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AI Employment Trends Report

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Introduction

Artificial Intelligence (AI) is a rapidly evolving field that is changing the way we live and work. As AI technologies continue to advance, they are creating a significant impact on job markets around the world. This report provides an analysis of the latest trends and data in AI job markets.

Growth of AI Jobs

The demand for AI specialists has seen a dramatic increase in recent years. Companies across various industries are seeking professionals with skills in machine learning, natural language processing, robotics, and other AI-related fields. The surge in AI job openings is a clear indicator of the growing importance of AI in today's economy. According to recent studies, the demand for AI professionals has witnessed an extraordinary surge, outpacing the supply of skilled individuals.

Top Industries Hiring AI Talent

Technology and finance sectors are leading the way in hiring AI talent. Tech giants like Google, Amazon, and Microsoft are constantly on the lookout for AI specialists. Similarly, financial institutions are leveraging AI for risk assessment, fraud detection, and customer service improvement.

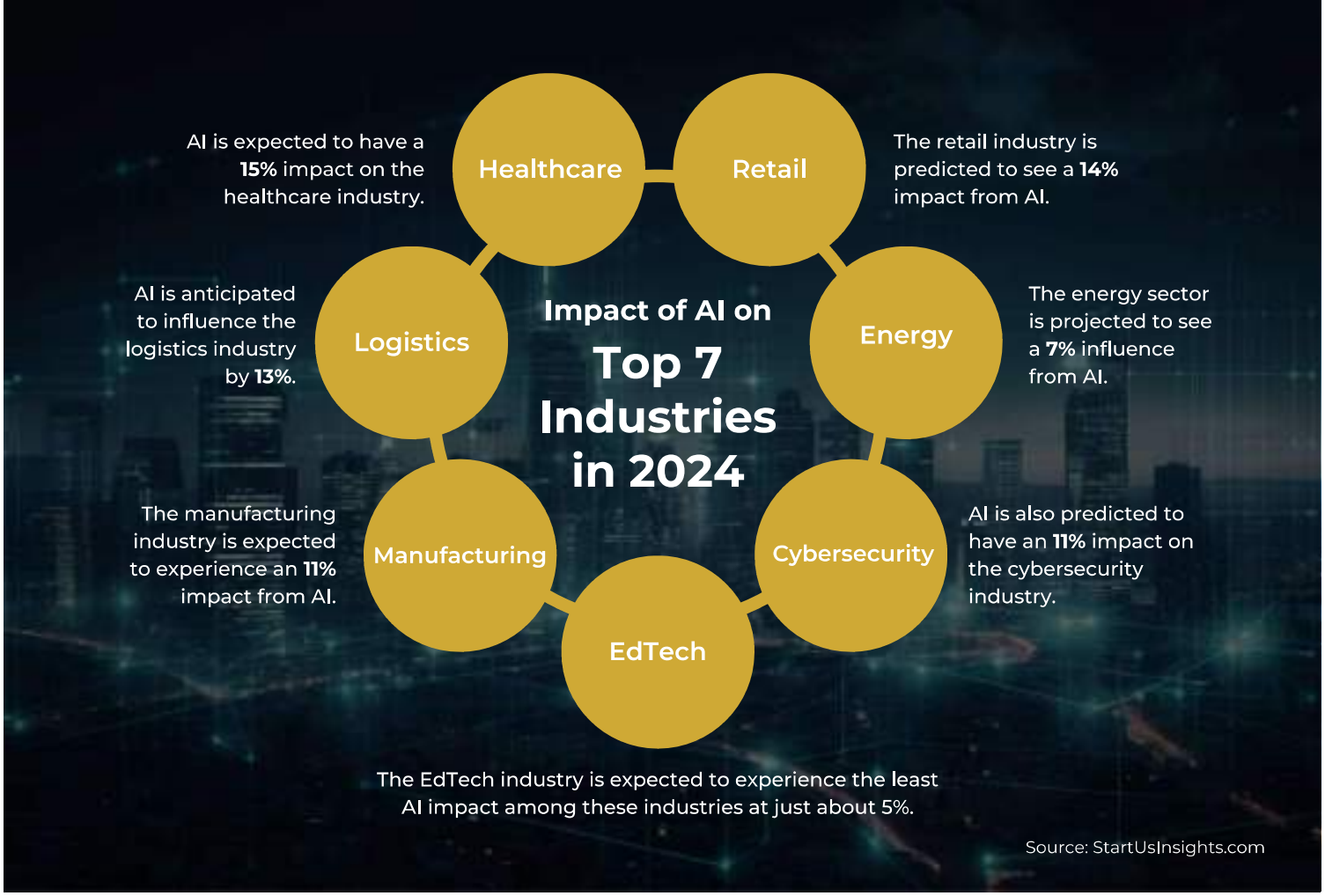
Geographical Distribution of AI Jobs

While AI jobs are available globally, certain regions have a higher concentration of opportunities. Silicon Valley continues to be a major hub for AI jobs. However, other regions like New York, London, and Bangalore are also emerging as significant players in the AI job market.

