



Spring 2016

IT & Engineering Services Update

Latest Trends in IT & Engineering Staffing and Solutions

Cloud, Mobile, Cybersecurity, IT Project Managers are Consensus Bets

Predictions are now coming out identifying the hot tech skills that will be in demand in 2016. Even U.S. Senators want to know.

In a recent hearing on the H-1B visa program, Sen. Chuck Schumer, D-N.Y., asked Mark O'Neill, CIO of JackThreads, an online ecommerce retailer selling men's clothing, what skill sets he was recruiting in the IT sector.

"I'm looking for talented developers who know JavaScript, who know PHP, who know Ruby, who can code on the Apple or the Android platform," said O'Neill.

"And you're having a rough time finding them," Schumer asked.

"We've had an extremely difficult time finding them," O'Neill replied. "We've had...[jobs] sitting open for months at a stretch."

JackThreads isn't alone. Some industry watchers say software developers right out of college are commanding starting salaries of \$90,000. And once they're settled in, if they begin getting a lot of recruiter calls, a 25 percent bump in salary is not unusual.

Industry research confirms a tight job market for IT talent in a number of different areas. Surveys vary on the hottest IT skills, so we've compiled a hybrid list based on industry trade surveys by *CIO* and *Computer World*, and a 2016 outlook by IDC, a research consulting firm. Based on 2015 data, IDC's comprehensive report suggests this could be a record-setting year, in terms of IT job growth, in more than a decade.

At or near the top of most top 10 lists are Cloud applications, including SaaS and IaaS skill sets. Relative to industry expectations for product performance, IDC ranks these specialties 1st and 3rd, respectively, in 2016. *CIO* ranks cloud architects and integration skills 8th on its top 10 list, and 9th by *Computer World*.

Mobile devices such as the ones JackThreads' CIO cited on Capitol Hill, is desperately searching for help with in

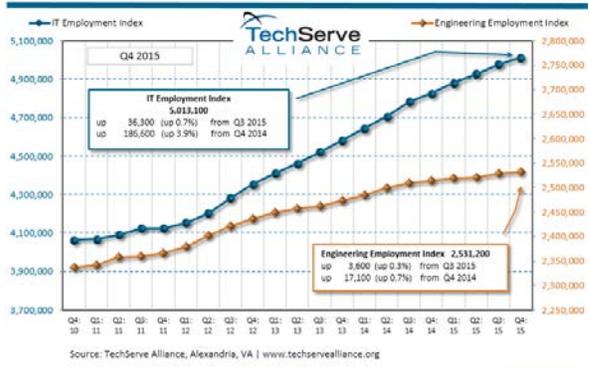
product development, are ranked fourth by IDC in terms of outperforming the market, with *CIO* ranking mobile engineers 5th in demand for their skill set in 2016.

IT project managers are also rated near the top by *CIO* and *CW*, with the best chance for job placement being in the same vertical, i.e. industry sector, like healthcare or finance. *Computer World* ranks project managers 3rd, with *CIO* at 7th. IDC ranks managed services 8th on its list.

Cybersecurity continues to be a hot draw. It's 2nd in terms of potential to over perform in 2016, according to IDC's survey, and its rated 4th by *CIO* and 8th by *CW*.

Others mentioned in the publications and research include the Internet of Things, integration services, network engineers, and web developers, especially those skilled in languages like Java, JavaScript, PHP and Python.

IT Job Growth Decelerates in Q4; Engineering Job Growth Remains Anemic



In Q2, the number of IT jobs continued to grow at a brisk pace, adding more than 47,800 (up 1%) for the quarter. Although engineering employment was positive, growth remained somewhat anemic increasing only 1700 jobs (up 0.1 %) during the second quarter.

Unemployment Rates Remain Low in Q4 for High Demand Technical Skill Sets

The unemployment rate for many (though not all) IT and engineering occupations were below the unemployment rate of 5% for the overall labor force. (see chart below)

IT Occupations (Q4 2015)	
Computer and information systems managers	2.4%
Computer hardware engineers	1.9
Computer and information research scientists	11.8
Computer network architects	--
Computer occupations, all other	3.5
Computer programmers	3.2
Computer support specialists	5.3
Computer systems analysts	1.8
Database administrators	1.5
Information security analysts	1.7
Network and computer systems administrators	4.5
Software developers, applications and systems software	2.2
Web developers	4.4
Engineering Occupations (Q4 2015)	
Aerospace engineers	0.7
Architectural and engineering managers	2.7
Biomedical engineers	10.2
Chemical engineers	1.4
Civil engineers	0.3
Electrical and electronic engineers	1.0
Industrial engineers, including health and safety	3.8
Materials engineers	2.8
Mechanical engineers	1.4
Mining and geological engineers, including mining safety engineers	--
Nuclear engineers	--
Petroleum engineers	--
Engineering technicians, except drafters	3.1
Engineers, all others	2.6
<i>Source: unpublished tabulations of Current Population Survey data furnished by the U.S. Bureau of Labor Statistics</i>	

The proposal attracting the most attention is the Grassley-Durbin bill, S. 2266, the H-1B and L-1 Visa Reform Act of 2015, introduced last November and referred to the Senate Committee on the Judiciary. The bill would eliminate work experience as an alternative to a STEM degree and favor advanced STEM degrees from a U.S. college or university. The bill also would limit larger IT companies from applying for H-1B visas if more than half of an employer's work force holds H/L visas and generally cut the 6-year admission period in half. Sen. Chuck Grassley, R-Iowa, is chair of the Judiciary Committee and Sen. Richard Durbin, D-Ill., is Minority Whip.

The Cruz and House companion bill (H.R. 4598) would require employers to pay H-1B workers a minimum \$110,000 and like S. 2266, favor petitioners with advanced degrees. A separate proposal (H.R. 4698) would prohibit outsourcing firms to import H-1B replacements in which the Secretary of Labor found that U.S. workers were required to train their replacements.

A bill (S. 2365) by Sen. Bill Nelson, D-Fla., would lower the H-1B annual cap from 65,000 to 50,000. In contrast, a bill (S. 153) introduced early in the 114th Congress by Sen. Orrin Hatch, R-Utah, would nearly double the current cap to 115,000 and increase it over time to 195,000, depending on demand.

The only substantive H-1B action taken by Congress at the end of 2015 was a last-minute legislative rider attached to must-pass budget legislation. The amendment tacked on an additional \$4,000 fee for certain H-1B petitions and \$4,500 for L-1s.

New Wave of H-1B Bills Filed in Congress

The controversy over U.S. worker replacements by H-1B offshore firms has spawned new legislation in Congress in addition to several oversight hearings. However, legislative gridlock on Capitol Hill means there is little chance for passage of any immigration bill, good or bad, in 2016.

Election-year politics prompted GOP presidential hopeful Sen. Ted Cruz, R-Tex., to introduce legislation (S. 2394) to curb the H-1B program. In total, there have been at least five bills introduced since November in response to the highly publicized replacement of U.S. IT workers with H-1B workers earlier this year at Disney World, as well as at Southern California Edison and others.