

Preventing the “Bad Hire” – Behavioral Interview Techniques for SAS Programming Candidates

Pamela Giese, i3Statprobe, Maidenhead, U.K.

ABSTRACT

Interviewing can be almost as stressful for the interviewer as the candidate. Both need to make that critical first impression. But how do you evaluate the whole experience of a career, education, and personality of a person? How do you identify real experience and skills? This presentation will discuss techniques on interviewing and evaluation of SAS programming candidates. Special emphasis will be place on application of Behavioral-based interviewing to SAS professionals. Behavioral-based interviewing is a technique designed to uncover experience and behavior in life and the work place.

Are you more of a candidate than an interviewer? Pick up some tips on creating the resume that managers want and presenting yourself in the

INTRODUCTION

Good interviewing is fundamental to preventing a “bad hire”. When a candidate is hired who’s skills/personality are not in tune with the organization it is costly and stressful for the new hire, other co-workers and staff, and managers. So ensuring that the candidate and the organization are a good match is critical. Even when the candidate and organization right for each other, the initial interview can place the candidate at an inappropriate level in the department. The challenge is to ask the right questions to eke out real experience and skills.

In these recessionary times, the job market will continue to become more competitive. This means that candidates need to make a statement, both in the resume/CV and in the interview to distinguish themselves from others. Behavioral interviewing techniques that focus on accomplishments and experience can help the candidate sell themselves.

SPECIAL CHALLENGES OF INTERVIEWING SAS PROGRAMMERS

The challenge of evaluating SAS programmers has been aided by the establishment of SAS certification. When a resume/CV identifies the programmer as being SAS certified, the hiring manager should check the SAS certification site to confirm this. The current URL is <http://support.sas.com/certify/directory/index.hsql> . However, with certification has come a new type of SAS job applicant –those who have studied for the certification and passed but have had no real experience in programming. The behavioral interviewing techniques discussed later will focus on identifying these candidates.

Another challenge of SAS programmers are the fact that programmers come in different types. There are statistical programmers, data analysts, and modelers. There are also developers, those adept at SAS/AF, SAS/Intrnet and building tools software. Lastly, there are those who think they’ve been programming in SAS but have in fact simply been inserting parameters and running code built by others.

Tip for Candidate: A resume should include a technical summary. This should be organized in such a way to indicate your expertise. A long rambling list of every SAS PROC without context just shows you can copy items— and ensures that an interviewer will want to hear details about the most arcane listed. If you have good overall SAS knowledge, just list BASE SAS, SAS Macros and then the Graph/STAT or other packages.

PREPARING FOR THE INTERVIEW

Clarifying the Goal

Before the interview, it’s important to revisit the goal of the interview.

- Is it just the first interview or is it possibly a deciding interview, for the right candidates?

PhUSE 2009

- Is the candidate being interviewed for a specific slot or is it possible to fill the role at a higher level (for an experience candidate) or at a lower level for a more junior candidate who is a good match to the corporation?
- How much training time/ramp-up time can be tolerated?
- Is there flexibility between contract or permanent?
- Are there options for full-time or part-time?
- Is the candidate needed for specific project or for a more general placement?

It's especially important to review the goals if a number of openings are available, as in the case of assembling a team. For example, if placed in the highly experienced roles have been filled, junior level candidates become more attractive. On the flip side, if a hiring team is having difficulty finding highly experienced clinical programmers, they may be less likely to consider new graduates in favor of junior level programmers with at least some expertise.

Telephone Screen.

In these cost-conscious days, most firms will screen candidates first via a telephone screening call. This is usually done by HR. If successful and the candidate is distant, this will often be followed up with a technical interview on the phone with a manager or senior programmers.

If HR (Human Resources) does the initial contact on phone screens, the hiring manager should make sure the HR representative is supplied with some basic questions. In addition to basic HR questions such as eligibility to work, availability, and salary expectations, questions such as CDISC experience, team leadership, or therapeutic areas are often helpful. The HR representative doesn't need to have an in depth understanding, a yes/no check box can still help later interviewers prepare.



The number one rule of telephone screens/interviews: No Cell Phones! Use a land line.

