

Interviewing

mohsin at google

Resume

- **Short** sentences to the point.
- Avoid long paragraphs about your project and internal project names.
- **Spell** check, **Grammar** check
- **Dates** e.g. Internship with NGO, 2005/5-2005/7.
- Plain **txt** and **pdf** file (not ms-word nor ppt).
- **Linkedin**, **github** profiles
- **Contact** email, phone numbers with country code, local address. Eg. phone: +91(789)123-4567
- **Email** address, use @gmail not @yahoo @hotmail ..
- Note: Do not send attachments in the first email to new contacts; their gmail will classify your message as **spam** unless they have replied to you earlier.

Resume

- **Action oriented**, start sentence with action.
 - I arranged a water tanker for the school.
- **Result oriented**, highlight what you solved
 - **Solved** water problem by arranging tanker.
- **Quantitative**, quantify your work
 - Wrote **1000** lines of C++ for router.
 - Saved **2000\$** by reusing old hard drives

Resume

- Be **honest**, do not write something you cannot explain when asked to elaborate. It is not ok to say you forgot (within few years of college).
- E.g. Wrote a big project in C++.
 - Q. What version of compiler did you use, why?
 - Q. What do you think of STL?
- E.g. **Expert** in Java
 - Q. How would you debug a deadlock in your code?

Resume

- Make it **interesting**, add few projects you did outside of class work, e.g. visited orphanage, wrote a blog on birds.
- **References** – not required on resume, but ask for references in advance, be prepared.

Not for resume

- Photo, race, gender, religion, family
- work permits, compensations,
- Numbers: ssn, pan, aadhar.
- transcripts, reference

Internet Reputation

- Google – search your name + college, SEO to make sure your webpage comes up on first page.
- Create your
 - google/profiles, linkedin, github
 - blogger, sites.google, stackoverflow
- Check other sites that refer to your name.
- Social media – make sure your wall is clean and shared only to trusted friends. Profile, name, posts, locations are not public, nor indexed by google.

Do your homework on the company

- Company size, products, years, employees, offices.
- Earnings, stock performance.
- Check what others say about the company and the products, use google, glassdoor, forums.

Dressing



Dressing



Body Language



Non- Verbal Interviewing Tips

Face:

- Smile
- Make Eye contact

Body:

- When you sit down, pull chair up to the table
- Sit up straight
- Lean forward slightly (shows interest!)
- Don't Fidget

Hands:

- Do not touch your face
- Gesturing occasionally
- Firm hand shake
- Avoid nervous habits, like picking nails

Your brand

- Create an College Tie/Pin/Blazer
- *US President Barack Obama wears his **Ivy League** badge on his shirt sleeves and business suits. And it has been no different during his ongoing India trip.* The conservatism of the ensemble was in keeping with the tradition of his Harvard University background. The president studied law there. Harvard men are known for their smart power suits that combine slim silhouettes, straight lines and slim fits.

Going for an interview

- Sleep well before the interview.
- Do not try to study too much on last day.
- Deep breath to reduce stress – meditate and be calm.
- Dress well and formally, not flashy.

Do's

- Discuss technical issues related to job
- Discuss global issues related to development
- Ask questions about the job, work culture.
- Company future.
- Your future in the company
- Interesting Technology, Finance questions.
- Be courteous and listen carefully
- Ask about who you will work with, the position and duties required of you.
- Ask about compensation

Don't

- Discuss politics
- Religion, Race, Gender, Jokes
- Personal opinions
- Previous compensation
- Over-eat during the interview lunch
- Excessive silence, nervousness, low voice

Technical questions

- **Think loudly** - solve one step at a time
- Write on white board / paper
- Understand the question first
- Ask and clarify
- List your assumptions, clarify the problem
- List alternatives
- Don't panic if you didn't solve one problem

1. What are they looking for?

- **Communication** skills, listens, speaks, asks.
- **Friendly** to work with
- Problem finder and framer, not just solver.
- **Action** oriented
- Self **motivated**
- **Interested** in work
- **Interesting** to work with