- Global AI Market size to reach **1.81 trillion USD** by 2030
- AI to contribute **15.7 trillion USD** to the global economy by 2030
- Maximum proportion of ChatGPT users reside in the **USA (15.22%)**, **India (6.32%)**, **Japan (4.01%)**, and others
- Wearable AI market boom on rising demand for AI Assistants
- AI Chip Market size to reach **83.25 billion USD** by 2027
- North America to dominate the global AI chip market; with Asia-Pacific being the fastest-growing region
- One in Ten vehicles to be self-driven globally by **2030**
- PwC predicts AI to be improving productivity by **40%** by 2035
- **By 2025,** up to **85 million** jobs could be lost, but **97 million** new employments are anticipated to be created instead.
- AI specialists are in high demand; positions such as machine learning engineers, data scientists, and AI researchers are seeing a **74%** yearly growth in job listings as per **2024 r**eport.

Source: Forbes


The future of AI is indeed booming! Here are some facts and predictions for AI in 2024 and beyond



AI in Education

- Over **47%** of learning management tools will be powered by AI in the next three years.
- **20%** to **40%** of the current workload of teachers can be automated using current technology.
- The global market value of AI in education surpassed **$2 billion** in 2021 and is expected to grow by over **45%** CAGR between 2022 and 2030.

AI in Healthcare

- The global AI in healthcare market size was estimated at **$22.45 billion** in 2023 and is expected to expand at a CAGR of **36.4%** from 2024 to 2030.

AI in Finance

- The AI in finance industry is predicted to reach **$26.67 billion** by 2025.
- Nearly half **(49%)** of financial services firms have full-scale AI deployment.

AI in Agriculture

- The global AI in agriculture market is expected to grow at a CAGR of **24.5%**.
- The market generated **$1.2 billion** in revenue in 2022 and is projected to reach **$1.8 billion** in 2024.

AI in Retail

- The global AI in the entertainment and media market is projected to reach approximately **$4.86 billion** by 2025.
- The AI in retail market size is estimated at **$9.65 billion** in 2024 and is expected to reach **$38.92 billion** by 2029, growing at a CAGR of **32.17%** during the forecast period (2024-2029).

AI in Manufacturing

- The AI in manufacturing market size is estimated at **$9.65 billion** in 2024 and is expected to reach **$38.92 billion** by 2029, growing at a CAGR of 32.17% during the forecast period (2024-2029).

AI in Autonomous Vehicles

- The automotive AI market is projected to hit **$7 billion** by 2027.
- The global in-vehicle AI robot market size reached **$66.7 Million** in 2023 and is expected to reach **$230.4 Million** by 2032, exhibiting a growth rate (CAGR) of **14.6%** during 2024-2032.

AI in Space Exploration

- AI is playing an increasing role, most prominently in space exploration, autonomously navigating obstacles that stand in its way.

AI in Energy

- The global AI in the energy market is expected to reach **7.78 billion** U.S. dollars by 2024.
- AI's energy appetite is expected to consume between **85 and 134** terawatt hours of electricity each year by 2027.

AI in Entertainment

- By 2025, the global AI in the entertainment and media market is projected to reach approximately **$4.86 billion**.
- The global AI in media and entertainment market was valued at **$1.26 billion** in 2019 and is expected to achieve a CAGR of **28.1%** over the forecast period of 2020-2025.

AI Job Market Statistics

- The AI market size is expected to reach **$407 billion** by 2027.
- AI is expected to contribute a significant **21%** net increase to the United States GDP by 2030.
- AI is estimated to replace **85 million** jobs by 2025, but 97 million new jobs will be created due to AI.
- The global AI market is projected to reach **$190 billion** by 2025.
- AI is anticipated to have a significant impact on the job market, leading to both job creation and job displacement. Specifically, by 2025, the use of AI is expected to create **133 million** new jobs worldwide while eliminating **75 million** jobs.

