



UPPER INDUSTRY REPORT • AUTOMOTIVE TALENT

The Automotive Talent Market in 2026.

How parallel AI sourcing wins both automotive talent markets at once — scarce software-defined-vehicle engineering and skilled trades.

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20,000+

U.S. salaried positions cut by Detroit's Big Three since peak employment — even as they post 2,000+ open roles.¹

120+ days

to fill engineer, researcher, and scientist roles in automotive/manufacturing.⁵

0.38

supply-to-demand ratio for autonomous-driving engineers in China's NEV sector.³

-16,200

U.S. motor vehicles and parts jobs, year-over-year through May 2026.⁴

~90%

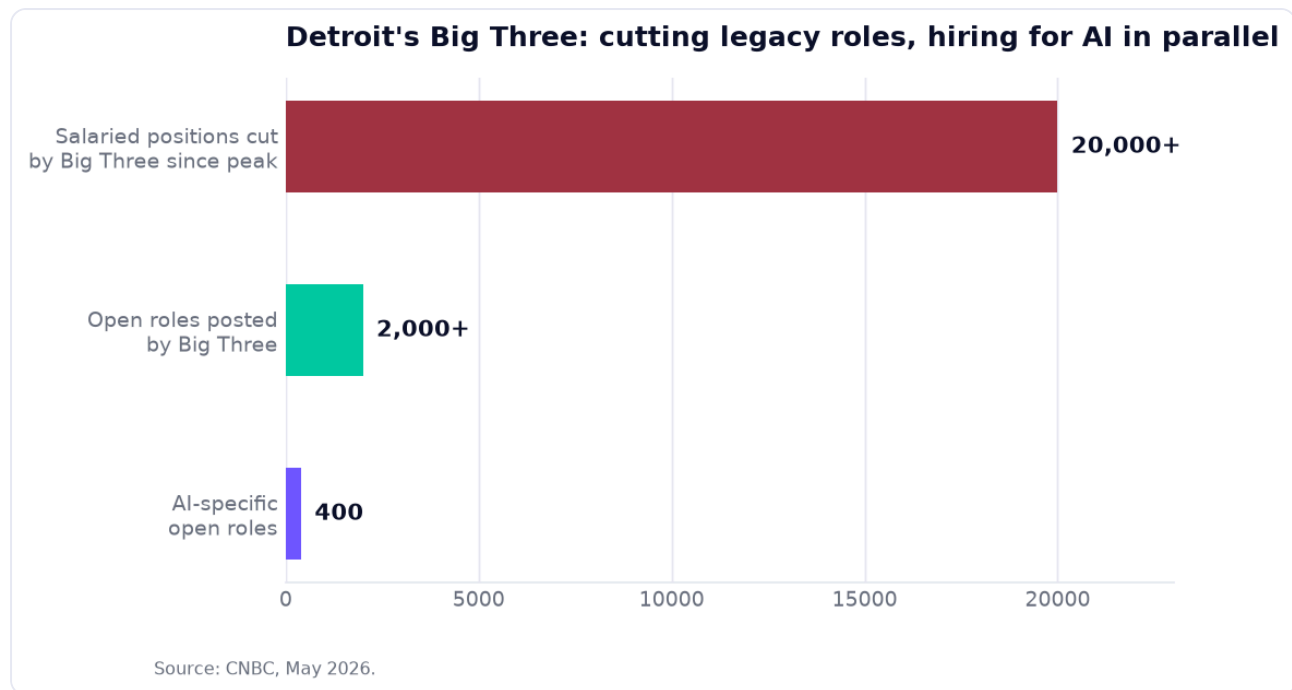
of the code in GM's autonomous-driving software is now AI-written, up from near zero two years ago.²

01 — The Bifurcation

Why is automotive both cutting jobs and hiring at once?

Automotive's 2026 labor market is really two markets moving in opposite directions — shrinking legacy, scarce software.

Detroit's "Big Three" automakers have collectively cut **more than 20,000 U.S. salaried positions — 19% of their combined white-collar workforce** — since peak employment earlier this decade, even as they simultaneously post **over 2,000 open roles**, nearly 400 of them AI-specific.¹ GM is executing a direct "skills swap," laying off **500–600 IT workers** while hiring AI-native engineers, data engineers, and prompt specialists — and reports that **nearly 90% of the code in its autonomous-driving software is now AI-written**, up from near zero two years ago.²



Source: CNBC, May 2026.

