AI and Entry-Level Jobs: What Hiring Data Really Shows

IntuitionLabs.ai · Adrien Laurent · 2026-09-05 · ai entry level jobs · ai hiring data · entry level hiring trends · ai and youth unemployment · graduate hiring 2026 · ai job displacement · ai occupational exposure · junior job market ai

Executive Summary

Entry-level hiring data through September 2026 present a genuine puzzle, not a settled verdict. The most-discussed evidence is the Stanford Digital Economy Lab's **"Canaries in the Coal Mine"** study, which uses ADP administrative payroll records covering **more than 26 million U.S. workers** (digitaleconomy.stanford.edu) and finds that employment of workers aged 22 to 25 in AI-exposed occupations now sits **19% below** where it would be had it tracked less-exposed peers, up from a 15% shortfall a year earlier (digitaleconomy.stanford.edu) (digitaleconomy.stanford.edu). The authors are explicit that this is descriptive, not causal, evidence (digitaleconomy.stanford.edu), a caveat corroborated and extended by other researchers.

Federal Reserve Bank of New York researchers, using real-time job-postings data, found it **"difficult to attribute the recent slowdown in entry-level hiring to AI alone"** and that junior and senior hiring within highly AI-exposed occupations are moving **"broadly in parallel"** (libertystreeteconomics.newyorkfed.org) (libertystreeteconomics.newyorkfed.org). A separate New York Fed study attributes **64% of the rise in**

unemployment among young college graduates to remote work rather than generative AI, noting the increase **"predates the rapid diffusion of AI"** (libertystreeteconomics.newyorkfed.org) (libertystreeteconomics.newyorkfed.org). Harvard economist David Deming and University of Chicago economist Anders Humlum have separately pointed to timing problems and firm-level evidence, respectively, that complicate a simple AI-caused-it narrative (npr.org).

Official statistics confirm the underlying softness even where causal attribution remains contested. The U.S. unemployment rate for workers aged 20 to 24 stood at **7.1%** in August 2026, versus 4.1% overall (fred.stlouisfed.org), and the New York Fed's recent-graduate unemployment series read **5.6%** with underemployment near **42%** as of the second quarter of 2026 (newyorkfed.org). Globally, the International Labour Organization reports youth unemployment reached **12.4%** in 2025, or 67 million people, and estimates that **6.1%** of jobs held by workers aged 15 to 29 sit in occupations highly exposed to AI-related change (ilo.org) (ilo.org). Employer-side surveys diverge sharply: the SAP SuccessFactors and Findem "Early Talent in Peril" report found entry-level job openings fell **35%** in a single year (findem.ai), while NACE's spring 2026 survey of employers raised its Class-of-2026 hiring projection to a **5.6%** increase (naceweb.org) and Strada Institute found senior talent leaders are **2.7 times** more likely to expect AI to increase, not decrease, entry-level hiring (strada.org).

The clearest, most reproducible pattern across sources is not "AI destroys entry-level jobs" but a **seniority tilt**: postings and headcount data repeatedly show hiring shifting toward experienced workers while junior roles stagnate or shrink, most visibly in software development, where U.S. programmer employment fell **27.5%** between 2023 and 2025 while the more design-oriented "software developer" category fell only **0.3%** (spectrum.ieee.org) (spectrum.ieee.org). This report walks through the measurement methods behind "AI exposure," presents the core Stanford data alongside corroborating and conflicting sources, and sets out, as of September 2026, why the honest answer to whether AI hiring data show entry-level jobs disappearing is "the data show entry-level hiring has weakened, and AI is one of several plausible, only partially disentangled, contributors."

Introduction and Background

Since 2022, hiring for recent graduates and early-career workers in the United States has softened relative to the labor market as a whole, and the timing has coincided with the rapid public adoption of generative AI tools. That coincidence has produced two very different reads of the same underlying data. One read, associated most closely with a widely cited Stanford study, treats occupation-level declines in youth employment as an early, measurable signature of AI substituting for junior labor. A second read, developed largely by Federal Reserve economists and labor economists at other universities, argues that the same data are equally consistent with interest-rate-driven hiring freezes, a post-pandemic correction in remote and hybrid work arrangements, and a broader cooling of payroll growth that has nothing specifically to do with AI.

