New Research: More Than 1.2 Million Job Vacancy Postings in Computer Occupations in the U.S.

Vacancies Up 15% in 6 Months; More Than 20 Times as Many Vacancies as New H-1B Petitions in Computer Occupations

Arlington, Va. – There are more than 1.2 million unique active job vacancy postings in computer occupations in the United States as of September 6, 2021, up 15% from 6 months earlier, according to an analysis by the National Foundation for American Policy (NFAP), a nonpartisan policy research organization. The analysis is based on data from Emsi Job Posting Analytics.

The latest vacancy numbers show that even if one adopts a zero-sum approach, there are more than 20 times as many job vacancy postings in computer occupations today as new H-1B petitions typically used by companies in computer occupations each year. There are also likely many more openings than publicly posted positions. There is not a fixed number of jobs, and people with high skills often create more jobs for people with complementary skills.

Additional evidence that H-1B visa holders are not “taking jobs” from U.S. workers is that top employers of H-1B visa holders in FY 2020 have many active job postings in computer occupations. Amazon had at least 20,000 job vacancy postings in computer occupations as of September 6, 2021, Accenture had more than 19,000 and Apple had at least 5,700. These companies and others also had many job vacancy postings for high-skilled positions in non-computer occupations, including management analysts, operations managers, marketing managers and others.

“Companies have an ongoing need for more highly skilled professionals to grow, and an insufficient number of available workers slows growth in the U.S. economy and encourages businesses to move more work outside the United States,” said Stuart Anderson, executive director of the National Foundation for American Policy.

The postings in computer occupations include 435,639 active job vacancy postings for software developers and software quality assurance analysts and testers, 112,990 for network and computer system administrators, 110,134 for computer systems analysts, 76,126 for information security analysts and 47,181 for electrical engineers. These occupations track those eligible for H-1B visas, according to DHS and BLS data.

The data point to a significant talent gap in the United States between the demand for high-skilled technical labor and the ability of the U.S. labor force to fill that demand. “At U.S. universities, foreign nationals account for 82% of the full-time graduate students in petroleum engineering, 74% in electrical engineering and 72% in computer and information sciences,” according to an NFAP analysis of data from the National Science Foundation.
Lack of access to H-1B visas and long waits for employment-based green cards have discouraged international students from coming to the United States in recent years.

“Computer jobs were already fast-growing before the pandemic, but it is still remarkable to see now a 15% increase in job postings from 6 months ago, after an 11% increase from the previous 12-month period,” said Mark Regets, a labor economist and a senior fellow at the National Foundation for American Policy. “This is consistent with the low unemployment rates we see in computer occupations. Firms have needed a lot of IT (information technology) talent to reorganize their businesses during the pandemic, and many of the changes will be long-term.”

“H-1B visa holders do not adversely affect U.S. workers,” according to a May 2020 National Foundation for American Policy study by Madeline Zavodny, formerly an economist at the Federal Reserve Bank of Atlanta (and Dallas) and a professor of economics at the University of North Florida (UNF) in Jacksonville. “On the contrary, the evidence points to the presence of H-1B visa holders being associated with lower unemployment rates and faster earnings growth among college graduates, including recent college graduates.”

The U.S. unemployment rate in computer and mathematical occupations was 1.5% in August 2021, declining from a 3.0% unemployment rate in computer occupations in January 2020, before the start of the pandemic, according to the Bureau of Labor Statistics (BLS).

About the National Foundation for American Policy
Established in 2003, the National Foundation for American Policy (NFAP) is a 501(c)(3) non-profit, non-partisan public policy research organization based in Arlington, Virginia focusing on trade, immigration and related issues. The Advisory Board members include Columbia University economist Jagdish Bhagwati, Ohio University economist Richard Vedder, Cornell Law School professor Stephen W. Yale-Loehr and former INS Commissioner James W. Ziglar. Over the past 24 months, NFAP’s research has been written about in the Wall Street Journal, the New York Times, the Washington Post and other major media outlets. The organization’s reports can be found at www.nfap.com. Twitter: @NFAPResearch

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