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Technology Resumes That Get Jobs

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If you're looking for a job, you need a resume that gets you interviews. But despite their level of technical experience,many engineers don't know how to write an effective resume. A good resume is more like a sales brochure than a design specification, and most of us don't work in the marketing department.

Many resumes cross my desk. As a consultant, my resume is always out there for people to find me. During the "great recession" of the past few years, I have rewritten multiple resumes for friends and helped them get back to work. In many cases, these friends had been on the bench for a while, often because they had resumes that any potential employer would toss aside after the first few lines.

First Impressions

What's the purpose of the engineering resume? It isn't for bragging or vaunting your capabilities. Resumes exist for their audience, not your ego. The people reading the resume have a problem and need suitable staff to deal with it. They need a warm, breathing body with a specific set of skills. Consequently, your resume should tell them what you could do to fill their needs and solve their problems.

Companies get lots of resumes, so the people reading them often need to make quick decisions. Most reviewers only look at the name, address, work status, and desired position to see if they match their needs before tossing most resumes aside. Consequently, the most important part of the resume is the top of the front page.

At the top of the page, you should use your name as you're commonly addressed. Instead of "William Jefferson Clinton," you should use "Bill Clinton" to avoid appearing stuffy and formal. Your address also should reflect where you live. If possible, avoid using apost office box, since itcan raise questions.

You also should use your personal e-mail address, as long as it's vanilla. Avoid using addresses based on nicknames or anything else that would convey an unprofessional image. Phone numbers should use all 10 digits, not just seven. (Seriously, I ran into this problem while working in New Mexico!) When applicable, include "U.S. citizen" or "Green Card holder" to indicate that you won't present any legal headaches if you're hired.

The Desired Position

Reviewers toss more than 90% of the resumes in the trash after reading the "Position Desired"section, which typically describes your objectives. If they can't determine your skill set after reading thefirst

sentence, you're history. Consequently, it has to be a very simple summary of what you're qualified to do. That's why I use"electronic product design," expecting the reviewer to read further to find out more.

Similar examples you may want to use include "embedded controller design," "digital HDL design," "mixed-signal IC design," "PCB layout design," "semiconductor model development," or "electronics technician and product support." Keep it short and make sure it covers your skill set in a broad manner that's understood by your target audience. Also, remember that narrow descriptions will unintentionally close a lot of doors. The sentences that follow your objectives can expand on your initial statement with some more details.

Think of your opening line asa pickup line, and your resume is a method of flirting with potential hiring managers. First impressions are lasting impressions. You're trying to start a conversation and then see where it goes.

Summarizing Your Experience

After defining the position you want, most of the resume summarizes your experience and projects. Generally, you present your career chronologically in reverse, starting with your most recent position and moving backward in time.

First, emphasize the details of your most recent positions. Nobody cares that you wire-wrapped 7400 logic boards 20 years ago. Experience designing 8-track players isn't terribly relevant either. Employers are interested in modern-day skills and tools. Whether it's coding a microcontroller or writing Verilog to run in an FPGA, the "here and now" methods of engineering are what's important. The tools and techniques of the electronics industry have gone through a huge evolution, and if it's outdated, save the space for more recent work.

Start each position description briefly summarizing what the general activity was all about. After that, sum up the major activities you were involved in. List them as a set of bullets or talking points. People tend to scan over resumes pretty quickly, and they might not read long paragraphs. But, they do skim lists looking for the buzzwords specific to their open position.

The technology business swims in a sea of acronyms, trade names, jargon, and other kinds of geek speak. It's part of the business, but you should use these words selectively in your resume. It's okay to use terminology commonly understood within your technical sphere, but avoid items that are cryptic to your peers.

It seems like common sense, but I see code names and undefined acronymsall the time. When I was part of IBM a few years back, the company had its own language for pretty much everything, and it was confusing to newcomers. If you put that kind of stuff in your resume, it will be tossed aside.

In many cases, resumes are scanned into digital databases and run through search tools looking for appropriate terminology. Consequently, your resume needs to be optimized for specific peer recognizedkeywords, similar to search engine optimization for Web sites.

Education And Academics

Your resume should include a short section on your education, though the longer you've been working, the less important it becomes. Applicants with five to 10 years of experience or more should focus on their professional work. If you have a lot of experience and you're still talking about your GPA, you will look green or stuck in the past.

If you're new to the profession, though, you should include where you went to school, your academic major, and some information about your specialty. You should describe the research and design projects you completed as part of your studies. As an engineer, you want to show that you can handle the practical aspects of the job andnot just score well on tests. It also provides useful information about the areas where you have a practical background. Emphasize your studies and eliminate the pizza delivery jobs.

Size Matters

Resumes should never go beyond two pages—no exceptions, even if you've walked on the moon. You want to put forth a concise and organized summary of who you are and what you can do. If you produce a long document with unimportant or outdated material, you appear disorganized. Employers want hires that can get in, get the important stuff done, and move forward. Your resume needs to do that too. And don't cheat by using a smaller font to cram more on the page. You can provide more details, if you're asked, in an interview.

With limitedspace in mind, should you include a section about your hobbies and interests outside of work? Experienced engineers can betteruse this space to describe professional organizations they belong to or other relevant activities. Some hobbies may be appropriate too, like amateur radio, combat robots, and Arduino design. Beer brewing and target shooting, though, might not sit right with the person reading your resume, so leave them off.

You also should avoid including fluff and filler material, including statements like "energetic self-starter" "self-sufficient," "easy to work with," and other personal claims. A resume can't validate these claims. Only your track record (and your interview) can. Never include personal material. Also, the business taboos against discussing religion, sex, and politics also apply. Keep your resume factual and positive, focused on technical skills and experience.

Additional Items

Try to include your professional accomplishments and activities. This is your opportunity to show that engineering is more than just a job. You can help sell yourself by showing enthusiasm and a genuine interest in your profession. Never forget that hiring managers love to hire workaholics. Include the articles and papers that you have written as well as any patents you have. Professional society and academic participation beyond graduation are helpful too.

Next, list the design tools that you know how to use. Modern electronicsis tightly tied to the EDAtools you use, and there is a distinct message in the EDA platforms that you're familiar with. Somebody looking for an IC designer will go searching for the tools commonly used in chip design, simulation, and layout. PCB designers, antenna designers, electromagnetic design experts, and other specialists face the same scrutiny. Hiring managers who need a test and measurement expert will be interested in seeing a resume that mentions the instruments in their lab.

Finally, experience with standards and regulations can be very valuable to employers. For example, medical products have to conquer a complicated regulatory maze, and employers will be impressed if you're familiar with thoseIEC standards. Foreign language skills in companies with an international presence or offshore manufacturing can help open doors as well.

Conclusions

A resume is a brief way of telling potential employers what you want to do and how you can fill their needs.

Through your resume, you're making a marketing presentation in an attempt to sell yourself. However, many engineers don't know how to put together an effective resume. Get somebody in your profession to review what you create, preferably with a marketing and sales perspective. Make sure that the content is concise, makes a clear pitch of what you offer, and deals with today's tools and techniques. Also, define yourself in a manner that broadly covers your skill set and doesn't narrowly define you. Good luck!

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