

## JOB MARKET RESEARCH


# AI Job Trends for 2025: Insights from a Year of Hiring Data




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## Top Insights from Aura's AI Job Market Research for 2025

1.  **AI Job Growth:** AI-related job postings peaked at 16,000 in October 2024, showcasing rapid expansion across industries.

2.  **Diverse Industry Demand:** AI adoption is booming in healthcare, management consulting, and staffing, beyond traditional tech sectors.

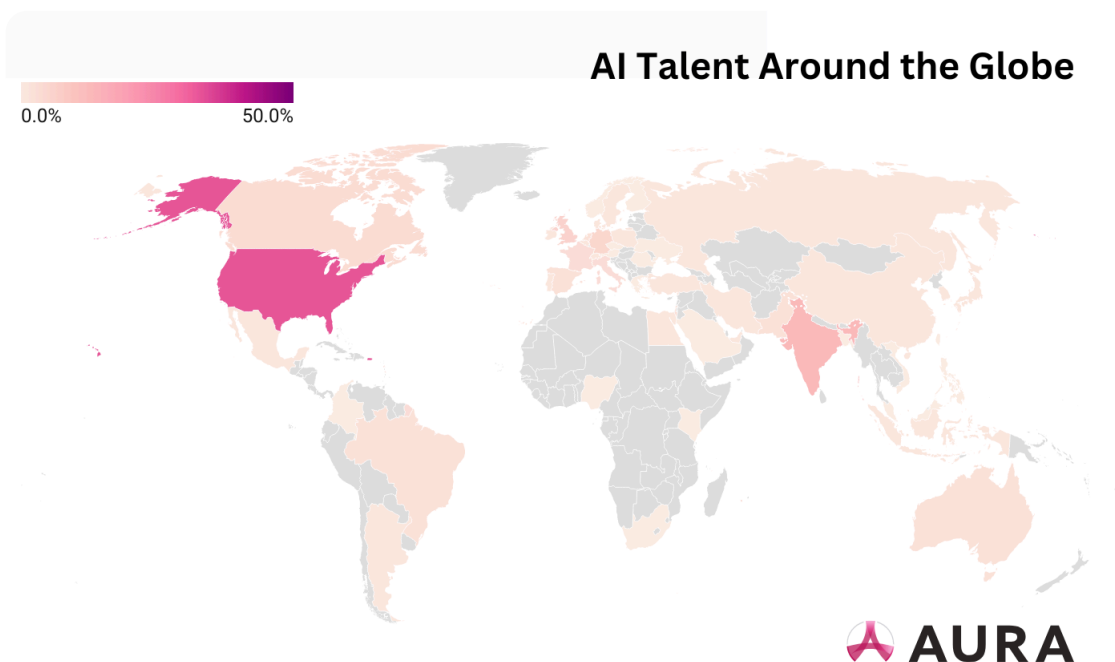
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3. 🔥 **Trending Job Titles:** Machine Learning Engineers remain top in demand, with emerging roles like Generative AI Engineer and Computer Vision Engineer growing rapidly.
4. 💡 **Key Skills to Watch:** Python, TensorFlow, PyTorch, and natural language processing (NLP) are dominating the AI talent landscape.
5. 🌐 **Regional Trends:** San Francisco leads as a talent hub, while other regions are catching up due to hybrid work opportunities.
6. 🤖 **Generative AI Revolution:** New creative roles emerge as tools like ChatGPT redefine media and design industries.

## AI Job Trends for 2025: What Aura's Data Tells Us

Artificial intelligence (AI) and machine learning (ML) are reshaping the global job market at an unprecedented pace. We've been tracking changes in the workforce each month, and these insights, compiled, provide insight into 2025. With insights drawn from Aura's comprehensive hiring data throughout the year, it's evident that AI-related jobs have moved beyond their niche to become a driving force in workforce transformation.

**Want to stay ahead of workforce planning in the age of AI? Book a demo of Aura's workforce intelligence platform to uncover actionable insights and top trends.**



# AI Job Trends in Numbers: A Year of Growth

The AI job market saw sustained growth this past year, with monthly AI-related job postings peaking in October at about 16,000 in our sample. This rapid growth reflects the increased demand for AI expertise across industries, as AI was rapidly propagated throughout organizations.

