

# **Job Interviewing & Resume Tips for Industrial Engineers**

**Steve Snelling**

IIE - Industry Advisory Board (IAB)  
Boeing Co. (*retired*)

[stephen.r.snelling@gmail.com](mailto:stephen.r.snelling@gmail.com)

# Main Items Addressed in this Presentation

- *Job Search Planning*
- *Resume Preparation*
- *IE Functional Work Areas*
- *Interviewing Techniques*
- *“Mock” Interviews*
- *Correspondence & Follow-up*

# ***Job Search Planning***

- Develop a good job search plan, treat it like an IE project
- Work your plan to a successful conclusion, to get a good job
- Focus on a few organizations or companies at a time, based on what you really want to do
- Do some serious research on the organizations & companies you are most interested in
- Expand your networking to professional societies (e.g. IIE, APICS, PMI, SME, ASME), attend their dinner meetings & tours as a visitor
- Use your reference contacts and other associations for job leads
  - Be very specific in telling them what you are looking for
  - Let them know your sense of urgency
  - Keep following up with them until you get the job you want
  - Tell them when you get your new job
- Use your school's Placement Services effectively

## ***Job Search Planning (continued)***

- When applying online, follow the site's instructions carefully, this is a necessary step for many companies, due to Equal Employment Opportunity (EEO) laws
- Most jobs include considerable on-hours training, and descriptions are written for a person with up to one year experience in that job, so don't forget you can grow into many new jobs
- Stay focused on what you really want, if not sure, do your research and do some hard thinking about it, then go back to your job search more focused
- Temper what you really want to do with your available options & current experience
- Interview for a job that you really want to stay at for several years, that has growth opportunities
- Revise your job search plan as required, and keep your references and job search helpers informed of your progress

# *Resume Preparation*

- Frame your entire resume around what you want to talk about during the interview
- Give enough information about each item on your resume so that the interviewer can ask a good question, otherwise delete it
- Focus on your accomplishments & highlight significant events, not just a history of where you've been
- Use bullets and make the resume easy to visually “scan” read
- Give the facility size, number of employees & end products of each company you list - to provide context for your experience
- List your main job duties first, for each company on your resume
- Focus a lot on your Intern work and Sr. Design Project, clearly note Intern work vs. full time work

# ***Resume Preparation (continued)***

- Use a lot of key words & phrases when describing your experience (e.g. cross-functional teams, lean manufacturing, process analysis, defect reduction, quality control, simulation, process improvements, implementation, etc.)
- Don't make "editorial" comments about your own abilities, better to illustrate these by your activity descriptions & actual accomplishments (e.g. don't say you are a "great" Project Manager - illustrate this by describing a successful project)
- Don't use too much technical jargon, but cover typical IE subjects
- OK to use part of a 2<sup>nd</sup> page, but put your name at top of both pages
- Use wide borders, and an easy to read font size
- Don't use odd size or colored paper, or colored fonts

## ***Resume Preparation (continued)***

- Consider having a brief "Hobbies & Interests" section; might give the interviewer some non-work related things to use as ice-breakers & might allow the interviewer to find a common interest with you
- Make sure you have contacted all references you list, and get a full agreement from each that they can and will speak very positively of you, where possible
  - List their current work information (title, company, e-mail address, & phone)
  - List when you knew them & which company they are a reference for
- Don't give the hiring manager a reason to throw out your resume in the 1<sup>st</sup> pass (where up to 80% of resumes received are discarded)

# Industrial Engineering Functional Work Areas

## Project Management



- Project Planning
- Project Scheduling
- Projects Coaching
- Risk Assessment

## Material



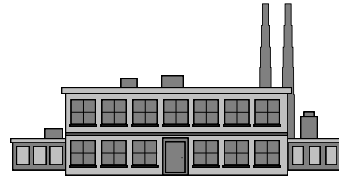
- Supplier On-Site Visits
- Supply Chain Management
- Parts Storage & Movement