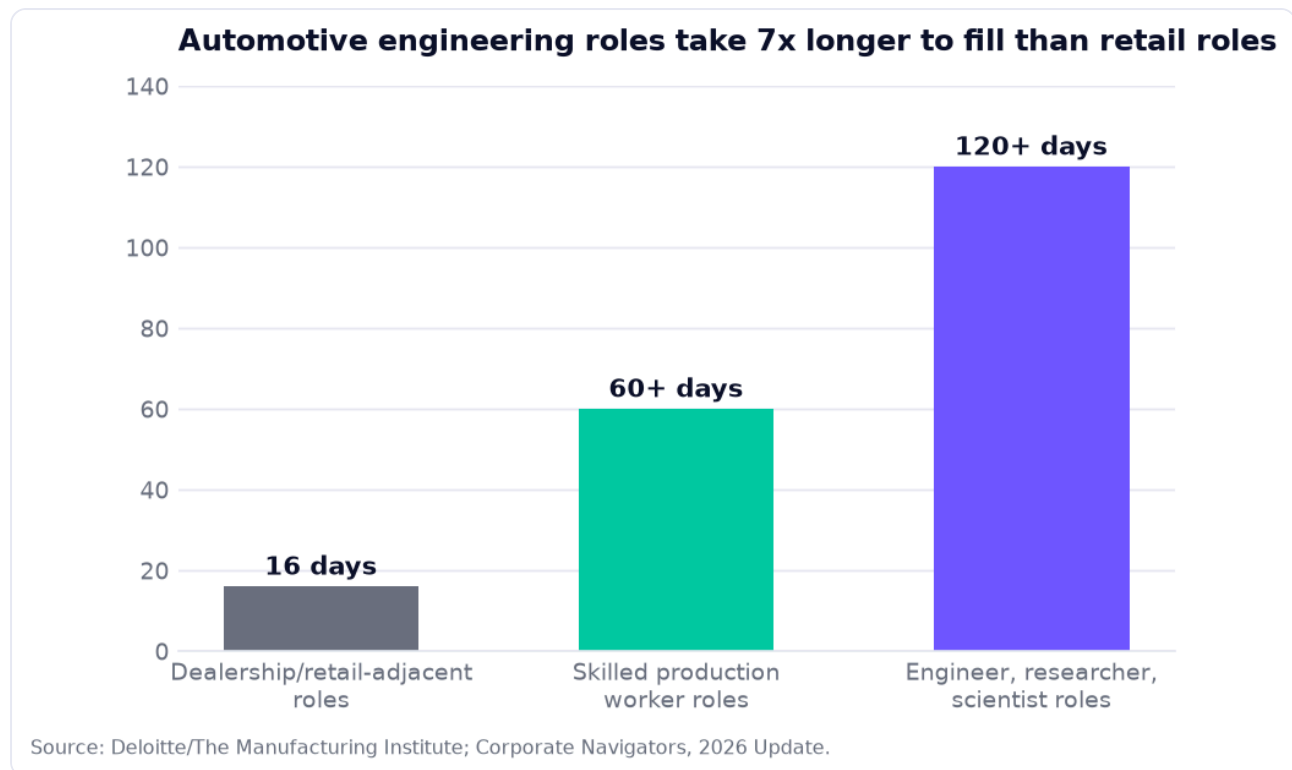
In the U.S., the same bifurcation shows up inside individual companies — a skills swap, not a simple cost-cutting headcount reduction, reflecting a broader pivot toward software-defined vehicles.²

02 – The Clock

How long does it really take to fill automotive roles?

Engineering and research roles take 4x longer than skilled production roles, and 7x longer than retail-adjacent roles.

Skilled trades and engineering hiring in automotive already runs far longer than typical white-collar benchmarks. Deloitte/Manufacturing Institute data show it takes **more than 2 months (60+ days) to fill skilled production worker roles, and more than 4 months (120+ days) to fill engineer, researcher, and scientist roles** — among the longest cycle times of any occupational category tracked.⁵ This contrasts sharply with the broader "Automotive" category in general recruiting benchmarks, which some staffing firms peg as low as **16 days** for typical dealership/retail-adjacent roles.¹³



Source: Deloitte/The Manufacturing Institute; Corporate Navigators, 2026 Update.

