



ix

**Embrace Opportunity**

# Software Engineering Day 18

Resume Building and Interview Preparation

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# Today's Overview

- Resume building.
- Interview preparation.
- Job search strategies.

# Resume

Building

# Resume Building

- Typically the first person who sees your resume is the HR, and they will skim through to see if you fit the criteria. Only then will you be invited to an interview.
- It is important to have a clear and descriptive resume.
- Your resume should be tailored to the position you are applying for.
- Consider including a link to your LinkedIn profile or your personal website / Github Repository.
  - This can help you stand out from the crowd and showcase any additional information.
  - A chance to also show off any of your projects you may have built, which could align with the role/company.

# Resume Building

- Dos:
  - Till you have years of experience, stick to a single page.
    - Companies will not waste their time reviewing more pages.
    - There are a few exceptions for certain countries, but in general stick to this rule.
  - Keep consistent formatting (layout/fonts) throughout sections.
- Don'ts:
  - Waffle
  - Add information that does not relate to the profession or place of employment you are apply too.
  - Grammar issues
  - Poor formatting

# Resume Building - Focus Points

- When building a resume focus on the key points
  - All essential information is presented in a logical, easily digestible format.
    - You want HR or the interviewer to be able to skim through and understand their prospective employee.
  - Information relating to the position applying for:
    - Education
    - Employment / Internship
    - Skills
    - Projects

# Resume Building - Focus Points

- Projects and skills are very important for current graduates or applicants who do not have large amounts of experience.
  - The company will want to see what possible skills that can be utilized for certain projects or clients.
  - Shows your willingness / eagerness to learn and develop.
    - Quite a lot of software engineering experience comes from self-teaching.
- These include personal projects or projects during internships or during courses and studies.
  - These will fall away once your experience has built up further.
    - Except key projects / achievements.
- Highlight your key strengths and career goals.



# Resume Building - Format

- Typical Resume format would include:
  - Personal details
    - Contact information
  - Education
    - Especially early on in experience, can include certificates achieved as well.
  - Work experience
    - Either real world work experience or,
    - Any practical project you have worked on, such as your personal website that would align with the role requirement.

# Resume Building - Format

- Would typically include employment
  - However this can rather be software experience while building up employment experience.
    - Internships
    - Projects
      - Give clear descriptions of the project, technology used, what your role in the project was and the impact you had on its success.
      - Template to describe a project outcome:
        - “Accomplished ‘X’ as measure by ‘Y’ by doing ‘Z’

# Resume Building - Format

- Skills
  - Which would include the languages and frameworks you have experience with.
  - Important to focus and highlight the technology that the business or position may have as a criteria or utilize for their work.
- Interest
  - This is a section some businesses will or won't focus on.
  - However this can give the interviewer a better sense of the prospective hire and how they might fit into a team or project.
    - As well as if your interests align with the company.

# Resume Building - Summary

- Perfecting your Resume - Supported by *Cracking the Coding Interview*
  - Adding additional items not related to the position only takes away from the important information that the hiring personnel are looking for.
  - Projects section is a main focus when experience isn't quite there yet. This shows to the hiring personnel the type of individual they will be hiring.
    - This will later also boost your experience as its a way to portray yourself and experiences to the company.
    - Display 2 - 4 of the most noteworthy projects, especially tailor the selection of projects if they align with the position/company.
      - Technologies and languages
      - Individual or team work
      - Independant (hobby, self improvement) or course requirement

# Resume Building - Summary

- Programming Languages and Software:
  - Software:
    - Only what is appropriate to the position or company, else this can be left out.
  - Languages:
    - Listing all the languages you have experience with, and are comfortable using and being questioned on in your interview.
    - Or listing all languages with your relative skill and experience level with.
      - Either years of experience or “proficient”/“prior experience”/etc...

# Resume Building - Summary

- Proofread:
  - Can't be understated how important well documented resumes present the candidate to the hiring personnel. Some might completely discard a resume due to mistakes, even if the candidate is qualified.
    - Grammar
    - Spelling
    - Formatting

# Interview

Preparation

# Interview Preparation

- Positions in technology usually follow similar interview processes:
  - First section of the interview
    - This will include the interviewer getting to know you, and build their first impressions.
    - Interviewee given time to explain experiences and skills.
    - They might ask about specific topics:
      - Such as certain tech stacks you might have experience with that the job requires.
      - Or even about a certain project you have on your resume that might peak their interest.



# Interview Preparation

- Secondary section of the interview:
  - This can either be incorporated into your initial interview or scheduled separately
    - Will focus on your technical skills, in which they will give you problems to solve, and will give you a time limit to actually code the solution.
      - Or even explain your logic or methodology of solving.
    - Will ask technically questions about certain technologies, aspects, methods.

# Interview Preparation

- Third section:
  - Typically but not always, you will be given a project, or test code, that you will work on for a certain period of time and submit the work.
    - This can be given during a sit down period with them or given to take home.

# Interview Preparation - Key Focuses

- Prior to the interview, prepare, prepare, prepare...
  - Make sure everything you wrote on your resume you understand and can explain in detail.
  - An important aspect is understanding the business you are applying to.
    - Make sure you understand:
      - Their goals
      - Their history
      - Their motto and mentality
    - This can show the interviewer you have interest in the company and being involved in their future development.
      - And that your interests and thought processes align with the company.

