companies like **OpenAI, Google, and NVIDIA** are worth watching due to their pioneering work in AI research, development, and deployment, positioning them at the forefront of innovation and potential investment opportunities.

Tools

Tools like **TensorFlow, PyTorch, and IBM Watson** have significantly improved productivity by streamlining AI model development, facilitating seamless integration, and providing robust frameworks for experimentation and deployment in various domains.

Skills to cultivate

I am focusing on honing skills in **machine learning, natural language processing, and data engineering** to navigate the Al-driven future effectively, leveraging advanced algorithms, big data processing techniques, and domain-specific knowledge to stay ahead in this rapidly evolving landscape.

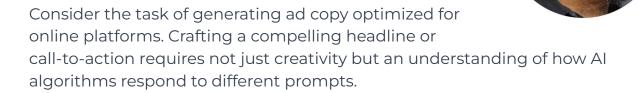


Suraj Nair

Digital Marketing Executive at SocialPilot

Skills to cultivate

The number one skill I'm focusing on right now is **prompt engineering**. When I say this, it simply means - writing the right prompts. Crafting precise prompts empowers individuals to harness AI across diverse sectors, unlocking opportunities for innovation and competitive advantage.



By honing prompt engineering skills, marketers can tailor their messaging to resonate effectively with target audiences, enhancing engagement and conversion rates. Whether it's deciphering search engine algorithms or crafting persuasive email subject lines, mastering prompt engineering is indispensable for staying ahead in the ever-evolving landscape of digital marketing.



Pratik Thantharate

Principal Software Engineer in Test at Paycor

AI Trends

The most impactful AI trend that will significantly impact business, society, and professional growth next year is the continued advancement and adoption of **large language models (LLMs) and conversational AI assistants.**

These robust AI systems are already transforming industries by enabling more efficient and personalized communication, automating various tasks, and augmenting human capabilities. As LLMs become more capable, accessible, and integrated into multiple



applications and workflows, they will drive innovation and productivity gains across sectors.

However, as these powerful systems become more ubiquitous, ensuring robust security and data privacy measures will be paramount. Striking the right balance between leveraging Al's capabilities and safeguarding sensitive information will be a critical challenge.

Companies to watch

Regarding AI companies to watch or invest in, I would highlight Anthropic as a leading player in developing safe and ethical AI systems. Their focus on developing AI with solid principles and safeguards is crucial as these technologies become more pervasive. Additionally, companies like **OpenAI, Flower Labs, and Perplexity AI, Inc.** will likely remain influential players in the AI landscape with their ongoing research and development of cutting-edge AI models and applications. AI companies prioritizing security and data privacy from the ground up are ones to watch and invest in.

Their principled approach to developing safe and ethical AI systems that respect individual privacy rights will be crucial.

Tools

Some of my favorite AI tools that have improved productivity include language models like **Claude** for writing assistance and analysis tasks while implementing strict access controls and data encryption to protect sensitive information. I've also seen the positive impact of AI-powered virtual assistants, automated data processing and analysis tools, and AI-driven personalization and recommendation systems in various domains. AI-driven automation tools that adhere to data privacy best practices have also proven valuable. However, careful vetting of these tools' security posture is essential.

Skills to cultivate

Regarding skills to cultivate for an Al-driven future, a strong emphasis should be placed on developing a deep understanding of Al principles, algorithms, and applications. I'm focusing on cultivating a **deep understanding of Al security,** including techniques like differential privacy, federated learning, and genetic algorithms. Knowledge of data governance, ethics, and privacy law will also be vital to navigating Al's responsible deployment. Soft skills like clear communication around Al's risks and limitations will ensure transparency.

Furthermore, as AI systems become more prevalent, it's essential to prioritize data privacy and ethical considerations. Robust governance frameworks, transparency in AI development and deployment, and a commitment to protecting individual privacy rights will be crucial for building trust and ensuring the responsible use of these powerful technologies. The overarching goal should be to unlock AI's potential while upholding data privacy and security.