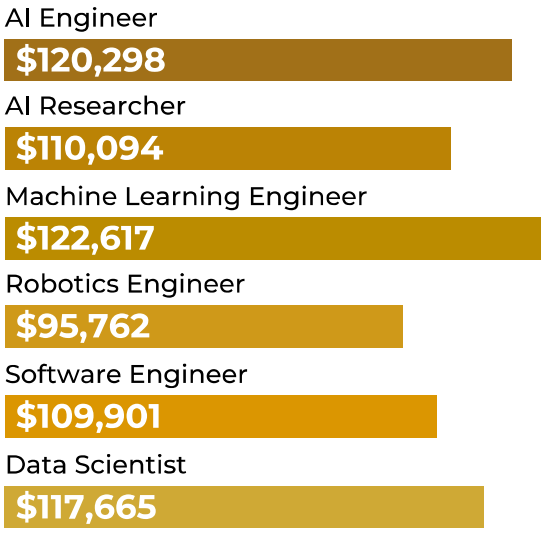
AI Job Roles in Demand

The demand for AI professionals is high and the following roles are particularly in demand:

- Machine Learning Engineer
- Data Scientist
- AI Research Scientist
- AI Ethics Consultant
- Robotics Engineer
- AI Product Manager
- AI Solutions Architect
- AI Quality Assurance Manager
- AI Research Scientist
- AI Prompt Engineer

Average Salary for AI Job Roles

Here are the average base salaries for various AI job roles in the United States:



Please note that these figures are averages and actual salaries can vary based on factors like location, years of experience, and the specific company. Also, these figures do not include additional compensation, such as bonuses, tips, profit sharing, or commission.

Top 7 AI Salary Projections 2024

ML Engineer

The projected annual salary for a Machine Learning Engineer is **USD 154,358**.

Big Data Engineer

The projected annual salary for a Big Data Engineer is **USD 133,279**.

AI Prompt Engineer

The projected annual salary for an AI Prompt Engineer is **USD 115,000**.

Robotics Engineer

The projected annual salary for a Robotics Engineer is **USD 101,616**.

Computer Vision Engineer

The projected annual salary for a Computer Vision Engineer is **USD 124,373**.

Cloud Engineer

The projected annual salary for a Cloud Engineer is **USD 123,667**.

Computer Scientist

The projected annual salary for a Computer Scientist is **USD 103,719**.

These figures are sourced from Indeed and represent projections for the year **2024**.

Source: Indeed

Key AI leadership roles that were prominent in 2023

- Chief AI Officer (CAIO)
- Chief AI Strategy Officer
- Chief AI Transformation Officer
- Chief Digital Officer
- Chief Transformation Officer
- Chief Data Officer

The rapid use of AI calls for a new breed of leaders— who can strategically integrate AI across the organization. This requires vision, ethics, and agility, beyond technical deployment.

Strategic Vision (Critical Skill): These executives need to have a forward-thinking mindset in order to create long-term plans that smoothly incorporate AI into current operations and future goals. (for example, $450,000 USD for a Chief AI Officer.)

Technical Proficiency (Important): Knowledge of AI technologies, data analytics, and machine learning ideas is essential for effective communication with technical teams and well-informed decision-making, even though deep coding skills is not required. Head of AI/Machine Learning, for example, makes about $380,000 USD.

Ethical Considerations (Essential): To ensure justice, accountability, and openness in the application of AI, leaders in this field must consider the ethical implications. Decision-making (e.g., AI Strategy Director: around $320,000 USD). (Head of AI/Machine Learning, for instance: about $380,000 USD)

AI Skills in Demand in 2024

Here are various technical skills that are expected to be in high demand in 2024.

Neural Networks

Understanding and implementing neural networks will be a key skill. Neural networks are a set of algorithms modeled after the human brain, that are designed to recognize patterns.

Data Engineering

This involves the collection, validation, storage, and analysis of large volumes of data, which is a fundamental part of developing effective AI systems.

Signal Processing Techniques

These techniques are used to analyze, modify, and synthesize signals, such as audio, images, and scientific measurements.

Linear Algebra and Statistics

A strong foundation in linear algebra and statistics is crucial for understanding and implementing many AI algorithms.

Data Security

With the increasing use of AI and data, ensuring the security of data is of paramount importance.

AI Prompt Engineering

This involves designing and refining AI prompts to elicit specific responses from AI models.

Soft Skills

While technical skills are important, soft skills like communication, problem-solving, and teamwork are equally crucial in the AI field.

