

## **Advice for Computer Science Graduates**

As a computer consultant I have often been tasked to advise or assist companies in hiring computer workers, but from that perspective the prospects for a new CS graduate are not good except in a few local markets where startups are dense. The best prospects may be to seek experience in a foreign country and then come back, or with a contracting firm based in a foreign country. The legal environment in the U.S. has made it so risky and costly to hire that too many employers prefer to let jobs go undone that to incur those risks, or to outsource the work to contracting firms, many based in India, that are less intimidated by lawyers who constrict business with simplistic rules to avoid unlikely contingencies.

If a recent graduate has a large student loan to pay off, it is probably not a good idea to disclose that to a prospective employer (although if it is delinquent it may show up in a credit check). That is used by many employers as a sign the grad will work for a lower wage, and he will get offered less.

If a student loan is delinquent it may prevent the hire, because the hiring manager thinks there is a risk of garnishment on a judgment (not a problem in some states like Texas).

Similarly, if there are child support payments owed, that may prevent a hire.

Candidates should, during their last year of college or grad school, get on job boards just to see what jobs are out there, and emerging, and plan accordingly.

Getting experience to put on one's resume is the bootstrap problem. One may need to do something on spec or as an entrepreneur, such as build a cellphone app. That will at least pave the way for Java jobs.

Be sure to put up a personal website that showcases one's skills and experience, and includes one's resume(s). It should be possible for a hiring manager to do a web search on "[name] resume" and have it come up. You may get more jobs from a well-designed website than from sending resumes through job boards.

It may be a good idea to get incorporated. There are more and more gigs for incorporated contractors, because that avoids many of the hassles of the W-2 relationship and the regulations and risks that come with it. The corporation should have its own website and bank account.

Don't plan on a long-term career in one specialty or at one company. If you can stay in one gig for a



year you are doing well. And don't expect to collect retirement benefits. Many if not most companies are now laying off workers just before the benefits start.

Until recently, workers who have too many expensive health care claims while on the job have been laid off on trumped-up "evidence" of poor performance at the instigation of the company health insurance company ("We may have to raise your premiums.") With the advent of Obamacare that is supposed to be alleviated, but not for older workers, so save up, because after you reach 50 you will probably be toast.

A poll of hiring managers around 1994 found that 95% of them said they would not consider hiring anyone with more than ten years' experience. So don't put more than ten years' experience on your resume, and make sure the items you need fall within about the last five years.

In larger organizations there can emerge a strong conflict of interest between the shareholders and your immediate supervisors, such that you can't do right by both. You may have to lose your job to save your integrity, but in my view, it is worth it.

Hiring managers don't favor foreign workers because they work for less money, but because they tend to be meek and don't question bad management decisions. Many managers would rather a job go undone than have someone who might reveal they don't know what they are doing.

Hiring managers will often want to demonstrate that a job they don't want to do can't be done because there is no qualified worker to do it, and devise requirements that no one can meet. (Classically requiring 5 years' experience using a tool that has only existed for 3 years.) Learn to recognize these and don't waste your time or your hopes on them.

Startups tend to hire based more on social affinity than skills, so it helps to dress, act, and speak like the people already working there. This tends to result in companies of all young people with no business experience. Avoid working for shares of stock in companies that don't have seasoned people in senior management who can control spending. On the other hand, beware of those who control spending in irrational ways.

Share living expenses with others. Live like a poor student for as long as you can.

Keep your computer working and your internet access and smartphone bills paid. They are your lifeline. You can always sleep on a friend's couch or in your car if you have to.