This report, current as of **September 2026**, sets out to answer a narrower and more useful question than "is AI taking entry-level jobs": what does the hiring data actually show, how is "AI exposure" defined and measured in the underlying research, and which parts of the observed decline can be causally separated from AI adoption using the evidence published so far. It complements, rather than repeats, IntuitionLabs' earlier analysis of the graduate job market (intuitionlabs.ai), which covered 2025-vintage survey data; this report focuses on the newer administrative payroll evidence, the formal exposure-measurement methods researchers use, and the growing set of studies that explicitly test and, in several cases, undercut a simple AI-caused-it narrative.

The report proceeds in five analytical steps: first, how researchers define and measure an occupation's "exposure" to AI, since every headline statistic in this debate depends on that definition; second, the core findings of the Stanford Digital Economy Lab's payroll-based study; third, corroborating and diverging evidence from employer surveys, job-board data, and government statistics; fourth, a breakdown by occupation and sector showing where the effect concentrates; and fifth, the competing macroeconomic and structural explanations that any reader should weigh against a purely AI-driven story. Because several of the underlying figures come from data series updated quarterly or from surveys with defined field dates, each statistic below is anchored to its observation date rather than presented as a permanent fact.

Measuring AI Exposure: Definitions and Methodology

Every claim that a given occupation is "AI-exposed" rests on a formal measurement method, and the two most widely used methods in the academic literature produce a specific, technical definition of exposure that is narrower than it sounds in press coverage. Understanding this method is necessary to interpret every downstream statistic in this report.

The first method, from Eloundou, Manning, Mishkin, and Rock's 2023 paper on large language models (**LLMs**) and labor markets, defines a task as **"exposed"** if **"access to an LLM or LLM-powered system would reduce the time required"** to complete it, holding output quality equal (arxiv.org). The authors set the exposure threshold at a **50%** reduction in completion time (arxiv.org), and applied this rubric to the roughly 19,000 task statements in the U.S. Department of Labor's **O*NET** occupational database, using both human annotators and GPT-4 to score each task (arxiv.org). The headline finding is that **around 80%** of the U.S. workforce could have at least 10% of its tasks affected by LLMs in this sense, while roughly **15%** of all worker tasks could be completed significantly faster with an LLM alone, rising to 47 to 56% once LLM-powered software tools are included (arxiv.org) (arxiv.org).

The second method, the **AI Occupational Exposure (AIOE)** index developed by Felten, Raj, and Seamans, links 10 categories of AI application (such as abstract strategy games or image recognition) to 52 human abilities cataloged in O*NET, using a crowd-sourced relatedness matrix, then weights each occupation's exposure by how prevalent and important those abilities are to the job (arxiv.org). Both methods depend on the same underlying data source: O*NET, which the U.S. Department of Labor describes as **"the nation's primary source of occupational information,"** developed under the sponsorship of the Department of Labor's Employment and Training Administration and covering more than 900 occupations with over 19,000 linked task statements (onetcenter.org) (onetcenter.org) (onetcenter.org).

Two methodological caveats matter for everything that follows. First, both sets of authors are explicit that **exposure measures technical feasibility, not adoption or job loss**. Felten, Raj, and Seamans state plainly that their index measures exposure **"to AI, but whether that exposure leads"** to job creation, displacement, or something in between is a separate empirical question their measure cannot answer (arxiv.org). Second, Eloundou and coauthors flag that their approach depends on the assumption that occupations can be meaningfully decomposed into discrete tasks; if that assumption fails, they write, **"our exposure analysis would largely be invalidated"** (arxiv.org), and they separately acknowledge **"a fundamental limitation… in the subjectivity of the labeling"** process itself, since annotators familiar with LLMs are not occupationally diverse (arxiv.org). Readers should treat any statistic labeled "AI-exposed occupation" as a statement about task-level technical substitutability estimated by a specific rubric, not as a direct measurement of actual job losses.