Telephone screens/interviews assess communication. In the current world of tele-commuting and out-sourcing, telephone skills and the ability to clearly be understood over the phone is even more critical than in the past. If you're the interviewer, be courteous and professional –airport noises, screaming children send the wrong message. If you're the candidate, trying to discretely use your cell phone in your current cubicle is not going to allow you to project yourself as a dynamic alert individual. This will even be worse if you're not speaking in your native tongue. Employers are quick to assume that poor telephone communication will translate to poor communication on the job. Chances are, if you can't be understood on the phone, you won't get the chance to do so in person.

Reviewing the Resume/CV

Take time before the interview to review the resume. Allow yourself at least 15 minutes, ideally within an hour of the interview. Do this even when you had seen the resume as part of a selection process. It's disheartening for a candidate to be faced with an interviewer who has not even had the courtesy to read his/her resume.

The resume is a document to be analyzed, like any other. Make notes.

- Highlight points for follow-up
- Make notes.
- Write down questions regarding interesting points or questionable ones
- Calculate any gaps of unemployment
- Note years at jobs

Tips for candidates:

- 1) **KNOW YOUR RESUME.** You should know your resume inside out. Nothing raises suspicions like a candidate who doesn't know his own resume. These days, there's no excuse not to tailor you resume to fit the industry or your memory. If you can't talk in detail about your role in every position or accomplishment, leave it off.
- 2) **Make sure your resume describes your experience.** If some jobs were assigned while a contract/temporary programmer, note the contract firm and the company assigned on the resume. Employers know that contract work means 6 months here, a year there, another 6 months

PhUSE 2009

somewhere else. Making it look as if you were a permanent hire for that time works against you. Also, employers don't expect the in depth business/therapeutic knowledge from contract programmers that they may from a permanent employee.

- 3) Most CROs have an internal CV database used to present qualifications to prospective clients. Unless you're applying for an internal position, don't purely use this CV. It doesn't allow you to highlight your own accomplishments and it's just lazy.
- 4) Have a list of questions ready for the interviewers. While some questions might be raised during the interview. Jot these down as they occur to you –it's easy to forget in the heat of performance. It's good to have a few lined up ahead of time. Common questions are: What would my average day be like? What would my on-boarding/ training time be like and how long would it take for a new person in this position to be up to 100% performance.
- 5) Bring 4-5 copies of your resume with you. It's not uncommon for a substitute last minute interviewer to not have received a copy or for someone on the panel to forget theirs or for an HR clerk to forget to copy a page. Occasionally resume formats can get all jumbled through emails or web-based resume uploads. Being prepared sends the right message.

Interview Settings

A few words about interview settings. These days, preliminary interviews are typically done via telephone. When a candidate is brought to the office for a face-to-face interview, he/she can expect to meet with a number of individuals who'll conduct their own interviews and then later meet to compare notes, impressions, and recommendations. Depending on the level of the position, candidates can be confronted with managers (singularly or in pairs) and senior programmers (singularly, in pairs, or even in panels). In the U.S. there will also be an interview with a human resource representative who will relate and answer questions regarding salary, company benefits, and eligibility. Interviews are typically conducted in meeting rooms, though sometimes in managers' offices. The candidate should be provided with the interview schedule at the beginning of the day.

A major advantage of interviewing in pairs or as a panel is that it gives you time to listen. Because you're listening, you're more likely to be able to ask follow-up questions as the candidate describes past projects or assignments. Panels of programmers (peer-to-peer interviewing) are often used to get at hard technical questions. They also provide an opportunity for the candidate to ask questions to possible co-workers that they might not feel comfortable asking a manager –for example: how much overtime do you usually work? How "real" is the work-life balance? Who's typically working Saturdays?

Some companies will also do an interview lunch. The interview lunch is less formal, though it can be with a hiring manager. It's a welcome break in a day-long interview schedule and especially courteous if the candidate is in a strange town. It's a chance to get to chat person-to-person. If you're picking a restaurant, choose a nice place –a similar caliber restaurant where you might take a business client.

Candidates should dress in business professional attire. Even in a company where the daily dress is "very casual" casual, interviewers should be in business casual. Remember you're representing your company.

