Technical Interviews Tipsheet

Employer’s Perspective
Companies invest considerable resources in an effort to identify the best possible match to join their team. Employers often filter the large pool of candidates by their technical fit first, then invest time with the remaining candidates to identify those with the best fit for the work culture.

The Interviewing Process
The technical interview process may differ from company to company; a general rule is that the larger the company, the more structured the interview process.

1. Interacting with Company Representatives and Recruiters
Queen’s brings employers on campus for information sessions and career fairs so you have an opportunity to interact with recruiters, hiring managers, alumni and technical experts. These interactions offer you an early peek into the workplace culture and can help you become more comfortable talking to professionals. Many of these companies are hiring for internship and post-graduation roles.
Success Tactics
- Research the company. Ask the recruiter an insightful question that demonstrates your genuine interest in the kind of projects they do.
- Use LinkedIn to connect with a recruiter, alumni or company representative. Your recruiter may become your first point of contact throughout the interview process later. Show your appreciation by responding to their emails in a timely manner. Later in the process, if you receive an offer, keep them updated if you receive a competing offer.
- Consider reaching out to current or past employees from a desired company to set up a casual coffee/video/phone chat. The alumni network through LinkedIn is a good place to find these types of connections.
- After any event or employee interaction send thank you emails to any contacts you made. It is also important to reflect and record anything you learned.

2. Technical/Aptitude test and Application Package
Some companies may require the completion of an in-person or online technical/aptitude test alongside an application package.
Success Tactics
- Prepare a tailored resume and cover letter using the company guidelines.
- Read online forms that describe the types of questions on the aptitude test.
- Complete some practice aptitude tests or go to testing sessions for similar companies.
3. **Phone/video interviews – Technical/coding**

You may be required to write code during these screening sessions, however some companies may additionally do first round non-technical interviews over the phone as well.

**Success Tactics**

- Practice! See the included interview prep resources at the end of the tipsheet.
- Be professional and engaged in the interview. And be yourself!
  - Dress smartly and be professional – as if it were an in-person interview
  - Maintain eye contact with the camera
- For many coding interviews, the coding language is not important. They are testing your problem solving and competence with coding code.
- To demonstrate your attention to details and to fully digest the problem, start by asking clarifying questions such as:
  - Will this array only contain integers?
  - Will there be any negative values in the dataset?
- Ensure that you use descriptive variable names as well as talk (think aloud) through your code using formal language for example:
  - “the minimize_array functions call returns 0.5, which is assigned to the variable min_value”
- Make sure you fully understand the space and time complexities of your implemented solution. You will almost always be asked: “how you can make your solution more efficient”.
- If you get stuck on the problem, tell the interviewer exactly what you have tried and why that does not work. Remember that you are primarily being testing on your problem-solving process; you can turn getting stuck into an excellent opportunity to demonstrate your resiliency.

**Logistics**

- Book a private and professional looking room where you won’t be disturbed.
- Familiarize yourself with the communication software and test your audio/video clarity.
- Have water, notepad, clock, cover letter, resume and references all accessible.
- Familiarize yourself with coding in a shared text editor.
4. **On-site interviews**

Congratulations, you have made it past the phone interviews and on to the final test. The on-site interviews will explore your problem solving ability and cultural fit with the company.

**Success Tactics**
- Bring notepad, water, cover letter, resume and references.
- People remember you by how you make them feel, aim to be personal even throughout the coding challenge. Ask for a business card from every interviewer.
- Post interview, reflect on how you performed and record what you learned. Even if you are not successful securing the position, valuable experience can be captured for next time.

5. **Post interview follow up**

Within 24 hours of your on-site interview, send a short, genuine email to the people who interviewed you.

**Success Tactics**
- Thank them for their time, and the insights and information they provided.
- You can send individual emails to different interviewers or choose to send a general email to all the people you interacted with at the company: both are professional.
- You can use the email to fill in gaps in how you answered an interview question but keep it to one or two sentences.

**Resources**

Passive Interview Information
- Cracking the Coding Interview by Gayle Laakmann McDowell
- Technical Interviewing and resource platform - [https://www.hackerrank.com/resources/?h_r=home&h_l=header](https://www.hackerrank.com/resources/?h_r=home&h_l=header)
- Technical interview guide - [https://learttocodewith.me/posts/technical-interview/](https://learttocodewith.me/posts/technical-interview/)
- Coursera course on software engineering interviews - [https://www.coursera.org/learn/cs-tech-interview?ranMID=40328&ranEID=3PhbAxfdARQ&ranSiteID=3PhbAxfdARQ-TcfH8OIT0tpNTQa_GaLADw&siteID=3PhbAxfdARQ](https://www.coursera.org/learn/cs-tech-interview?ranMID=40328&ranEID=3PhbAxfdARQ&ranSiteID=3PhbAxfdARQ-TcfH8OIT0tpNTQa_GaLADw&siteID=3PhbAxfdARQ)
Interview Training

- Awesome interview practice questions - https://github.com/MaximAbramchuck/awesome-interview-questions
- Peer to peer practice interview prep site - https://www.pramp.com/#/
- Practice programing interview questions - https://www.java67.com/2018/05/top-75-programming-interview-questions-answers.html
- Practice programing interview questions - https://simpleprogrammer.com/programming-interview-questions/