Michael Alf

Founder at Alf Global Services

AI Trends

One of the most important skills for most "knowledge" workers is the best blending of GenAl and regular work. The foundation of that is a solid understanding of Generative Al and practical experiences.

Understanding and utilizing how **GenAl and human creativity work hand-in-hand** can be a game-changer. The next step in the evolution is a good understanding of how business processes and then business models are evolving.



Companies to watch

For most people, it is ok and enough to master at least one of the major tools like ChatGPT or the equivalents of Google and Microsoft. All models evolve steadily and it is very hard to keep up to date. But getting the most out of one model is a good first attempt.

On top of that, I suggest looking at solutions or applications that address specific problems.

Tools

I am a daily user of ChatGPT (4) plus several GPTs within ChatGPT. Plus, I explore and test various tools for specific functions like recording conversations and transcribing, structuring workshops or presentations, and much more.

Skills to cultivate

Being **on top of GenAl** - or at least above average - is priority one. Using it, encouraging the teams to use it, and thinking about potential impacts on the current business models are a few key steps to stay ahead. So, instead of "always closing", it is "always learning GenAl".

Arafat Ashrafi Talha

Google Certified Cyber Security Professional

AI Trends

The most impactful trend will be the customization of enterprise AI.

Businesses will move beyond generic models to leverage generative AI tailored to their specific needs. This will revolutionize tasks, create efficiencies, and unlock new opportunities across industries.

And also the single most impactful AI trend I foresee for the next year is the continued advancement and integration of AI ethics and responsible AI practices into



business operations and societal frameworks. As AI technologies become more pervasive, ensuring they are developed and deployed ethically will be crucial for maintaining trust, minimizing bias, and mitigating potential harm. This trend will not only shape how businesses operate but also influence public policies and professional standards, fostering a more responsible and equitable AI-driven future.

Companies to watch

Two areas pique my interest:

Small Language Models (SLMs): Companies like Microsoft are making strides with SLMs. These efficient models, trained on curated data, offer huge potential for fostering innovation and research due to their focus and adaptability.

Multimodal generative AI: Companies like IBM are pushing the boundaries of generative AI that can handle various inputs (text, speech, images). This will lead to more natural and powerful interactions with

virtual agents, completely transforming how we utilize AI assistants.

And also among the AI companies to watch or invest in, I believe those focusing on AI-powered healthcare solutions will be particularly promising. Companies like Babylon Health, which leverage AI to improve access to healthcare services and enhance diagnostic accuracy, are poised for significant growth. Additionally, companies like OpenAI, which are pioneering advancements in artificial general intelligence (AGI), hold great potential for transforming various industries and reshaping the AI landscape.

Tools

One of my favorite AI tools is **Google's TensorFlow**. Its robust framework and extensive library of pre-trained models have significantly improved my productivity in developing and deploying machine learning models. TensorFlow's flexibility and scalability make it suitable for a wide range of applications, from computer vision to natural language processing, enabling me to tackle diverse AI projects efficiently.

Skills to cultivate

To stay relevant, I'm constantly being improved to: Enhance **factual accuracy and reasoning**: This ensures my responses are reliable and informative.

Refine communication skills: I strive to provide clear, concise, and helpful answers to your questions.

Adapt to new information and domains: The ability to learn and grow is crucial in the ever-evolving AI landscape.

And also to stay ahead in the AI-driven future, I'm focusing on developing my skills in interdisciplinary collaboration and ethical AI design. As AI technologies continue to intersect with various domains, the ability to communicate effectively with experts from different fields and integrate diverse perspectives will be essential for creating impactful and responsible AI solutions.



Additionally, cultivating a deep understanding of ethical AI principles and practices will enable me to navigate complex ethical dilemmas and contribute to building AI systems that prioritize fairness, transparency, and accountability.

Jarrod Teo

Consultant at Beacon Consulting Pte Ltd ·

AI Trends

In retail, **Human AI on LED boards** to interact and recommend products has the potential to be impactful. At current usage, Human AI was deployed at unmanned shops in Korea to add the human touch to an empty unmanned shop to get customers to spend more.