THE INTERVIEW

Most interviews start one of two ways: 1) the interviewer launches into "Let me tell you this XXX position at company YYYY or 2) the interviewer asks "Tell me a bit about yourself, what you've done and why you're interested in this position". The response to the 2nd question is often called your "30 second commercial"¹, though in an interview this can go up to 2-3 minutes since the "30 second commercial" should be followed by a summary of the most recent job experience. Interviewers often lead off with this since it's a way for them to transition into the interview from whatever meeting they had previously attended. It's also a way to sit back and get a first impression of the candidate.

Type of Interview Questions

Any interview of programmers should contain a mix of technical questions, questions about experience, and questions gauging the candidate's personality and fit with the current team. Many companies have a

¹ See Appendix for further description of the "30 Second Commercial"

PhUSE 2009

standard list of questions (technical and other) so that all candidate as asked the same questions and hence rated on the responses.

What is Behavior-based Interviewing?

The purpose of Behavior-based interviewing is to ascertain the candidate's level of experience, knowledge, skills, and behavior based on past behavior. Behavior-based interviewing attempts to root out real experience as separate from theory, hypothetical situations, or candidates skilled at providing the answers the interviewer "wants to hear". At the same time, Behavior-based interviewing can be used on new graduates by expanding past experience to school projects and extra-curricular activities.

The Behavior-based question is posed in such a way to encourage the candidate to fully describe a situation. The acronym for answering Behavior-based questions is **STAR**:

Situation

Task

Action

Result

Let's look at a few examples.

Suppose you're interviewing for a position in a high-stress environment where pressures for deadlines, exactness, and the ability to juggle assignments can be difficult for some individuals to cope. How would you find out if the candidate's got what it takes?

Typical Question/Answer:

Interviewer: "How well do you work under pressure?"

(the answer is obvious if the candidate wants the job)

Candidate: "I work well under pressure. "

The Behavior-based style attempts to look at all around behavior:

Interviewer: I see you worked for X CRO. Can you tell me about a situation you found especially stressful?

Good Behavior-based response: Yes, I was working on this project for BIG_Pharma_inc. The programming was behind scheduled and having trouble with validation when they came back asking us to move up the deadlines by a week! At the same time we had this flu going through the department –it was awful. I thought we should push back and keep with the original deadlines, but I was over-ruled by the lead programmer who thought we could cut corners by just doing visual checks on validation. We did some overtime and got it out, but it came back with quality problems. So the final delivery was on the original delivery time line! If we had kept to our original schedule we would have had it right the first time.

In the above example, the candidate described the

Situation: BIG_Pharma_inc. The programming was behind scheduled and having trouble with validation when they came back asking us to move up the deadlines by a week! At the same time we had this flu going through the department.

Task: Not only complete the assignment, but move things up

Action: Suggested push-back but instead team leader cut corners on validation

Result: Rework and Redelivery

PhUSE 2009

Behavior-based responses often take the form of “lessons learned”. In the real world, every situation does not always have a happy ending. Part of having “genuine”, on-the-job experience is that the world is less than perfect and things don’t always go as we’d like. But, the ideal candidate learns from their mistakes. A typical Behavior-based question that addresses this:

Interviewer: “Can you tell me about a situation at work, a project or an assignment, that didn’t go quite as well as you would have hoped?”

It should be pointed out that some candidates might be culturally adverse to disclosing a “negative” or “less than ideal” situation. If you expect that to be the case, you might want to couch the question such as:

Interviewer: Have you ever worked in a team-environment? For example, on a project with a team of other programmers and/or statisticians?

Candidate: Yes, all the time.

Interviewer: Well, sometimes when we’re in a team, we can’t control everything that goes on or what happens. Can you tell me about a time on a team when the task at hand did not go as expected?

Candidate: Oh, that happens all the time. My current company hired all these junior programs who don’t know what’s going on. So we’re always behind schedule and having to fix their work.

The above example violates one of those rules of interviewing: Never directly complain about your current employer or blame other co-workers. A better response would be:

Candidate(revised): I’ve worked in situations where we had a lot of new hires who had not been adequately trained before they were put on critical assignments. It was frustrating to them and to us. We tried to do some on-the-job training and mentoring. On one project the schedule didn’t allow this and we had to put in overtime to meet the deadlines.

The situation is still the same, but the blame is defused and the “having to fix their work” is euphemized to “providing on-the-job training and mentoring”.