The Stanford "Canaries" Study: Core Findings

The single most-cited data source behind claims that AI is visibly reducing entry-level employment is **"Canaries in the Coal Mine? Six Facts about the Recent Employment Effects of Artificial Intelligence,"** by Stanford researchers Erik Brynjolfsson, Bharat Chandar, and Ruyu Chen, first released in August 2025 and updated most recently in **August 2026**. The study is built on administrative payroll data licensed from ADP, a payroll-processing firm whose records cover **over 26 million U.S. workers**, from which the authors construct a balanced analysis panel of several million employees per month, tracked at monthly frequency through June 2026 (digitaleconomy.stanford.edu) (digitaleconomy.stanford.edu). This is a meaningfully larger and higher-frequency dataset than the household surveys typically used in labor economics, which is part of why the study drew rapid attention.

The **headline finding**: employment of workers aged 22 to 25 in occupations classified as highly AI-exposed now stands **19% below** where it would be had it kept pace with employment growth among less-exposed occupations, a gap the authors describe as concentrated in young workers specifically, with no comparable shortfall for experienced employees in the same occupations (digitaleconomy.stanford.edu). This shortfall has widened over successive data releases: it measured 16% in the November 2025 version of the paper (digitaleconomy.stanford.edu) and, per the authors' own comparison, was 15% at the July 2025 data vintage before rising to 19% as of June 2026 (digitaleconomy.stanford.edu). The study classifies occupational exposure using the same Eloundou et al. (2024) task-substitution ratings described above, applied to O*NET job categories (digitaleconomy.stanford.edu), and further distinguishes occupations where AI usage (measured via the Anthropic Economic Index) is predominantly **"automative"** (substituting for tasks) from those where it is predominantly **"augmentative"** (complementing a worker). Ars Technica's coverage summarized the pattern: **"the findings are consistent with automation-oriented uses of AI substituting for labor while complementary uses are associated with flat or rising employment"** (arstechnica.com). The study also finds the effect works mainly **"through reduced hiring of young workers rather than increased separations"** (digitaleconomy.stanford.edu), meaning the pattern looks less like layoffs and more like fewer junior positions being filled in the first place.

Lead author Erik Brynjolfsson has publicly described the pattern as **"real, persistent and widening"** (arstechnica.com), but the authors' own paper is careful to state that it **"does not estimate a causal impact of AI: these are descriptive facts, and ongoing work is needed to"** establish causation (digitaleconomy.stanford.edu). Co-author Bharat Chandar has stated this even more directly in his own public explainer: **"We do not claim that these findings are fully driven by AI. Many other things changed in the US economy at the same time"** (bharatchandar.substack.com). The authors report that the education level of workers is **"the one control that attenuates"** the estimated gap most, and that the divergence between young and experienced workers persists even after excluding technology firms and computer occupations and after controlling for occupations' exposure to interest-rate increases and to remote-work amenability (digitaleconomy.stanford.edu) (digitaleconomy.stanford.edu).

The authors also disclose data limitations relevant to reproducing or extending the analysis: job titles are missing for **roughly 30%** of the ADP sample and are imputed where possible, and the analysis sample skews toward manufacturing and wholesale sectors, larger firms, and higher-exposure occupations relative to the broader economy (digitaleconomy.stanford.edu). Named methodological pushback exists as well: Fortune reported that Google economists Fabien Curto Millet and Zanna Iscenko argued interest rates, not AI, better explain the pattern,

a critique the Stanford authors address directly in their robustness section (fortune.com), and Apollo Global Management chief economist Torsten Slok has publicly asked, of the broader "AI jobs crisis" framing, **"where is the AI jobs crisis?"** pointing instead to a general low-hire, low-fire labor market (fortune.com).

