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A Problem and Opportunity Statement for Diversity Talent in the era of AI

The rapid adoption of artificial intelligence (AI) across technology companies such as Original Equipment Manufacturers (OEM) and Software-as-a-Service (SaaS) organizations has intensified the demand for a technology workforce equipped with advanced AI competencies. However, while the need for AI-capable talent grows, the available pipeline remains underprepared. Despite a doubling of computer science graduates in U.S. universities between 2013 and 2022, employers report difficulty finding candidates with the “right” combination of AI-related technical and human skills (Borchers, 2025). Many OEMs and SaaS companies have responded by automating or eliminating entry-level roles and focusing hiring on elite AI engineers, inadvertently constricting pathways for new graduates to enter the workforce (Edmonson & Chamorro-Premuzic, 2025).

This structural shift has produced a dual challenge: a shortage of job-ready talent and the underrepresentation of diverse students in the technology pipeline. Underrepresented college students—particularly women, Black, and Hispanic learners face disproportionate barriers to AI-related employment due to limited access to mentorship, inclusive networks, and experiential learning opportunities (Barton, 2021; Orduna, 2021). As a result, technology based companies risk overlooking an untapped source of innovation and creativity that could strengthen their competitive advantage.

While many organizations emphasize technical mastery in AI, evidence increasingly shows that soft and critical skills including communication, creativity, adaptability, and ethical reasoning are equally vital for effective human–AI collaboration (Sanders & Wood, 2023; Hosseinian et al., 2025). These foundational skills are directly linked to long-term employability, innovation capacity, and wage growth (Housseinioun et al., 2024). Companies that fail to integrate these competencies into their workforce

development strategies risk widening skill and diversity gaps, perpetuating inequities, and limiting innovation.

The opportunity, therefore, lies in reimagining the technology talent pipeline by infusing AI-critical and human skills development into undergraduate programs for underrepresented technology students. By aligning higher education, industry, and policy initiatives to cultivate hybrid skill sets, organizations can expand access to AI careers, foster inclusion, and strengthen innovation capacity. Developing this integrated talent pipeline ensures that technology companies not only remain competitive in the evolving AI economy but also leverage the full spectrum of human potential driving the future of work.

References

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