

6 Top IT Careers to focus on in 2018 and beyond

Information Technology (IT) is one of the strongest sectors in the U.S. economy, boasting 524,800 open positions (Q1, 2017).¹ But, employers are having a hard time finding applicants to fill these positions.

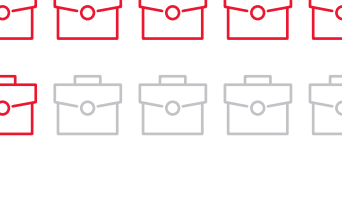
Why so many unfilled positions?¹

- As our world advances more IT professionals are needed to keep things running safely: open IT positions increased by 16,900 from Feb to Mar 2017.
- Not enough applicants are qualified for the available jobs, which leaves an abundance of open positions—in fact, 93% of employers say finding the right IT pro to fill job openings is a major challenge⁶.

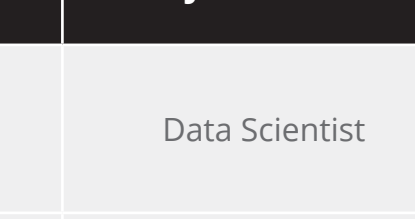
What does that mean for you? **Getting the right training is key.**

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In IT there are 4 advertised jobs for every¹ unemployed jobseeker, meaning if you have the right skills, you should have your choice of positions.



BONUS: On average tech workers (\$108,900) out-earn other American workers (\$53,130) by 105%.²



And 6 of the top 10 jobs on Glassdoor's Best Jobs in America list for 2017 are in the tech industry.³

Rank	Job Title	Median Base Salary	Required Education
1	Data Scientist	\$110,000	4-year and possibly advanced degree in statistics, mathematics, economics, operations research, or computer science
2	DevOps Engineer	\$110,000	BS in computer science or software engineering
3	Data Engineer	\$106,000	BS in computer science or engineering
5	Analytics Manager	\$112,000	BS in information science or business data
7	Database Admin	\$93,000	2-year or associate's degree in computer science or information systems
10	Solutions Architect	\$125,000	BS in computer science, information technology, or software engineering

The Future of the IT Job Market

It's good to know what's happening in the industry now but the IT industry is growing rapidly. Thinking ahead to future needs is vital to keeping yourself relevant and employable. The U.S. Bureau of Labor Statistics predicts that in 2020 there will be 1.4 million more software development jobs than applicants who can fill them.⁷ Being aware of statistics like that can help lead you in the right direction when choosing an IT career path.

Job-hunting site CareerCast ranked the best IT jobs in the nation predicted to grow substantially between now and 2024.⁵ Here are six of the top contenders including their average salary and projected growth:

	Web Developer	\$64,970	27%
	Computer Systems Analyst	\$85,800	21%
	Information Security Analyst	\$90,120	18%
	Software Engineer	\$100,690	17%
	Data Scientist	\$128,240	16%
	Network and Computer Systems Administrator	\$77,810	8%

So, what can you do to hone your skills and snag one of these hot jobs?

Obtaining the right degree, developing your skills, and pursuing the proper certifications will help. **Check out the charts below** to see what each of these “hot” jobs require.

WEB DEVELOPER	
Degree in	<ul style="list-style-type: none"> • Computer Science • Business Information Systems • Information Technology • MBA with concentration in Information Systems is helpful
Skills needed	<ul style="list-style-type: none"> • Object oriented programming languages (Python, Ruby, PHP) • JavaScript, NodeJS • HTML, CSS, Bootstrap • Distributed version control with Git or other control system • Container provisioning with Docker or similar tool
Certifications that are helpful	<ul style="list-style-type: none"> • Microsoft Certified Solutions Developer (MCSD) • AWS Certified Developer • Oracle Certified Professional MySQL 5.6 Developer
Potential Jobs	<ul style="list-style-type: none"> • Web App Developer • Computer Engineer • Systems Analyst • Computer Analyst