Corroborating Evidence from Employer and Platform Data

Independent of the Stanford payroll analysis, several employer surveys and job-board datasets point in a broadly similar direction, though with differing magnitudes and, in some cases, opposite conclusions about near-term hiring intentions.

The SAP SuccessFactors and Findem **"Early Talent in Peril"** report, published **July 1, 2026** and based on a global survey of more than 1,700 early-talent workers and job seekers (findem.ai), found that open roles across the ten most common entry-level job titles **declined 35%** in a single year, from 2024 to 2025 (findem.ai). The same report found the share of new graduates securing employment within their graduation year has dropped **10%** since 2021 (findem.ai).

By contrast, the **National Association of Colleges and Employers (NACE)**, whose Job Outlook survey is the standard reference for U.S. campus recruiting, reported very different figures across two waves of the same hiring cycle. Its fall survey (fielded August 7 to September 22, 2025, with 183 respondents) projected just a **1.6%** increase in Class-of-2026 hiring (naceweb.org) (naceweb.org). Its spring update (fielded February 12 to March 17, 2026, sponsored by Jobscan, 185 respondents) reported a **5.6% median** hiring increase, with the largest employers, those above 5,000 employees, raising planned hiring by **8.7%** (naceweb.org) (naceweb.org) (naceweb.org). NACE says the spring release uses a median, whereas the fall release's **1.6%** figure was originally reported as a mean; it gives the fall median as **-2.4%**. The releases are therefore differently summarized survey waves, not a like-for-like revision. This swing across a single hiring season, from near-flat to moderately positive, illustrates how volatile employer-intention surveys can be and why single-wave figures should not be treated as stable facts.

Indeed Hiring Lab, using the platform's own job-posting data, documented entry-level postings declining **7.5%** year over year as of May 2026, even as senior-level postings rose **14.7%** over the same period (hiringlab.indeed.com) (hiringlab.indeed.com). In a companion analysis of the software sector specifically, Indeed found that **71%** of the year-over-year increase in software-development postings came from senior roles, leading its researchers to describe the pattern as consistent with **"a seniority-biased technological change"** (hiringlab.indeed.com) (hiringlab.indeed.com). ZipRecruiter's 2026 AI Employer Report, based on a survey of over 1,000 U.S. employers conducted June 11 to 18, 2026, found that **38%** of employers have already shifted basic data-entry and processing work off entry-level staff and onto AI tools (ziprecruiter-research.org) (ziprecruiter-research.org).

The Strada Institute for the Future of Work's survey of nearly 1,500 executives and senior talent leaders offers the most optimistic reading among the surveys collected here: senior leaders were found to be **2.7 times** more likely to expect AI to *increase* entry-level hiring in 2026 than to decrease it, and among firms citing a significant positive driver of increased entry-level hiring, **27%** named greater AI use as the single most important factor (strada.org) (strada.org). The same survey found **more than 40%** of employers report AI has increased the analytical responsibilities assigned to entry-level staff, suggesting a shift in job content rather than simple elimination (strada.org).

Table 1 below summarizes the major employer and platform data sources discussed in this section alongside the Stanford payroll study, to make the range of methods and findings directly comparable.

Table 1. Major Data Sources on AI and Entry-Level Hiring (as of September 2026)

Source	Method / Sample	Key Finding	As-of Date
Stanford Digital Economy Lab ("Canaries")	ADP administrative payroll panel, several million workers/month	Young workers (22-25) in AI-exposed jobs 19% below expected employment trend (digitaleconomy.stanford.edu)	August 2026 (June 2026 data)
SAP SuccessFactors / Findem	Survey of 1,700+ workers, 850M+ profiles analyzed	Entry-level open roles down 35% year over year (findem.ai)	July 2026
NACE Job Outlook (Spring Update)	Employer survey, n=185, Feb-Mar 2026	Class-of-2026 hiring projected up 5.6%, large firms +8.7% (naceweb.org)	April 2026
Indeed Hiring Lab	Platform job-posting data	Entry-level postings down 7.5% YoY; senior postings up 14.7% YoY (hiringlab.indeed.com)	May 2026
ZipRecruiter AI Employer Report	Survey of 1,000+ U.S. employers	38% of employers shifted data-entry tasks from entry-level staff to AI (ziprecruiter-research.org)	June 2026
Strada Institute	Survey of ~1,500 executives/talent leaders	Leaders 2.7x more likely to expect AI to increase, not cut, entry-level hiring (strada.org)	May 2026

