



What Obstacles are Currently Faced by Entry-Level IT Graduates?

With information technology graduates emerging from all over the world, we wanted to find out one thing. What obstacles are these graduates facing as they try to enter the information technology field? We reached out to experts across the country and wanted to share their thoughts with you. Hopefully you gain as much insight as we did as you read through these responses:

What I see with young graduates in IT and engineering is that they often lack career search and development skills. This encompasses everything from the LinkedIn profile, resume, to the interpersonal skills of job negotiation. Naturally one has to focus on one's studies, but knowing how to find and negotiate a job opportunity are also important lifelong skills. Many students I meet don't know how to introduce themselves to companies or how to present their unique value propositions. Many think that having a degree is enough; they don't understand how to communicate their education into a value proposition for the prospective employer. They also lack expertise about the larger business world in general. To be sure, having an internship is key for this orientation.

At our university, we offer courses on resume development, networking for career opportunities, and door openers. Roslyn Layton

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Here's a quick listing of obstacles I see right now.

1. The economy - at least in New England - is still very poor. IT department's budgets have had a bulls-eye on them throughout this 5 year recession and with the exception of some health care and government, there are almost no entry-level IT jobs and certainly no full-time jobs.

2. Graduates of 2 year and technical school programs have little practical experience with current and relevant technologies. Companies that will hire can't afford to put new employees through extensive training programs. If you can't start as an employee and contribute value right now, why



would anyone hire you? As an aside, this is a reason why colleges with strong co-op programs like Northeastern are so successful. Students graduate with real experience that makes them valuable.

3. Businesses continue to contract out project work rather than develop in-house departments.
4. Curriculum at many 4-year schools isn't relevant to today's issues. Actually, the technology landscape changes so quickly that schools can't change their programs fast enough to keep up.
5. Students rely too much on their education and don't do enough (or any) outside prep for entering the workforce. For example at MicroData, we won't hire an entry level support person (usually help desk tech) unless they are already Microsoft certified. It's probably not appropriate for schools to be teaching certification prep classes, but the student should know what's coming and tackle things like this on their own.

Glenn Mores
President
MicroData
Beverly, MA

Many entry level grads are challenged by being able to find an employer who will sponsor them for a visa. When students are attending school they are on student visas. Once they graduate and have used their optional practical training, they have to find sponsorship. The problem is that there are not enough visas available to ensure that all the grads receive sponsorship.

Lynn O'Brien
Attorney
Bethesda, MD

One of the biggest obstacles that entry level IT grad needs to overcome is their ego, aka the Dunning-Kruger effect. Yes, they may have studied for a long time. And yes, they graduated with all kinds of honors. And yes, they know all everything there is to learn from books. And until they've actually implemented a tenth of what they know they are completely clueless, and they don't know that their clueless.



"The Dunning-Kruger effect is a cognitive bias in which unskilled individuals suffer from illusory superiority, mistakenly rating their ability much higher than average. This bias is attributed to a metacognitive inability of the unskilled to recognize their mistakes." (quote from Wikipedia)

Daniël W. Crompton

The primary obstacle faced by recent system administration and other information technology graduates is lack of experience with the tools and technologies in a production environment. A lab environment simply cannot replicate the complexity and stress of a production environment. All companies that I know of require experience before they will hire you.

Other obstacles are lack of mentors to help them with their career and a peer group where then can get support for difficult problems. Many system administrators work alone so these are critical for their success. LOPSA provides both with a mentoring program (<https://lopsa.org/mentor>) along with IRC, mail lists, and regional conferences where system administrators can get help, career advice, and support from their peers.

I am a Director of the League of Professional System Administrators (<http://lopsa.org>). LOPSA is dedicated to advancing the practice of system administration; to support, recognize, educate, and encourage its practitioners; and to serve the public through education and outreach on system administration issues. If you have any additional questions, I would be happy to speak with you.

Chris "Ski" Kacoroski, Director of LOPSA

I graduated from Brown with an interdisciplinary in Applied Math - Biology, and I decided to pursue a position in IT. Being at a small startup, my role encompasses more than the traditional marketing associate entry-level position. I work on everything from SEO (search engine optimization) to content strategy for our product management.

- Balancing collaboration among teams

Being in an environment where everyone is so open to innovation and collaboration means that we



also have to establish an efficient system of communication. I'm quickly learning that the place, time, and ways we present ideas when we collaborate are just as important as the ideas themselves. For instance, I've been working on redesigning our company blog for a couple of months; but the way to make my voice heard was to offer to jump in on the website redesign project and work with our designers. We're now in the process of updating our content so it's more navigable for everyone on the Bloodhound network.

- Learning to navigate organizational structure to implement change and action at a small startup, where the approval process is not set in stone

What I love most about my IT job is that I can usually take action on any idea that I think will make Bloodhound better. However, getting marketing-oriented ideas into the task pipeline of the development team can take persistence, because the engineers are constantly working on product-level features and have many other important priorities. We're playing around with our office layout to make this collaboration easier; for instance, we're moving our designers closer to the marketing area to make it easier to check in throughout the day.

- Learning from online resources

I've been excited to extend my Excel knowledge and gain exposure to writing VB scripts - and I'm glad to encounter the breadth of online resources available for learning these tools. However, sometimes googling for help on particular tasks can take me off-track. I've had to find good all-inclusive resources like Grovo that make the learning more efficient and cohesive. The "For Dummies" guide to SEO was also incredibly helpful when I was learning about keyword research. One of the skills I've had to master is learning how to learn.

- Understanding the timelines of different engineering projects and how to build that into marketing timelines.

Getting a sense of how long it takes to build or engineer a certain feature, and then plan my own work accordingly, takes a sixth sense. Often I'll have to message our users about a new update, quickly understand the features and how soon the release needs to be out, and execute on tight deadlines. It's a very hands-on process, which I am greatly enjoying!

Emily Gould, Bloodhound network