# Interview Preparation - Key Focuses

- Practice problem solving, so that you can ace the technical section of the interview
  - Excellent website to practice:
    - [Leetcode](#)
- Do mock interviews / practice in front of the mirror or others
  - Focusing on:
    - Eye contact
    - Body language
    - Tone and speech when replying and explaining yourself.

# Interview Preparation - Summary

- Key Takeaways - Supported by *Cracking the Coding Interview*
  - Points the interviewer will evaluate the candidate on:
    - Analytics skills:
      - The candidate's problem solving proficiency, and at what level the algorithm was determined.
    - Coding skills:
      - The level and proficiency at which you can translate your determined algorithm to actual code.
    - Technical knowledge:
      - The understanding of computer science fundamentals.

# Interview Preparation - Summary

- Experience:
  - Has the candidate showed initiative, drive and their potential for learning.
  - Goes hand in hand with the projects the candidate has worked on.
- Culture fit:
  - Including communication skills.
  - Do the personal values and personality traits align with the company and team they might work on.
  - The candidate might be right for the position but not right for the team. Team synergy is incredibly important in this field.

# Interview Preparation - Summary

- Preparation and processes:
  - Problem-solving skills are valued the highest in this profession.
    - Working through tough problems and coming up with optimal solutions will put the candidate at the top of the list.
  - Data structures and algorithms:
    - Understanding these principles is quintessential, not only for interviews but for performing well in software engineering.
      - Doesn't have to be at an extremely high level, but a basic understanding and higher is advised.
    - Problem-solving questions during interviews will incorporate them.
      - Practice the pattern of problem-solving questions.

# Interview Preparation - Summary

- Algorithms to code:
  - Especially if the interview is not expecting you to compile the code.
  - When converting your determined algorithm for a problem-solving question into code, perfect code is not the focus, but more the ability to reason and understand.
    - Syntactical errors and bugs can happen.
    - This doesn't mean incorrect code can just be used, but focusing on the bigger picture weighs more.



# Interview Preparation - Summary

- Responses:
  - Be specific
    - Describe and articulate yourself with the support of facts.
      - The interviewer will determine their interpretation of your answers.
  - Limit details:
    - State details and key points, do not waffle on about your answer.
      - Allows the interviewer to focus on the correct key parts of your answers.

# Interview Preparation - Summary

- Focus on yourself
  - When explaining or describing a project or answer to a question, if it involves a team, focus on yourself rather than what the team accomplished or did, focus on what your role was and your impact.
- Asked about yourself:
  - Normally the interviewer will give you time to introduce yourself, and run through your resume.
    - Keep it structured, while describing yourself, highlight key points on your resume with short explanations.

# Interview Preparation - Summary

- Hobbies:
  - Only include them if they are unique to strike up a conversation or if they are technical or support a skill or trait that will be useful for the company.
- Success:
  - You are pitching yourself to the interviewer, so highlight some achievements, awards, etc...

# Conducting

Mock Interview

# Job Search

Strategies

# Job Search - Networking

- Networking is about:
  - Building relationships
  - Connecting with others
  - Broadening your reach
- Networking is tapping into a hidden job market
- The benefits of networking:
  - People who either work in or own businesses are more likely to conduct business with people they know, or who are referred to them.
  - Job listings pull in many applicants but having a slipstream can put your name towards the top.
  - The job or position you are looking for may not have a job listing posted yet. So knowing people and having a network gives you a head start.

# Job Search - Networking

- Building a network:
  - Includes friends, family, colleagues, even first acquaintances.
    - It's just the first step of getting your name out there and building a network.
  - Once you build a network, other networks will build on top of that, and spread from there.
    - It's all about taking the first step, putting yourself out there and getting your network started.
- Once you have a network established no matter the size
  - Utilize it, you must reach out, you will have to take that initiative.
  - You have to leverage your network in order to find jobs or leads to jobs.

# Job Search - Networking

- Make sure you know what you are after before reaching out.
  - The people in your network must have a clear understanding of what you are looking for, or no real potential leads will come from it.
  - They might not know how to help, or what direction to point you in if you are not clear about your objectives.
- Key notes:
  - First focus on building your network and the relationships before expecting results.
  - Make sure to always acknowledge the people who have helped you, regardless of the outcome, this will strengthen your network.



# Job Search - Resources

- Excellent website to build a personal portfolio and building a network. Can also be used for finding job listings, including international listings:
  - [LinkedIn](#)
- Fantastic website that connects developers with businesses, across South Africa and Europe. Highly targeted for the developer world:
  - [Offerzen](#)

# END

Thank you all for a successful IX 2024.  
Goodluck on your future software  
engineering endeavors!



A person with dark, curly hair is shown in profile on the right side of the frame, looking out over a vast ocean at sunset. The sun is a bright, glowing orb on the horizon, with its light reflecting as a shimmering path on the water's surface. The sky is a mix of soft orange and pale yellow. The text 'iX' is centered in the middle of the image in a white, sans-serif font. The person is wearing a dark red or maroon jacket.

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