As the table shows, methodology drives much of the apparent disagreement. Payroll and job-posting data (Stanford, Indeed) capture realized hiring outcomes and tend to show contraction concentrated in junior, AI-exposed roles, while forward-looking executive-intention surveys (NACE spring update, Strada) capture stated plans, which skew more optimistic, particularly among large employers whose hiring plans firmed up over the first half of 2026. Neither data type is more "correct" than the other; they measure different things; realized hiring outcomes versus employer sentiment, at different points in a still-unfolding hiring cycle.

Analysis of Key Segments: Which Entry-Level Roles Are Most Affected

Aggregate statistics obscure substantial variation by occupation and sector. The clearest segment-level evidence comes from software and technology roles, where SignalFire's industry analysis, cited by IEEE Spectrum, found entry-level hiring at the **15 biggest tech firms fell 25%** between 2023 and 2024 (spectrum.ieee.org). U.S. Bureau of Labor Statistics data cited in the same analysis show an even starker occupational split: employment classified under the **"programmer"** category fell a dramatic **27.5%** between 2023 and 2025, while the broader **"software developer"** category, which includes more design- and architecture-oriented work less amenable to AI code-generation tools, fell only **0.3%** over the same period (spectrum.ieee.org) (spectrum.ieee.org). This gap between narrowly defined coding roles and broader engineering roles is one of the more reproducible occupation-level findings in this literature, since it draws on official BLS occupational classifications rather than a single firm's proprietary exposure score.

Despite this, most employers surveyed do not describe their actions as outright replacement. NACE's Job Outlook 2026 data, as reported by IEEE Spectrum, found **61%** of employers say they are **not** replacing entry-level jobs with AI (spectrum.ieee.org), and a separate NACE analysis found only **11%** of employers are actively discussing using

AI to replace entry-level positions outright, with most instead reporting task-level changes (naceweb.org). What is changing quickly is the skill bar: NACE's spring 2026 survey found **more than one-third** of entry-level job postings now require AI skills, nearly triple the share reported in fall 2025 (naceweb.org). A Kelly Services staffing executive quoted by IEEE Spectrum described this shift in expectations as **"a tectonic shift,"** distinguishing task redefinition from headcount replacement (spectrum.ieee.org).

PwC's 2026 Global AI Jobs Barometer, drawing on more than one billion job advertisements across 27 countries, offers a striking segment-level nuance: entry-level roles that are highly exposed to AI have not uniformly shrunk. In PwC's U.S. analysis of entry-level postings in the **top AI-exposure quartile**, roles classified as **seniorised**—postings with at least 10 mentions of skills that were both new and traditionally senior—**grew 35% from 2019 to 2025**, while **non-seniorised** roles declined **10%** (pwc.com) (pwc.com). The same report found that jobs requiring specific AI skills are growing **almost eight times (69% versus 9%) faster** than the overall jobs market, alongside a rising wage premium for those skills (pwc.com). Read together with the Indeed and BLS occupational data above, the segment-level picture is less "entry-level jobs are disappearing" than "entry-level jobs are bifurcating," with routine, easily automatable roles contracting and AI-fluent junior roles expanding, sometimes within the same broad occupational category.

International data show a related but distinct pattern in South Korea, where platform data from JobKorea found AI-keyword entry-level postings rose **about 80%** year over year in the first five months of 2026 (biz.heraldcorp.com), and a Bank of Korea issue note found that **94%** of youth job losses over a four-year window (June 2022 to June 2026) occurred in sectors with high AI exposure (biz.heraldcorp.com). These figures suggest the segment-level dynamic identified in U.S. data, concentration of change in specific, identifiable job categories rather than a uniform decline, is not a purely American phenomenon.