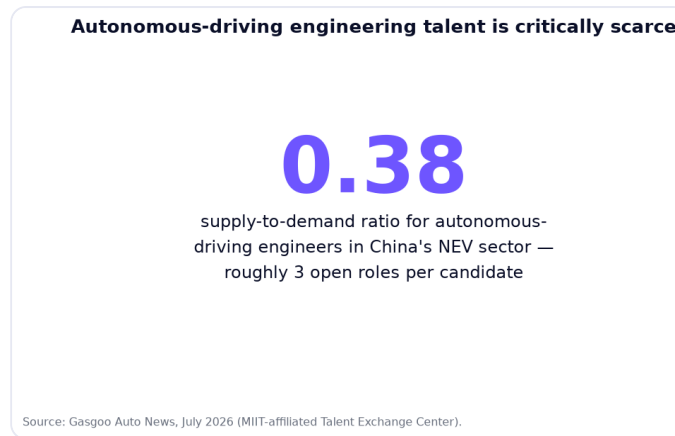
Deloitte and The Manufacturing Institute project the U.S. manufacturing skills gap could leave an estimated **2.4 million positions unfilled and put \$2.5 trillion in manufacturing GDP at risk** over the coming decade.⁵

03 – The Global Scramble

Why is software-defined-vehicle talent so hard to find?

Automakers are structurally disadvantaged against tech and EV-native rivals for the software engineers their strategy depends on.

China's new-energy vehicle (NEV) sector faces a projected talent shortfall of **1.03 million workers**, with the supply-demand ratio for autonomous-driving engineers at just **0.38** — meaning roughly three open roles compete for every one qualified candidate — prompting automakers to open R&D centers in the U.S., Europe, and Japan purely to hunt for scarce global talent.³



Source: Gasgoo Auto News, July 2026 (MIIT-affiliated Talent Exchange Center).

Compensation gaps versus tech and EV-native rivals persist: historical comparative data show traditional automaker software engineers earning meaningfully less than counterparts at Tesla, Rivian, Cruise, and Big Tech for comparable roles — even accounting for regional cost-of-living differences. Current U.S. market data put automotive software engineer total pay in the **\$100K–\$158K range** with a median near **\$125K**.

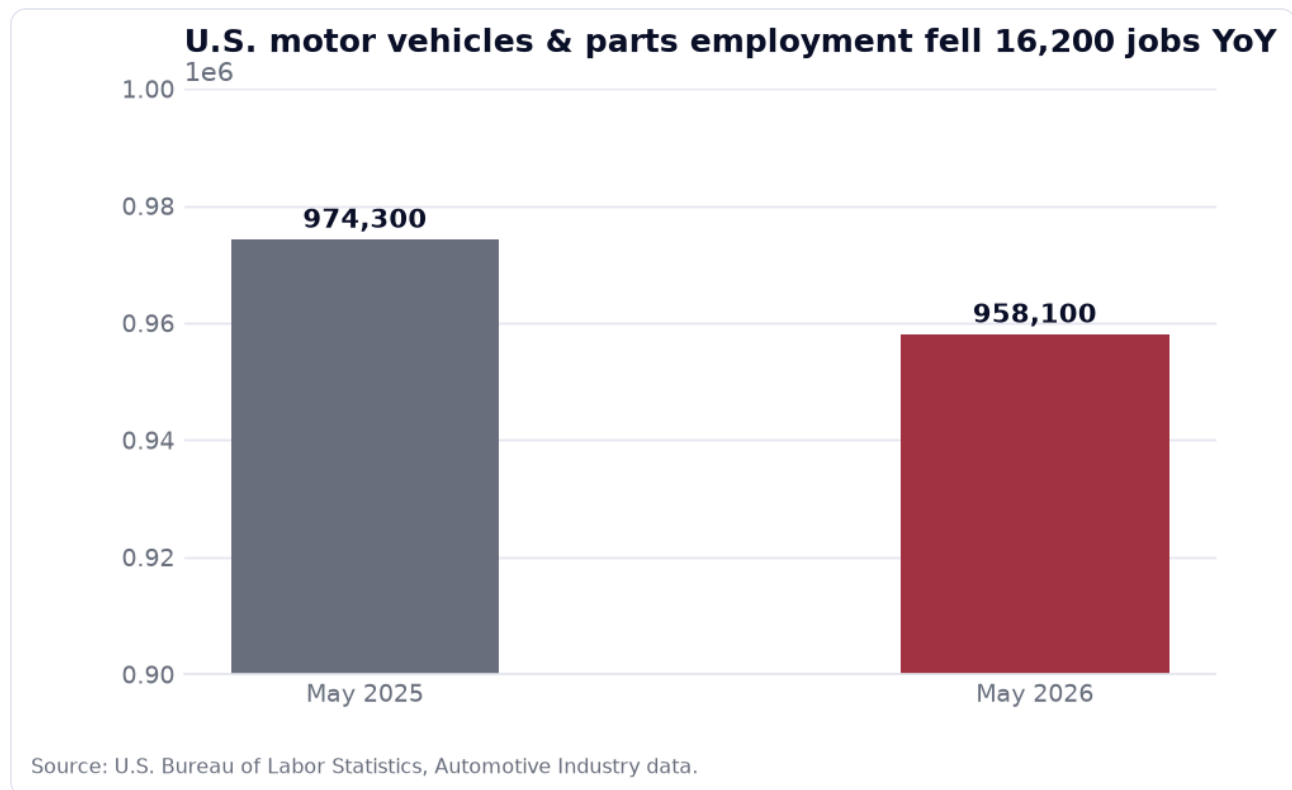
"Automakers are turning to more dynamic, always-on sourcing rather than static annual hiring plans — treating talent with the same forecasting rigor applied to parts and materials."