This application can also be applied to autonomous cars to recommend routes and places of interest to tourists as well. Or even a personal AI maid in the



house to control all the equipment at home with voice control which interacts with owners on what to do for the weekends.

Companies to watch

DeepBrain AI. Their Human AI is very advanced and able to interact with people with minimal manual intervention.

Their Human AI makes use of the 4 pillars of Data Science, Text, Image, Video, and Vocal to create a Human to interact with people.

Tools

SPSS Statistics. Though I also use **Python, Alteryx, SPSS Modeler, PowerBI**, etc. I was an SPSS trainer before and was the trainer who invented all the SPSS Coding courses in Singapore. This allows me to also transfer my SPSS Coding skills to Python.

I can, for example, code in SPSS and combine 500 Excel spreadsheets within mins while pointing out which spreadsheets are duplicates.

Skills to cultivate

Designing unique Data Science solutions, making these solutions into business to sell and make profits. Designing a unique solution that is adopted into business is always a tricky process that requires both sides of thinking... Technical and Business.

We have to think like a Businessman where simplicity is needed in the Data Science products while not losing the technical aspects of the algorithms used in the process.

Deep Dave

Industrial IoT Specialist Lead at LTIMindtree

AI Trends

Al's future impact across sectors is poised to be transformative, with various industries experiencing significant changes. Here are some predictions based on the search results:

Al Automation in Industries: Different sectors will be impacted by Al automation to varying degrees. For instance, office and administrative support, legal, and architecture, and engineering are among the industries expected to be significantly affected by Al-driven



automation, potentially altering tasks like data entry, legal processes, and more.

Profit Margins Boost: Sectors like healthcare, financial services, and professional services are projected to see increased profit margins due to Al adoption, showcasing the positive economic impact of Al across these industries.

Global Economic Contribution: All is expected to contribute up to \$15.7 trillion to the global economy by 2030, with significant portions coming from increased productivity and consumption-side effects. This highlights the substantial value potential that Al offers for economic growth worldwide.

Al Impact Scores: PwC's Global Artificial Intelligence Study provides an Al Impact Index that rates different sectors based on their potential for Al transformation. This index ranges from 1 to 5, with higher scores indicating a greater impact of Al on those sectors.

Consumer Sentiment and Adoption: Over 75% of consumers express concerns about misinformation from AI, underlining the importance of ethical AI development.

Additionally, ChatGPT's rapid adoption rate with 1 million users within five days signifies the growing interest and utilization of AI-powered tools. These trends suggest that AI will continue to revolutionize industries globally, driving economic growth, enhancing productivity, and reshaping traditional business models across various sectors.

Tareq William Shahwan

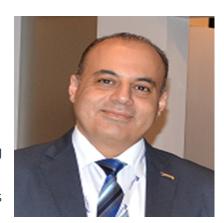
Project Management Consultant at Bayan Advisers

AI Trends

The emergence of **multimodal AI** will be the most impactful AI trend in 2024.

It is simply a natural evolution of different Al technologies today.

The often silo approach to AI development is changing and a convergence point is finally starting to happen. By integrating inputs from multiple modalities such as text, images, audio, and video, multimodal AI systems



can achieve a more comprehensive understanding of complex real-world scenarios. Multimodal AI is more relevant to the way humans think and process information because it attempts to mirror the multisensory nature of human perception and cognition.

I think the multidimensionality of multimodal AI will indeed get us closer to our long aspiration of making machines "intelligent".

The year 2024 will certainly be a pivotal year for AI, and if multimodal AI does not live up to expectations, the future of AI will once again be in question.

Companies to watch

Aside from the large names, such as Google, Microsoft, Amazon, IBM, Nvidia, and the like, I would also pay attention to perhaps the lesser-known names.

Companies like **Cerebras Systems, Tempus, and SoundHound AI**.

Cerebras Systems is a rising pioneer in the advancements in AI hardware.