Data Analysis and Evidence

This section consolidates the official government and international statistics that anchor the qualitative debate above in independently verifiable numbers, since survey-based and payroll-based figures can vary by methodology in ways official labor statistics do not.

In the United States, the Bureau of Labor Statistics' household survey data, mirrored through the Federal Reserve Bank of St. Louis's FRED database, put the unemployment rate for workers aged 20 to 24 at **7.1%** in August 2026, compared with an overall U.S. unemployment rate of **4.1%** the same month (fred.stlouisfed.org) (fred.stlouisfed.org). The unemployment rate for the broader 16-to-24 age bracket stood at **9.1%** in August 2026 (fred.stlouisfed.org), and labor force participation among 20-to-24-year-olds was **70.9%** the same month (fred.stlouisfed.org). The New York Fed's quarterly Labor Market for Recent College Graduates series, last updated for the second quarter of 2026, found the unemployment rate for recent college graduates specifically **"stayed elevated at about 5.6 percent, and the underemployment rate edged up to 42 percent"** (newyorkfed.org), a series the New York Fed notes is updated quarterly, generally in February, May, August, and November.

Broader macroeconomic context matters here. The Federal Reserve Bank of St. Louis noted that 2025's overall labor market cooling was severe: payroll growth **"decelerated dramatically, averaging a mere 35,000 new jobs"** per month, a pace far below the level needed to absorb new graduates at prior rates, and separately observed that **"the traditional premium associated with higher education"** in wages and employment outcomes may itself be weakening, independent of any AI-specific effect (stlouisfed.org) (stlouisfed.org).

Globally, the International Labour Organization's Global Employment Trends for Youth 2026 report, published August 11, 2026, found the global youth unemployment rate rose to **12.4%** in 2025, equivalent to **67 million** unemployed young people, alongside a global NEET (not in employment, education, or training) rate of **20%**, affecting more than **257 million** people (ilo.org) (ilo.org). Northern America (the ILO's regional grouping covering the United States and Canada) showed one of the sharper regional increases, with youth unemployment rising from **8.3%** in 2023 to **9.8%** in 2025 (ilo.org). Notably, the ILO's own report explicitly names AI as one of several contributing factors: UN News coverage of the report cited **"the effects of artificial intelligence (AI) on entry-level jobs, a lack of new highly-skilled positions and the [experience paradox]"** as combining to disadvantage young workers (news.un.org), and the ILO separately estimates that **6.1%** of jobs held by workers aged 15 to 29 sit in occupations highly exposed to AI-related change, with traditional entry points such as clerical, administrative, and manufacturing-related roles identified as shrinking (ilo.org) (ilo.org).

The Organisation for Economic Co-operation and Development (OECD) reported that its member-wide youth unemployment rate (ages 15-24) rose **0.2 percentage points to 11.4%** in April 2026, while the G7 subgroup's youth unemployment rate rose more sharply, by **0.5 percentage points to 10.6%**, a change the OECD attributed primarily to a **1.0 percentage-point increase in the United States** (oecd.org) (oecd.org).

Table 2 presents these official statistics side by side to make the comparative scale of the U.S. slowdown, relative to global and OECD averages, explicit.

Table 2. Official Youth and Graduate Labor Market Statistics (as of September 2026)

Metric	Value	Geography	Period	Source
Unemployment rate, ages 20-24	7.1%	United States	August 2026	BLS via FRED (fred.stlouisfed.org)
Overall unemployment rate	4.1%	United States	August 2026	BLS via FRED (fred.stlouisfed.org)
Recent college graduate unemployment	5.6%	United States	Q2 2026	Federal Reserve Bank of New York (newyorkfed.org)
Recent college graduate underemployment	42%	United States	Q2 2026	Federal Reserve Bank of New York (newyorkfed.org)
Youth unemployment rate (15-24)	12.4% (67 million)	Global	2025	International Labour Organization (ilo.org)
Youth unemployment rate (15-24)	9.8% (up from 8.3% in 2023)	Northern America	2025	International Labour Organization (ilo.org)
Youth unemployment rate (15-24)	11.4%	OECD average	April 2026	OECD (oecd.org)
Youth unemployment rate (15-24)	10.6%	G7 average	April 2026	OECD (oecd.org)