04 – The Volatility

Why does automotive hiring whiplash so hard?

EV retrenchment is producing large, repeated layoff waves — making static annual hiring plans obsolete.

U.S. motor vehicles and parts manufacturing employment fell **16,200 jobs year-over-year** through May 2026, continuing a multi-year contraction even as EV and software roles remain understaffed.⁴ GM idled Factory Zero to a single shift in January 2026 (cutting ~1,200 jobs), temporarily laid off **1,300 workers** in a subsequent 30-day production adjustment, and paused battery-cell production at its Ultium plants in Ohio and Tennessee, affecting **2,100 more workers**.⁶⁷ Ford and Stellantis show the same pattern of volatility across their EV programs.⁸⁹



Source: U.S. Bureau of Labor Statistics, Automotive Industry data.

This volatility is precisely why automakers are turning to more dynamic, always-on sourcing rather than static annual hiring plans — industry white papers explicitly call for automakers to apply "predictive hiring, workforce modeling, and talent logistics" with the same rigor as supply-chain planning.¹¹

05 – The Reskilling Wave

What happens to workers displaced by the ICE-to-EV shift?

The legacy-to-EV workforce transition is a global undertaking, and reskilling ICE-trained talent is now a strategic sourcing category.

Tata Motors has committed to reskilling **more than 50% of its workforce** (with over 57,000 employees at various stages of training) to move mechanical engineers who worked on internal combustion engines into electronics and software disciplines.¹² In the U.S. supply base, the disruption has been severe enough to trigger major supplier restructuring: Bosch announced plans to cut **13,000 jobs** (10% of its German workforce), and ZF Group announced it would lay off **7,600 employees** in its electrified powertrain unit by 2030.¹⁰

Manufacturers cite shifting skillsets from new technology/automation and the retirement of baby boomers as the two leading structural drivers of the skills gap, with **50% of manufacturers already having adopted automation** and citing critical thinking, programming, and digital skills as the top capabilities needed going forward.⁵

06 – The Playbook

What should an automotive talent team do about it?

Five moves separate the manufacturers and suppliers that will win the next 24 months of automotive hiring:

- 1. Source simultaneously across two very different talent markets.** Build parallel, purpose-built pipelines for software/AI engineering talent (competing directly with Big Tech compensation and speed norms) and skilled-trades/manufacturing talent.
- 2. Move faster than the 4-month engineer/scientist hiring cycle.** Automated sourcing that pre-qualifies SDV, battery, and autonomous-driving engineering candidates can compress the 120+ day traditional cycle materially.
- 3. Track and target the scarce autonomous-driving/software talent pool globally.** With a supply-demand ratio as thin as 0.38 candidates per role, this requires continuous, cross-border sourcing rather than reactive regional postings.
- 4. Support reskilling-to-hiring pipelines for the ICE-to-EV transition.** Identify internal or externally displaced ICE-trained engineers and technicians who are strong reskilling candidates for EV/battery/software roles.
- 5. Apply predictive, supply-chain-style workforce planning to hiring.** Run talent acquisition with the same forecasting discipline used for parts and materials.

This is precisely the model UPPER was built to run: autonomous sourcing that runs two parallel pipelines at once — scarce SDV/battery engineering and skilled-trades roles — so automotive talent teams stop losing the talent war on either front.

Sources

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This report synthesizes third-party research current as of July 2026; figures are attributed to their original sources above. Automotive software engineer salary figures are crowdsourced/aggregator compensation data rather than government statistics and should be read as directional market benchmarks; China NEV talent-shortfall figures are drawn from a single named industry source and should be treated as an industry estimate. UPPER edition H2 2026 — refreshed semiannually.