## AI Job Posting Trends



What's striking, however, is the diverse AI hiring demand from industries beyond tech and software. While the tech sector remains dominant, industries like healthcare, management consulting, and research, are demonstrating significant adoption of AI technologies. These sectors are leveraging AI for applications such as diagnostics, strategic advising, and operational analysis, showing that AI's influence is far-reaching, and penetrating broadly across sectors.

## Diversity of Companies Hiring AI Talent

An insight is the prominence of traditionally non-tech professional services companies leading in job postings. Consulting giants like Accenture and Deloitte rank among top recruiters for AI talent, reflecting the growing need for data-driven strategies in traditional industries. Recruiting companies like Adecco are aggressively hiring AI professionals for themselves and their clients, underscoring how deeply AI is being integrated and expanded.

## AI Job Titles

AI-related job titles we studied reflect increasing specialization beyond machine learning engineers, who still top the list of most requested roles. Emerging roles such as Generative AI Engineer, Computer Vision Engineer, and Remote AI Training Specialist highlight the niche areas where AI talent is most in demand. These positions reflect the growing complexity of AI systems, where expertise is becoming increasingly specialized and segmented.

The breadth and depth of AI-related job growth in 2024 show that it's no longer confined to tech firms or generalist roles—it's a universal force reshaping the global workforce.

# Industries Leading AI Job Trends in 2025

The Information Technology and Services sector is unsurprisingly leading in developing AI hiring demand. The internet sector, staffing and recruiting, and computer software follow, with notably strong demand in management consulting and hospital and healthcare industries.

## Top Industries for AI Hiring

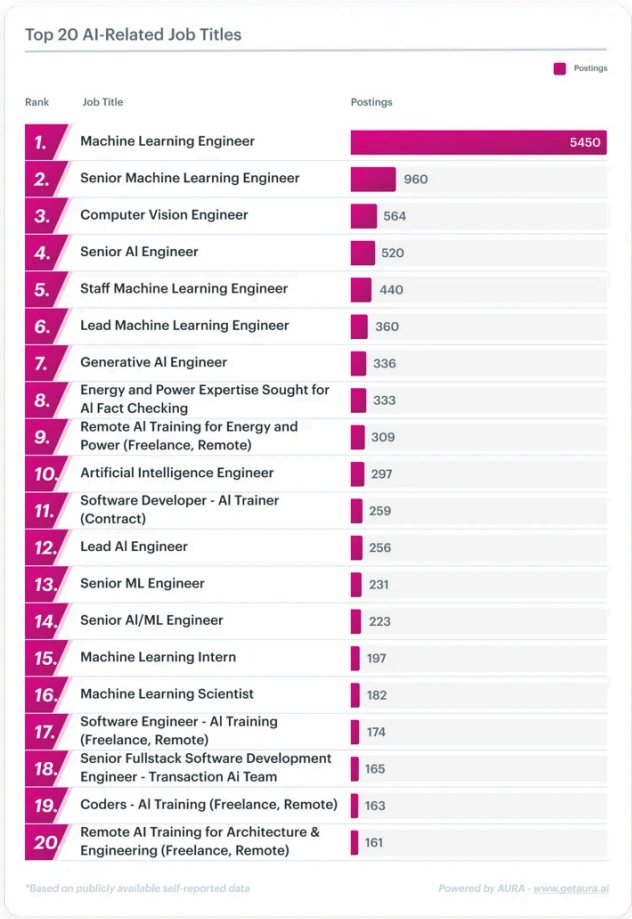


The diversity of industries hiring for AI roles highlights the universal applicability of AI technologies in solving real-world problems, from software co-development and marketing to optimizing staffing levels and analyzing and even responding to customer inquiries.

# Top AI Job Titles Trending in 2025

Among AI job titles, Machine Learning Engineer is the job title most in demand from employers, reflecting the critical need for professionals who can build machine learning systems and automate repetitive tasks. Senior Machine Learning Engineers, Computer Vision Engineers, and Generative AI Engineers are also in high demand.

## Top Job Titles in AI



These roles indicate a focus on advanced capabilities such as generative AI tools, deep learning, and computer vision for applications ranging from image recognition to content creation.