As Table 2 shows, the U.S. youth labor market has weakened by more than the OECD or G7 average over the same window, which is consistent with, but does not by itself prove, an outsized U.S.-specific AI effect; it is equally consistent with the U.S.-specific interest-rate and hiring-freeze dynamics discussed in the following section.

Case Studies and Real-World Examples

Two neutral, publicly documented employer examples illustrate how individual organizations are responding to AI in ways that complicate a single narrative of entry-level job elimination.

McKinsey & Company: Expanding, Not Cutting, Junior Headcount

At a media event in New York in September 2025, McKinsey senior partner Eric Kutcher stated that the firm intends to **grow its North American non-partner staff 15 to 20% over five years** and increase 2026 hiring by **12%** compared with 2025, explicitly framing this as a response to sustained demand rather than a retreat from junior hiring despite the firm's heavy internal use of AI tools (business-standard.com). Kutcher argued that AI does not substitute for the analytical and creative problem-solving work performed by junior consultants, describing the intellectual demands of the role as unchanged: **"the same level of intellect, the same level of pace"** (business-standard.com).

Cosmax Group: Adding AI Proficiency as a Hiring Qualification

Korean cosmetics manufacturer Cosmax Group, for its first-half 2026 open recruitment cycle, added **"AI utilization capability"** as a preferred qualification across research, marketing, sales, procurement, and management roles for the first time, a company representative saying, **"starting with this open recruitment, we added"** the requirement in response to rising day-to-day use of AI tools across departments (biz.heraldcorp.com). This example illustrates a pattern also visible in the NACE and Strada survey data above: employers redefining the entry-level qualification bar to include AI fluency rather than reducing the number of entry-level positions outright.

Implications and Future Directions

For employers, the weight of the evidence points toward a **redefinition of entry-level work** rather than its wholesale elimination in the near term. Gartner's survey research (via a Q4 2025 poll of 110 HR heads, reported by IT-Online) found that nearly a quarter of organizations have **at least one business leader who has stopped hiring for entry-level roles** in response to AI automation (it-online.co.za), yet Gartner's own HR practice recommends against this, warning that **"cutting their early career talent pipelines altogether risk[s] creating significant workforce challenges"** later, since today's entry-level hires are tomorrow's mid-career and senior staff (it-online.co.za). Organizations that eliminate entry-level roles wholesale risk a multi-year talent gap once current mid-career cohorts age out, a structural risk distinct from this year's hiring statistics.

For universities, career-services offices, and workforce-development bodies, the segment-level evidence in this report (the sharp BLS-documented divide between "programmer" and "software developer" employment, PwC's narrowly scoped U.S. posting analysis, which found growth in seniorised roles and decline in non-seniorised roles within the top AI-exposure quartile, and NACE's finding that AI-skills requirements in entry-level postings have nearly tripled since fall 2025) argues for curriculum and advising strategies that emphasize AI fluency and the higher-order analytical, judgment, and communication skills that current exposure-measurement methods classify as least substitutable, rather than treating "entry-level jobs" as a single undifferentiated category.

Consultancies advising regulated industries on AI adoption have generally converged on a structured, role-by-role approach rather than broad workforce substitution. IntuitionLabs, a life-sciences-focused AI consultancy, positions its own advisory work around this model, describing its approach as turning AI capability into governed, department-level operating capacity: **"AI Acceleration for Life Sciences: Turn AI into Working Time"** (intuitionlabs.ai), with implementation organized around **"role-specific capability across regulatory, medical writing, clinical operations, medical affairs, quality, CMC, and commercial teams"** rather than blanket automation of a function (intuitionlabs.ai). That framing is consistent with the broader evidence surveyed here: employers appear, on balance, to be redesigning entry-level roles around AI-augmented workflows more often than eliminating them outright, though the Stanford payroll data show that in occupations where AI use is genuinely substitutive rather than complementary, hiring of young workers has measurably slowed.