Exploratory Data Analysis

This is the process of analyzing datasets to summarize their main characteristics, often using statistical graphics and other data visualization methods.

Programming Language Competency

Proficiency in programming languages such as Python, R, and Java is essential for implementing AI algorithms and models.

Deploying ML Solutions

This involves taking a trained machine learning model and making it ready for real-world use.

Generative AI

This is a subset of AI that includes generative adversarial networks (GANs) and is used to create new data that is similar to the input data.

Most sought after Tech Stacks for AI Jobs 2024

Here are various technical skills that are expected to be in high demand for AI jobs in 2024

Python

Python is a high-level, interpreted programming language known for its readability and vast library support, including numerous libraries for machine learning and data analysis.

R

R is a programming language and free software environment for statistical computing and graphics supported by the R Foundation for Statistical Computing.

SQL

SQL (Structured Query Language) is a standard language for managing and manipulating databases.

Tableau

Tableau is a powerful data visualization tool used in the Business Intelligence industry.

Spark

Apache Spark is an open-source, distributed computing system used for big data processing and analytics.

TensorFlow

TensorFlow is a free and open-source software library for machine learning and artificial intelligence.

PyTorch

PyTorch is an open-source machine learning library based on the Torch library, used for applications such as computer vision and natural language processing.

AWS (Amazon Web Services)

AWS is a secure cloud services platform, offering compute power, database storage, content delivery, and other functionality to help businesses scale and grow.

Scikit-learn (sklearn)

Scikit-learn is a free software machine learning library for the Python programming language.

Agile methodology

Agile methodology is a type of project management process, mainly used for software development, where demands and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and their customers.

Basecamp

Basecamp is a web-based project management tool developed by Basecamp and launched in 2004.

Perl

Perl is a high-level, general-purpose, interpreted, dynamic programming language.

Google Cloud Platform (GCP)

GCP is a suite of cloud computing services that runs on the same infrastructure that Google uses internally for its end-user products, such as Google Search and YouTube.

SCRUM methodology

Scrum is an agile framework for managing knowledge work, with an emphasis on software development.

Power BI

Power BI is a business analytics tool developed by Microsoft. It provides interactive visualizations and business intelligence capabilities with an interface that is easy to use for creating reports and dashboards.

Jira software

Jira is a proprietary issue tracking product developed by Atlassian that allows bug tracking and agile project management.

Conclusion

The rapid evolution of technology continues to drive significant changes across industries, prompting organizations to adapt and transform their business models to stay competitive. A McKinsey report claims that technology is significantly altering the nature of the workforce. Furthermore, the analysis indicates that by 2030, certain professions might experience a drop, requiring a change in a line of work. This pattern is indicative of an evolving labor market where previous job duties are replaced and rearranged by new opportunities. To prosper in this dynamic environment, people need to embrace lifelong learning and flexibility. With a 62% net effect, big data analytics is in the lead, followed by cloud computing at 40% and Artificial Intelligence at 33%. These figures demonstrate the increasing significance of knowledge in cloud computing, artificial intelligence, and data analysis. As highlighted in this trend report, emerging technologies such as artificial intelligence, blockchain, and the Internet of Things are reshaping the business landscape, offering new opportunities for innovation and growth. To thrive in this dynamic environment, professionals must acquire the latest skills and knowledge through certifications that are tailored to these evolving trends. Our certification company is committed to empowering individuals and organizations with the expertise needed to navigate these transformative changes successfully. Together, we can embrace the future with confidence and drive impactful business transformation.

Why AI Certs?

AI Certs offer role-based AI and Blockchain certifications . We help in creating a smarter workforce, adapting to change, and driving growth. Our Professional and Technical Series Certifications serve a broad range of users by confirming the competencies of IT and business professionals as they advance across the AI landscape. These qualifications provide:

Business Professionals: Capable of bridging the gap between technical implementation and business needs, and with the strategic acumen to comprehend AI's potential influence on their enterprises, facilitating its effective adoption.

IT professionals: Possessing the technical know-how necessary to successfully integrate AI technologies and optimize their value inside their respective technological ecosystems through design, development, deployment, and management.

By showcasing your expertise with our certificates, you let potential employers know that you're ready to make a significant impact in the rapidly developing field of artificial intelligence.

These globally recognized certifications adhere to rigorous industry standards (ISO 17024:2012), ensuring credibility. Furthermore, the curriculum is crafted by the industry experts with latest, high-quality content.

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