## Safety



- Safety Investigations
- Ergonomic Evaluations

## Factory Operations



- Production Scheduling
- Lean Manufacturing
- Systems Integration

## Facilities



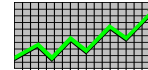
- Layout Design
- Process Flow Analysis

## Tooling



- Machine Capacity
- Tool Usage
- Tool Certifications

## Quality



- Chronic Rework
- Supplier Quality

## Product Engineering



- Integrated Product Teams
- Product Development
- Product Costing

## Transportation



- Logistics Planning
- Material Handling
- Alternative Methods

## Production Control



- Product Mix Analysis
- Forecasting

## Costing



- Comparison of Alternatives
- Cost & Savings Estimating

## Training



- Training Presentations
- Course Scheduling



# Sample Student Resume Format

**Name (in Initial Caps, Bold, 14 pt.)**

Page 1 of 2

Student address and/or Home address  
Cell phone and/or Home phone  
Student e-mail and/or Home e-mail

## **EMPLOYMENT**

### **OBJECTIVE:**

Not always necessary, but if used – describe the types of jobs that you are most interested in, and maybe how they link to your Intern work experience, or your Independent Study or Senior Design Project, etc.

### **EDUCATION:**

Month & Yr. of planned graduation

- Formal school degree, name of school, program and location of school
- List any school related projects involving outside companies (Sr. Design Project)
- List any Independent Study (with which Professor)
- Work related course summary, certifications, etc. might also be used
- List any honorary academic societies or other academic awards

## **COMPUTER**

### **KNOWLEDGE:**

List of computer software (maybe as multiple columns, maybe organized by type of software, & any code writing skills).

## **EMPLOYMENT HISTORY:**

**Company name (most recent)**

City, State

Month/Yr. – Month/Yr.

*Position title* – describe main duties (or let this be the first bullet).

- Briefly describe the size of the facility and main products, etc.
- Briefly describe a project or activity you worked on.
- Utilize key action words like Cross-Functional Team, Project Management approach, Business Forecasting, Process Improvement, etc.
- Have several interesting things to talk about in the interview (maybe bring a written project report or activity summary).
- About 4-6 bullets in total for each position.

# Sample Student Resume Format

Page 2 of 2

**Name (repeated on 2<sup>nd</sup> page)**

**Other Company name**

Location

dates

*Position title* – describe main duties (or let this be the first bullet).

- Briefly describe the size of the facility and main products, etc.
- Briefly describe a project or activity you worked on.

## **PROFESSIONAL ASSOCIATIONS:**

List any student professional associations (like ΠE) and any officer positions.

List any professional conferences attended or any papers presented.

## **HOBBIES & INTERESTS:**

Not always necessary, but if used - list a few of your hobbies & interests – to serve as an icebreaker (or help make a connection with the Interviewer).

***[References will be furnished upon request.]***

If you add the statement above, have 3-4 references already typed up on a separate sheet, ready to send out (by mail or e-mail). Check with all the listed references to get their permission and current e-mail address, company and title. If a reference is working at a different company now - than when you knew them - state how you knew the person and what company they were at when you met them.

# *Interviewing Techniques*

- Do some mock (practice) interviews to build up your interview skills & to have a crisp delivery about your experience
- Prepare a script ahead of time of major points in your resume you want to speak about during the interview
- Bring along some copies of your resume and references
- Bring along a few (2-3) reports you have written
  - These should be current, individually bound, with a cover page & concise summary
  - Don't include any confidential information from another company
  - Reference these reports in your resume (if possible)
  - Make sure they are returned to you following the interview
- Prepare some questions ahead of the interview and plan to get some of them answered (e.g. job location, travel, typical work week, allowance for continued education, etc.)

# ***Interviewing Techniques (continued)***

- Do some research on the position, company & organization
  - Bring this research along on the interview
  - Maybe ask some questions related to your research
- Don't over-dress (or under-dress) for the interview
- Be on time and make sure you know how to find the meeting location
- Turn your cell phone off during the interview
- Relax and be yourself during the interview
  - Put the interviewer at ease
  - Show some of your personality, be professional, but don't be stiff
- If a meal interview, order something easy to eat & no alcoholic drinks
- Listen for items in the job description that you can relate to specific things in your background (be concise)