Looking ahead, the research agenda flagged by the Stanford authors themselves, disentangling AI's contribution from interest rates, remote work, and the broader post-pandemic hiring correction, will require additional data vintages and, ideally, natural experiments (such as staggered enterprise AI rollouts) that current descriptive payroll and survey data cannot provide. Until such causal evidence exists, employers, universities, and policymakers should treat the 19% Stanford gap, the 35% Findem decline, and the 27.5% BLS programmer-employment drop as strong, well-documented associations rather than proven AI-caused outcomes.

Conclusion

The reproducible core of the evidence, drawn from ADP payroll data, BLS occupational statistics, and multiple independent employer and platform surveys, is that entry-level hiring in AI-exposed occupations has weakened relative to hiring for experienced workers since roughly 2022, and that this gap has widened through 2026 rather than closing. What the same evidence does not yet establish, and what its own authors are careful not to claim, is that AI is the primary or sole cause of that gap. Remote-work normalization, an unusually sharp slowdown in overall payroll growth, interest-rate-driven hiring caution, and a weakening college wage premium each have independent, Federal Reserve-documented support as contributing factors. The most defensible summary, as of September 2026, is that AI hiring data show entry-level roles narrowing and shifting in composition, with routine tasks increasingly reassigned to AI tools and a rising skills bar for the roles that remain, rather than definitive proof that AI has caused entry-level jobs to disappear. Readers using this report as a citation source should track the quarterly and survey-wave updates noted throughout, since several of the underlying figures (the Stanford gap, NACE's seasonal hiring projections, and quarterly BLS and New York Fed releases) are updated on defined schedules and are likely to move before this analysis is revisited.

Frequently Asked Questions (FAQs)

Does AI hiring data show entry-level jobs disappearing? The data show entry-level hiring has weakened relative to overall and senior-level hiring, most clearly in the Stanford payroll study's 19% employment gap for young workers in AI-exposed occupations (digitaleconomy.stanford.edu), but the same researchers and several independent

economists caution this is descriptive association, not proven causation (digitaleconomy.stanford.edu).

Is AI replacing entry-level workers outright? Most survey evidence says no in the majority of cases: NACE found 61% of employers say they are not replacing entry-level jobs with AI (spectrum.ieee.org), and only 11% of employers are actively discussing outright replacement (naceweb.org). More common is task reassignment, with ZipRecruiter finding 38% of employers have shifted routine data-entry tasks from junior staff to AI tools (ziprecruiter-research.org).

What explains entry-level hiring trends besides AI? New York Fed research attributes 64% of the rise in youth unemployment among college graduates to remote-work dynamics rather than generative AI (libertystreeteconomics.newyorkfed.org), and St. Louis Fed research points to a broad, dramatic slowdown in overall payroll growth as a contributing factor (stlouisfed.org).

How is "AI hiring statistics 2026" data collected? Sources vary widely in method: the Stanford study uses administrative payroll data (digitaleconomy.stanford.edu), NACE and Strada use employer surveys with defined field dates and sample sizes (naceweb.org) (strada.org), and Indeed Hiring Lab analyzes platform-level job-posting data at scale (hiringlab.indeed.com).

Does AI reduce entry-level positions in every sector equally?

No. The clearest documented reduction is in narrowly defined coding/programmer roles, down 27.5% by BLS classification between 2023 and 2025, versus a 0.3% decline in the broader software-developer category over the same period (spectrum.ieee.org) (spectrum.ieee.org). In PwC's U.S. top-AI-exposure-quartile posting analysis, seniorised entry-level roles grew 35% from 2019 to 2025 while non-seniorised roles declined 10% (pwc.com) (pwc.com).