COMPUTER SYSTEMS ANALYSIS	
Degree in	<ul style="list-style-type: none"> • Computer Science • Business Information Systems • Information Technology • MBA with concentration in Information Systems is helpful
Skills needed	<ul style="list-style-type: none"> • Business workflow processes • Enterprise integration • Project and data management • Database design and implementation • Web app development • Java programming • Systems analysis • Business information systems
Certifications needed	<ul style="list-style-type: none"> • CompTIA A+ • CompTIA Network+ • ISACA Certified Information Systems Auditor (CISA) • (ISC)2 Systems Security Certified Practitioner (SSCP)
Potential Jobs	<ul style="list-style-type: none"> • Computer Engineer • Systems Analyst • Computer Analyst

INFORMATION SECURITY ANALYSIS	
Degree in	<ul style="list-style-type: none"> • Information Technology Management • Information Technology with a concentration in Cyber Security • Computer Science with a concentration in Computer and Information Security • Business Information Systems
Skills needed	<ul style="list-style-type: none"> • Cryptology • Unix • Network security • Database design and administration • Computer forensics and digital forensics • Understanding of business operations
Certifications needed	<ul style="list-style-type: none"> • ISACA Certified Information Security Manager (CISM) • CompTIA Security+ • CompTIA A+ • (ISC)2 Certified Information Systems Security Professional (CISSP) • (ISC)2 Systems Security Certified Practitioner (SSCP) • (ISC)2 Certified Cloud Security Professional (CCSP) • Certified Ethical Hacker (CEH)
Potential Jobs	<ul style="list-style-type: none"> • Computer Security Analyst • Information Security Analyst • Security Analyst • Cybersecurity Analyst

SOFTWARE ENGINEER	
Degree in	<ul style="list-style-type: none"> • Computer Science with Electrical Engineering • Software Engineering • Information Technology • Software Development • Mathematics
Skills needed	<ul style="list-style-type: none"> • Coding and scripting • Calculus, differential equations, linear algebra, and physics • Understanding of data management and network operations • Understanding of system administration • Collaboration
Certifications needed	<ul style="list-style-type: none"> • Microsoft Certified Solutions Developer (MCSD) • AWS Certified Developer • VMware Certified Professional 6 VCP6-DCV
Potential Jobs	<ul style="list-style-type: none"> • Software Developer • Software Engineer • DevOps Engineer

DATA SCIENTIST	
Degree in	<ul style="list-style-type: none"> • Computer Science • Information Science • Computer Engineering
Skills needed	<ul style="list-style-type: none"> • Routers and switches • Windows networking • Network security • Information technology diagnostics • Network communications • Network design
Certifications needed	<ul style="list-style-type: none"> • CompTIA Network+ • CompTIA A+ • Cisco Certified Entry Networking Technician (CCENT) • Accelerated CCENT • Cisco Certified Network Associate (CCNA) Routing and Switching
Potential Jobs	<ul style="list-style-type: none"> • Network Administrator • Computer Systems Administrator • Network Manager

NETWORK ADMINISTRATOR	
Degree in	<ul style="list-style-type: none"> • Computer Science • Information Science • Computer Engineering
Skills needed	<ul style="list-style-type: none"> • Routers and switches • Windows networking • Network security • Information technology diagnostics • Network communications • Network design
Certifications needed	<ul style="list-style-type: none"> • CompTIA Network+ • CompTIA A+ • Cisco Certified Entry Networking Technician (CCENT) • Accelerated CCENT • Cisco Certified Network Associate (CCNA) Routing and Switching
Potential Jobs	<ul style="list-style-type: none"> • Network Administrator • Computer Systems Administrator • Network Manager

Getting the proper training and earning certifications can help set you apart from the competition and get you on your way to a great job in IT—and a better payday.

For more on how to start training for a certification today, check out **wiley.com/professionaltch**.

SOURCES

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