# ***Interviewing Techniques (continued)***

- Focus on your accomplishments & what you think you have to offer, tie it back to your resume
- Ask about anything you are uncertain about
- Stay focused and don't ramble on when answering questions
  - Watch the interviewer's body language, err on the side of being too concise
  - Ask for clarification on a question, if needed, particularly if you're not sure whether to continue with a longer response
- Listen carefully to any follow-on questions
- Plan to take a few notes during the interview, but focus on listening with good “eye contact”
- Make sure you have asked some questions about the job being discussed, so you fully understand it

# ***Interviewing Techniques (continued)***

- Don't ignore issues like work hours, travel, benefits & vacation
- Ask for the job at the end of the interview, or for the next step in the process
- Don't accept any job offer until you have all your questions answered
- Ask to have a day or two to think about any offer
  - Then really think about it before you accept
  - Include others who will be affected (spouse, children, etc.)
- Avoid conditional jobs or trial period jobs, if possible
- Try to never accept any job offer until you have interviewed the person who would be your actual boss, and preferably his/her boss as well
- Try to have at least two job offers for comparison, but if the first one looks great, don't continue shopping and risk losing it

# ***“Mock” Interviews***

- The IIE Student Chapter at the University of Washington (U.W.) holds an annual “Mock” (practice) Interviews event
  - They work with the IIE Puget Sound Chapter and the U.W. IE-Visiting Committee to get industry managers to attend
  - The IE-Visiting Committee has representatives from about 30 local companies who advise the ISE Dept. Chair (at special meetings held on the U.W. campus)
- The event is held at night on a weekday from 6 pm – 8:30 pm
- ISE students sign up to meet with representatives from the 6-8 local companies in attendance (UPS, Boeing, Microsoft, Starbucks, Genie, Phillips, etc.)
- The 1<sup>st</sup> part of the “mock” interview is run like a real job interview, the 2<sup>nd</sup> part is to give feedback to each student on their resume and also their interview technique/answers

## ***“Mock” Interviews (continued)***

- The local IE managers are not obligated to bring a current job opening (since they may not be currently hiring), but are encouraged to bring a sample job description for their company
- The IE managers may see as many as 4-5 students for about 30 min. each, during the evening’s event (usually each manager is assigned a separate classroom)
- If you don’t currently have “Mock” Interviews at your school, you should consider setting these up



# ***Correspondence & Follow-Up***

- Make sure you contact all your references
- Keep good records of who you wrote to or talked to during job interviews - and when you need to get back to them (get their business cards during job interviews)
- Send in any requested information promptly, following a job interview
- Make sure you get back any reports you loaned others to read (e.g. examples of your projects & writing, etc.)
- Prepare a good e-mail cover note when sending your resume as an attachment

# ***Transmittal Emails***

- Unless doing a U.S. Postal mailing (letter, envelope & stamp), most old-style cover letters have given way to e-mail notes when sending an attached resume or application form, electronically.
- If applying to a specific job posting, start by specifying the exact position title, the date the position was originally posted, the source of the posting (company website, newspaper ad, etc.) and any job number/code (if applicable).
- Keep the e-mail note short and to the point, but tell them why you are responding; and maybe point out some key items in your background that are relevant to the position. Check your spelling & grammar.
- Make sure the subject line of your note is complete & relevant to the overall content of the note.

## ***Transmittal Emails (continued)***

- If you also placed your resume on their company website, let them know what position you applied for & when you responded (just the most recent position you applied for – don't list multiple jobs).
- Ask for the next step in the process, or come up with a pro-active way for you to help the process along (e.g. Volunteer to be in their area, if interviewing for an out of town job).