2. What are they looking for?

- Technically **competent**
- Wider **vision**, besides technical
- Well **read** technically
- Drive solutions to **completion**
- **Written** communication skills

You are also interviewing them

- Do you like the company product, people, vision, office, culture, diversity?
- **Ask** questions - Do they **listen** to you – if not, maybe it is not your type of company.
- Are they **polite**?
- Do the interviewers **like their work**?
- What **tools** do they use?
- How secure and robust (#errors in chrome) is their **website**?
 - Zero js errors, top company.
 - Around 10 errors / webpage, average tech company.
 - More than 10 errors / webpage, don't bother.

You are also interviewing them

- Are their questions interesting or data **recall**?
- Are they **on time**, do they make notes? Did they ask you for water before asking technical questions?
- Make sure you like their questions, food, style, dressing, work culture - If not, it is sign their culture is not right for you, and the work will de-motivate you soon.

Sample Questions

- Why do you want to work here?
- Where else did you apply?
[mention if you are talking to other companies, but not details, so they reply soon].
- What are your hobbies?
Answers to avoid: socializing, partying, watching TV.
Interesting answers: ?

Sample Introductory questions

- What newspapers do you read?
- Which websites do you read?
- Which books have you read?
- Which textbooks did you like?
- What happened in the news recently, and what do you think of it?

Career questions

- What do you see yourself doing in 5 years?
- What are your dreams in career?
- What difficult problem have you solved before?
- What achievement are you proud of?
- Who are your heroes and why?
- What else you plan to study in the future?
- How will you help the community?
- What was your project?

Sample technical questions

- What is e-signature? SSL? Super Cookies? Distributed hash? Anonymizer? DDOS?
- Which is your favorite programming language?
 - Version, IDE, Debugger, OS.
- Estimate people/cars/roads in a city?
- Estimate access time: disk vs network?
- Design a db for tracking mobile users.

Sample coding questions

- Sorting: heap, quick, radix.
- Searching, indexing, hashing, strings, trees.
- Graph algorithms: paths, connectivity, flow.
- Dynamic programming, concurrency.
- Crypto: How would you multiply two large numbers? - Time/space Complexity?
Algorithms? Applications?

Reference: Intro to Algorithms, by Cormen,

Practice

- Mock interviews
- Apply and go for real interviews and meet people even if you don't need a job, you never know where the opportunities come from. You will learn something and make good friends in other companies.

Preparation

Read:

- Google for information all the time.
- news.google.com – current events.
- Wikipedia.org - read, contribute.
- Read books in spare time, not TV.

Summary

Top Ten Most common mistakes made at a job interview

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- 10 Over-Explaining Why You Lost Your Last Job
Conveying That You're Not Over It
 - 9 Lacking Humor, Warmth, or Personality
Not Showing Enough Interest or Enthusiasm
 - 8 Inadequate Research About a Potential Employer
Concentrating Too Much on What You Want
 - 7 Trying to Be All Things to All People
"Winging" the Interview
 - 6 Failing to Set Yourself Apart From Other Candidates
 - 5 Failing to Ask For the Job

Most common tips about interviewing

- 4 Learn about the organization
Have a specific job in mind
- 3 Review your qualifications for the job
Be ready to briefly describe your experience
- 1

5 questions most likely to be asked

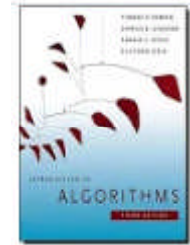
- Tell me about your experience at _____
- Why do you want to work for us?
- What do you know about our company?
- Why did you leave your last job?
-

Questions?

Thank you

References

- Hackerrank.com
- Practice.geeksforgeeks.org
- Cormen, *Introduction to Algorithms*, 3rd ed., 2009
- Skiena, *Algorithm Design Manual*, 2nd ed., 2008.
- Meyers, *Math for CS*, MIT 2018
<https://courses.csail.mit.edu/6.042/spring18/mcs.pdf>



(look on google)