Other Behavior-based questions:

- Tell me about negative experience taking over someone’s program.
- Tell me about a positive experience taking over someone’s program.
- Tell me about a recent formatting challenge in creating a report or graph.
- Thinking about your own programs or those you may have validated, describe a problem you’ve seen regarding:
 - o The merge statement
 - o PROC SQL
 - o The LAG function
- Tell me about a situation where you had to juggle multiple projects.
- Tell me about a situation where you had to escalate a problem/issue to a superior
- Tell me about a recent technical challenge and what you learned.
- I see you’ve worked on oncology studies. Tell me about some special challenges of oncology studies.
- I see you’ve worked on allergy studies. Tell me about some special challenges of allergy studies.
- Do you work with programmers at other locations? Describe that interaction. (For team leads or managers, interaction might be changed to challenges)
- Can you describe a particularly challenging situation and how you turned it around?

PhUSE 2009

Behavior-based questions should be followed up if the situation is unclear. What was your role on the team? What was the team composition? What were the project timelines? How many other projects did you have at this time?

New Graduates

New graduates won't have the same work experiences, still Behavior-based questions can be used. Instead of asking about work experience, the question can be directed to class projects or assignments. Behavior-based interviewing is especially helpful for those in career changes. Like a new graduate, questions can be asked about life in general, whether on the job or in a hobby or vocation.

Ending the Interview

A good interview usually ends when the allotted time runs out. This is because all parties are engaged in conversation and the inter-personal chemistry has "clicked". Sometimes, even when the candidate is later made an offer, the conversation runs out and there is an awkward silence. At this point the candidate will be asked if he/she has any questions. As mentioned earlier, it is good to prepare for this in advance. Visit the company website, go some industry research and if all else fails, ask the interviewer how long they've been working for company XXX and what did they do previously, how did they find the transition, etc.

Finally, both parties should address the implicit question of the job. The hiring manager should give some general outline of the process left (i.e. "Thank you for your time. We still have a lot of candidates to see but we hope to make our decisions by XXX.") The candidate, in turn, should "ask for the job" (i.e. "Thank you for your time. This sounds like a great company and a fantastic opportunity and I would love to work here. I hope you consider me."). "Asking for the job" lets the interviewer know that you were interested and excited. It's surprising the number of candidates that leave an interviewer wondering whether or not they're even interested.

Business etiquette also suggests that the candidate follow up the interview with a Thank You card or email. It's not necessary to go overboard and email/send a Thank you to all panel members, Thank you cards to the hiring manager(s) is sufficient. If you weren't given their direct email or address, a Thank you card to the HR contact will find its way to the correct individuals.

CONCLUSION

Remember the interview is a multi-faceted activity. It's not only the time for the manager to evaluate the candidate but also for the candidate to evaluate the company. The manager is "the face" of the company and as such the interview must be professional, fair, and present the company in the best light. Lastly, it's important to remember that even a "rejected" candidate may one day be working for a client or even interviewing you.

PhUSE 2009

APPENDIX 1: "30 Second Commercial"

The "30 second commercial" is your summary of your professional career. In a day of interviewing, it will be given multiple times and is often the introductory "ice-breaker" into the interview setting. Because of this, every professional should have practiced it so well, that it rolls off the tongue, even in the most uncomfortable of settings. The "30 second commercial" is also useful in situations such as professional meetings when you need to introduce yourself.

The basic format of the "30 second commercial" is:

Hello, my name is XXXX YYYYYY. (←pronounce slowly and clearly, if your name is uncommon or non-native) I've been working as a xxxxx (or I've been in the field of xxxxx) for N years.

Add in optional phrases from the following:

- Prior to that I had been xxxxxxxx at yyyyy
- I've received my xx degree in xxxxxx at yyyyy
- My special area of interest is xxxxx
- Most recently I've been working in xxxx teams doing yyyyy. My role is zzzz.

In an interview, summarize your experience, starting with the most relevant and then going in reverse chronology getting briefer and briefer with each description until there's no reason to mention it at all.

Close the interview with one of the following:

- I'm looking for an opportunity to xxxxx in a yyyyy company/team
- I want to return to xxxx in a yyyyy company/team/field