## ***Sample Cover Letter as an E-mail Note***

To: John Smith, IE Manager - XYZ Company

From: Bill Student

Date: 12/4/20XX

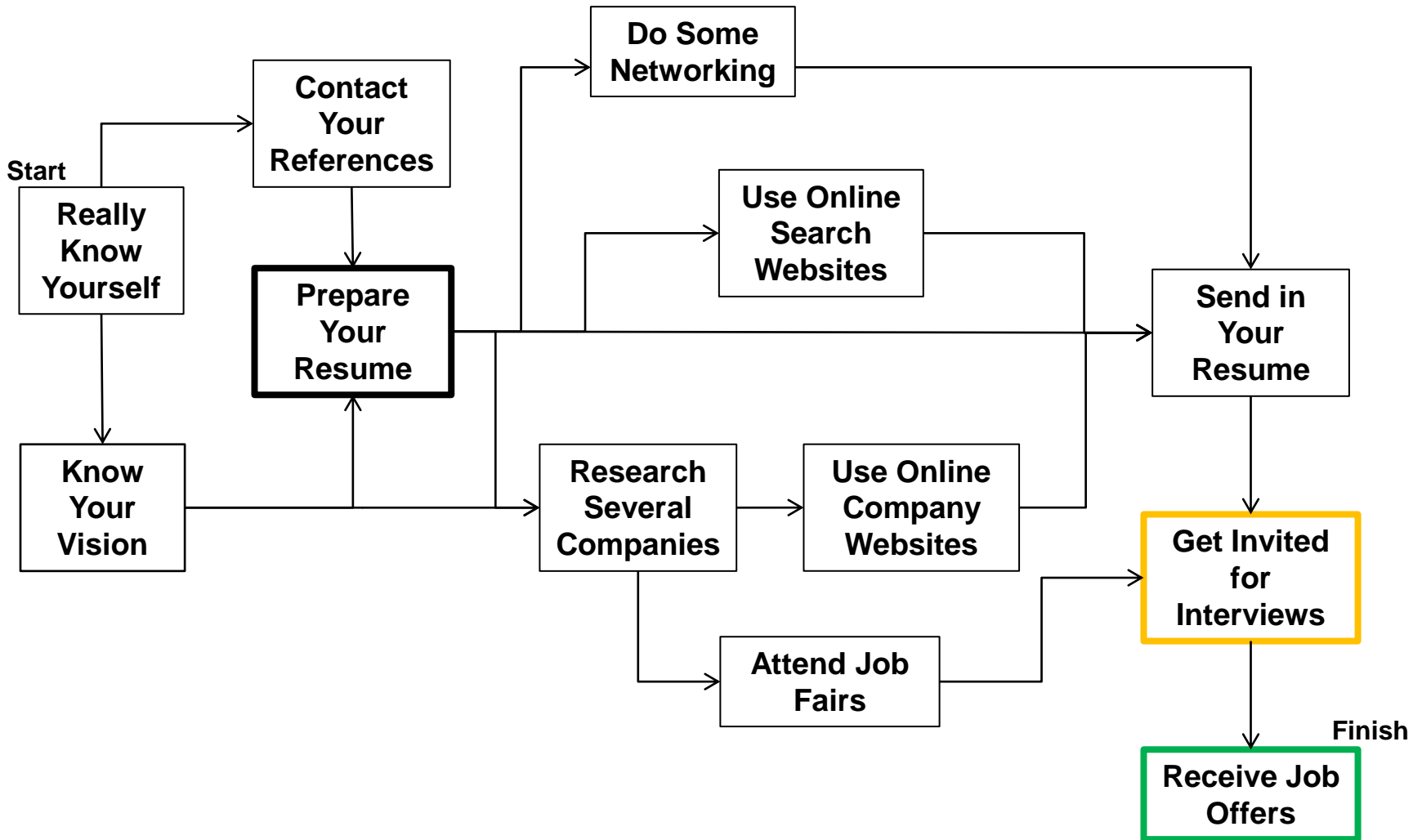
Subject: Resume for Job #A113 IE - Special Projects position

Attached is my current resume for consideration for the Industrial Engineer - Special Projects position in Denver with your company, Job #A113. I saw this position posted on your company's website on Dec. 2<sup>nd</sup>.

As you can see from my attached resume, I have completed several Process Improvement projects and have some Lean/Six Sigma training. I applied online for this position on Dec. 3<sup>rd</sup> using the company's website.

I will be in the Denver area during the week of Dec. 14<sup>th</sup>-18<sup>th</sup> and would be very interested in meeting with you at your convenience, to discuss this position or other similar positions with your company.

# Job Search Plan - as a diagram



# Some Closing Thoughts

- How important is the resume to the initial job interview selection?
- How important is the resume during the actual job interview?
- How do you handle a job interview with multiple-interviewers?
- How do you handle an extended job interview (half-day or all-day)?
- How do you handle a phone job interview?
- What if you get a bad cold or the flu the day of the interview?