Monthly data and growth for each job title is available with Aura's platform or by request.

Employers are on the lookout for cutting-edge AI skills. Artificial intelligence, machine learning, and Python programming dominate the skill sets most in demand, with data science, computer vision, and natural language processing (NLP) following closely. Specialized AI frameworks like TensorFlow and PyTorch are critical for professionals aiming to develop deep learning models and other complex AI systems. Meanwhile, softer skills of problem-solving and data analysis remain core competencies for tackling real-world challenges.

The graphs below show current AI-related skills (listed on professional profiles, demonstrating talent supply) and AI skills in demand (from job market data, demonstrating talent demand.)

**Top Current and Most Requested AI Skills**

There's a noticeable shift from traditional programming to AI-specific tools. While foundational programming languages like Python remain critical, frameworks such as PyTorch and TensorFlow are quickly catching up. This shift may indicate that employers are prioritizing advanced AI applications like deep learning and neural networks, which promise more efficient productivity over traditional software development.



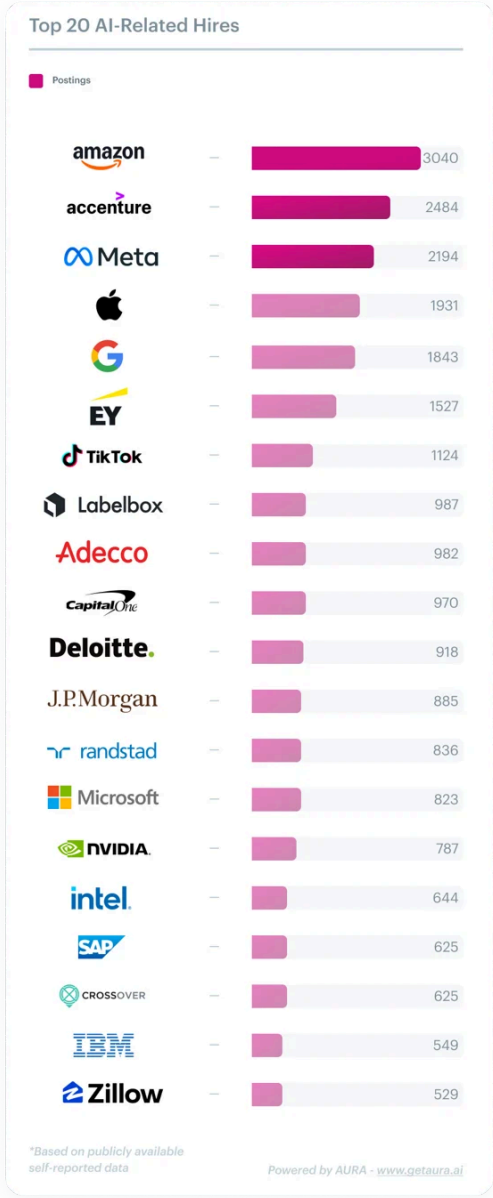
Leading tech giants like Amazon, Accenture, IBM, Google, Microsoft, and Meta posted thousands of AI-related job openings throughout the year, signaling their commitment to dramatically expanding their AI capabilities. Consulting firms like Deloitte and Ernst & Young also came up as top employers seeking AI talent, reflecting the increasingly broad spectrum of industries embracing AI, as well as the specific necessity for professional services and consulting firms to firmly embrace AI insights.

The consistent increase in postings from January to October of 2024, followed by a period of potentially seasonal, more flat numbers, indicates a strong and stable upward trend in AI job growth. This reflects the growing integration of AI into business operations, from optimizing supply chains to enhancing customer support. The focus on skills development and talent needs is evident as employers scramble to find candidates who can not only write code, but also apply AI tools to increase efficiency and productivity.

While AI's rapid growth is creating many jobs, concerns about job displacement persist. Roles like administrative assistants, marketing, and legal professionals are certainly evolving, with AI tools taking on repetitive tasks like data collection, content development, and fielding of customer inquiries. Much has been written about the vulnerability of certain jobs to automation and AI; Aura discussed it in further detail earlier last year.