They developed a processor that certainly competes with the leading companies in terms of performance, power consumption, and size. Tempus is leveraging AI and machine learning to analyze clinical and molecular data, aiming to revolutionize personalized medicine and improve patient outcomes.

And SoundHound AI has been actively developing voice recognition and conversational AI technologies, with a focus on enabling seamless interactions between humans and machines.

Their Al's real-time multimodal interface integrates voice, visuals, and touch naturally.

And their voice AI technology processes speech similar to the way humans do.

Tools

Gemini from Google, ChatGPT from OpenAI, and recently You.com.

All these tools enable me to gain a wealth of information about different topics in a very structured and organized way.

I do not, however, rely entirely on the output of these AI tools for specialized topics, especially in the technical domains.

Skills to cultivate

Continuous learning and development of the latest AI tools and technologies.

Additionally, I am always passionate about exploring new tools, especially as relates to AI in the audio and video domains.

Recently, I have been focusing on developing my technical skills as relates to data analytics and programming languages such as Python.



Pranav Wadhera

Global Account Manager at IoT83

AI Trends

The most impactful AI trend that could significantly impact business, society, and professional growth in the next year is **Natural Language Processing (NLP)**. Here's why:

Business Transformation: NLP can help businesses automate content creation, improve customer service with Al chatbots, and make data-driven decisions. It can analyze, format, translate, and use texts essential to all types of businesses around the world. For example,



MonkeyLearn, an AI text analysis tool, can analyze reviews, surveys, support tickets, and other sources of human text.

Society: Our world is wrapped in text. NLP can analyze data in ways that are far different from prior statistical methods we've used. It provides an efficient way to analyze and gain insights from enormous amounts of data — something that just isn't possible without the use of NLP.

Professional Growth: As more industries adopt NLP, there will be a growing demand for professionals skilled in AI and machine learning. This could lead to new job opportunities and the need for continuous learning and upskilling.

However, it's important to note that with the rise of NLP, there are also challenges and concerns related to ethics, regulation, and the potential for misuse. Therefore, a balanced approach that considers both the benefits and potential risks is crucial when adopting and implementing these technologies.

Shyam Bhojwani

CyberSecurity & Business Technology Leader

AI Trends

I believe the AI Trend with the biggest impact is the 'AI-Interaction architecture' where all the various AI-enabled digital assistants work in tangent to solve a problem while still in the loop to ensure decisions are taken with a confidence score and being handled by a specialized AI digital assistant agent.

Companies to watch

For me, companies solving day-to-day productivity improvement problems such as Internal and External searches for employees who are being asked to do more in these challenging markets is something to watch out for.

To name a few 'Glean Enterprise Search" which does an AI-based search and summarization leading to improved employee and customer experience is something to watch out for.

Another AI Tool category is products in the Integration space such as Workato which can now integrate with AI products via application connectors along with automations is something to watch for too.

These products provide flexible options to integrate with your own Al models and tools and leverage automation to take an action be it kicking off a cyber incident process or sales process of capturing leads, enriching with the right data, and taking actions which makes it easier for the Sales team to close a deal.

Tools

As an IT and Cyber practitioner, I juggle between meetings, working on projects, and doing a lot of context switching with that being said any tool that summarises for me meeting minutes, gets me put speed with what a project initiative is working, where are we blocked along with Al-driven hyper-automation tools like **Workato** which focus on using Al is the recommendation and UI Layer and trigger a business impactful end to end automation with the idea of closing the loop be it for a Sales process, or an IT and Cyber incident which gets identified, enriched with Al context and auto closed or remediated is something I can find a huge value in.

Skills to cultivate

Al is becoming more and more accessible and now rather than focusing more on the **underlying hardware and infrastructure** the main focus for my teams is developing the right Al Interaction architecture i.e having Al digital assistants that can pick up a prompt be it for any service requests, HR requests, sales kickoff event or a security alerts and hand it over to the right Al digital assistant and close the loop.

The second thing is responsible usage with a core focus on ensuring these **Al assistants follow the right user permission/access architecture** along with local and international data and privacy laws.