However, this technological advancement also holds the potential to expand human capabilities and create new positions. Additionally, it creates new AI-specific roles in designing, managing,

and optimizing AI systems. Lifelong learning and the acquisition of new skills will be key for job seekers to stay competitive in the high-tech job market.





For job seekers, the key to thriving in this competitive job market lies in understanding in-demand skills and acquiring relevant qualifications. Whether it's a bachelor's degree in computer science or specialized AI certifications, job-ready candidates will be those who can provide real-world solutions through AI.

For consultants, M&A professionals, and private equity investors, tools like Aura's workforce analytics offer a competitive edge. By identifying talent trends, benchmarking workforce capabilities, and uncovering market patterns, Aura enables these stakeholders to make data-driven decisions. Whether evaluating acquisition targets or advising clients on talent strategy, Aura's insights help stay ahead of the curve in AI innovation.

**Stay ahead of AI job trends. Use Aura's workforce analytics to track hiring patterns and make strategic organizational and investment decisions.**

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AI job growth has shown sustained expansion throughout 2024, with monthly AI-related and specialized job postings peaking at about 16,000 in October. This trend reflects the increased demand for AI expertise across various industries, as AI technologies are being rapidly integrated into organizations beyond the tech sector.

While the Information Technology and Services sector leads AI hiring, other industries such as internet, staffing and recruiting, computer software, management consulting, and healthcare are



also showing strong demand. This diversity highlights the universal applicability of AI technologies in solving real-world problems across various sectors.

Machine Learning Engineer remains the most in-demand job title, followed by Senior Machine Learning Engineer, Computer Vision Engineer, and Generative AI Engineer. These roles indicate a focus on advanced capabilities such as generative AI tools, deep learning, and computer vision for applications ranging from image recognition to content creation.

The most in-demand AI skills include artificial intelligence, machine learning, Python programming, data science, computer vision, and natural language processing (NLP). Specialized AI frameworks like TensorFlow and PyTorch are critical for professionals aiming to develop deep learning models and other complex AI systems.

Non-tech industries are increasingly integrating AI into their operations. For example, healthcare is leveraging AI for diagnostics, management consulting firms are using it for strategic advising, and research institutions are applying AI for operational analysis. This broad adoption demonstrates AI's far-reaching influence across various sectors.

Consulting giants like Accenture and Deloitte are among the top recruiters for AI talent. This trend reflects the growing need for data-driven strategies in traditional industries and underscores how deeply AI is being integrated into professional services. These firms are hiring AI professionals both for internal use and to meet client demands.

Generative AI tools like ChatGPT are transforming creative industries, leading to the emergence of new roles that require a deep understanding of these technologies. This shift is creating opportunities for professionals who can leverage generative AI for content creation, design, and problem-solving across various sectors.

While AI's rapid growth is creating many new jobs, particularly in AI development and management, concerns about job displacement persist. Roles in administration, marketing, and legal professions are evolving, with AI tools taking on repetitive tasks. However, AI is also expanding human capabilities and creating new positions, emphasizing the importance of lifelong learning and skill acquisition.

Key trends include the rise of generative AI and creative roles, increased demand for hybrid skills combining technical expertise with strategic capabilities, and the continued prominence of tech hubs like San Francisco as talent magnets for AI and machine learning engineers. These trends highlight the evolving nature of AI jobs and the skills required to succeed in the field.

To thrive in the competitive AI job market, professionals should focus on understanding in-demand skills and acquiring relevant qualifications. This may include pursuing a bachelor's degree in computer science or specialized AI certifications. The key is to develop the ability to provide real-world solutions through AI, combining technical expertise with problem-solving skills.

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##### By: Aura Team

Aura's staff are dedicated experts in workforce analytics and organizational decision intelligence. Combining deep industry knowledge with cutting-edge AI technology, they empower clients to make smarter, faster, and more impactful decisions. With backgrounds in consulting, technology, and data science, Aura's team is passionate about delivering actionable insights that drive innovation and business success.

##### About: AI in the Workplace

AI in the workplace is transforming operations by optimizing talent strategies and streamlining decision-making. Aura uses advanced AI to deliver actionable workforce insights, helping businesses stay agile and competitive in today's fast-changing environment.

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