Mock Interview Guide

COMPUTER SCIENCE:
HARDWARE, NETWORKING, PROGRAMMING

THOMPSON RIVERS UNIVERSITY | Career and Experiential Learning

Index

Mock Interview Guide: Computer Science

Hardware Job Description

Who is DFO

Fisheries and Oceans Canada, is a department of the Government of Canada that is responsible for developing and implementing policies and programs in support of Canada's economic, ecological and scientific interests in oceans and inland waters. Within DFO, Information Management and Technology Services is a distributed department, with offices in Vancouver, Kamloops, and other sites across Canada. Students would work in Kamloops but have colleagues at other sites as well.

Description

The Co-op Students work consists of replacing computers throughout the Pacific Region under our Life Cycle Maintenance Program, this includes contacting the DFO clients, scheduling the replacements, preparing and shipping the new computers, assisting with data transfer and software installation and configuration as well as wiping and disposal of the old computers.

Qualifications

- Student will be trained in all aspects of the job, but an interest in operating systems, hardware, software applications, enterprise systems and technical troubleshooting is preferred.
- Ability to work with both technical and non-technical employees and resolve their computer problems.
- Organizational skills.
- Able to work at the DFO Kamloops office (with COVID protocols) and support remote clients across Canada.

Requirements

- Must be a Canadian Citizen or permanent resident: this is a requirement to get security clearance set up in a reasonable amount of time.
- A valid Driver's license preferred but not mandatory.
- Must be returning to School in the fall (or future semester) and be registered at a recognized Canadian Educational Institution.

Preferences (Not Required)

- Experience supporting clients in the Windows 7 Enterprise Environment remotely, using remote tools and techniques.

Hardware Interview Questions

1. Tell me about yourself.

2. What words would a classmate or co-worker use to describe you?

3. Why are you interested working for this company?

4. What is your biggest weakness?

5. Tell me about a time when you made a mistake. How did you handle the situation and what did you learn from the experience?

6. How do you explain technical details to a non-technical audience?

7. Tell me about a time that you had a conflict with a co-worker. How did you deal with the situation?

8. Tell me about a time when you worked as part of a team to complete a challenging project. What role did you play, and how did the team work together to get the job done?

9. What would you do if there was a hardware system with a problem that you could not figure out?

10. What if you had multiple projects that you needed to complete in a short time frame. How will you make the deadlines?

11. You've been assigned a major project and are halfway through when you realize that you've made a mistake that requires you to go back to the beginning to fix it. How do you handle that while still trying to make your deadline?

12. What would you do if you were assisting a customer with their computer problems, but they were not able to understand the technical aspects? What would you do if they started to get frustrated and angry?

13. Where do you see yourself in 5 years?

14. Do you have any questions?

Rubric

How You Did:	Comments:
You're Hired! - stellar resume (no grammar or typing errors) - great poise, professional dress, great eye-contact - very confident - detailed and specific answers to questions - sells skills and references previous experience - clear understanding of the organization and job description - appears very honest and easy to work with - interviewee is professional when responding - very clear and concise manner of speaking - above-average maturity - expresses a strong interest in the position -prepared well developed questions directly related to the company and the position	
We're Considering You… - thorough resume (no grammar or typing errors) - decent poise, professional dress, good eye-contact - somewhat confident - specific answers to questions - sells some skills related to the job description - appears to have **some** understanding of the organization and job description - appears honest and non-conflict prone - interviewee is usually professional when responding - clear manner of speaking - noticeable maturity -expresses **moderate** interest in the position -prepared questions directly related to the company and the position	
We Might Have Hired You But… - resume is organized, but shows little experience (some typos) - not enough poise, semi-professional dress, some eye-contact - confidence is not convincing (nervous) - specific answers to some questions, others too general (answers are not thorough enough) - comes off as a little too inexperienced - doesn't have the necessary skills or experience - appears to have some communication problems - lacks motivation, dedication and commitment to the organization - interviewee attempts to be professional when responding (are they following S.T.A.R technique situational questions?) - manner of speaking is comprehensible, but a bit unclear - some maturity evident - has prepared questions at the end	
Keep Working at It! - resume feels incomplete or has errors - no poise, dress too casual or inappropriate, poor eye-contact (discuss what they should wear according to the job) - lack of confidence and inexperience is obvious - answers to questions are not convincing, relevant, or sufficient - unexplained absences from their employment history on resume - does not come across as a dependable employee - interviewee is not professional when responding - manner of speaking is unclear, jumbled or poorly worded - interviewee needs more experience and maturity - used profanity or inappropriate conversation - they did not ask any questions even though they were prompted	

Networking Job Description

Position Summary

As the successful candidate you will join the Service Engineering team at BlackBerry. You will be deploying, security patching, maintaining and supporting the production environment. Working with Service Specialists, you will manage multiple cloud environments comprised of systems running Linux and Windows operating systems.

Responsibilities

- Deployment and upgrades of BlackBerry services; coordinating the arrangements for the supporting platform and infrastructure; configuration of the services.
- Create and review methods of procedure (MOPs) that specify the steps and commands to run; create implementation plans that organize the work.
- Automate recurring work such as deployments, upgrades, management and monitoring functions.
- Validate that production behavior and performance aligns with test results.
- Build and deploy brand new services; migrate services between different environments.
- Work with security teams to improve security and patch identified security vulnerabilities.
- Assess service quality and identify opportunities for improvement.
- Troubleshoot and resolve incidents; prevent incidents from recurring through knowledge sharing, documentation, and improvements. Contribute to root cause analysis.
- Work within the defined change management processes to plan and schedule changes.

Skills and Qualifications

- Currently enrolled in post-secondary education in Computer Science, Systems Administration, or a related discipline.
- Working knowledge of Linux/Unix and Windows administration.
- Deploying and maintaining apache web servers
- Knowledge of internal protocols: HTTP, SSL
- Experience with scripting and version control: bash, awk, sed, Ruby, Python, Git, SVN.
- Knowledge of Cloud Computing (e.g. KVM, VMware, OpenNebula, AWS, Azure)
- Excellent written and verbal communication skills.
- High initiative and motivation. Ability to work effectively independently, and to support multiple services as part of a team.
- Strong support and troubleshooting skills in the area of applications and services, including log analysis.
- Ability to learn new technologies quickly with some support and guidance.
- Strong individual time management. Basic project management skills.

Additional Assets

- IT Administration or Network Operations experience.
- Programming languages (Java, Ruby, C, C++).
- Experience with automation using scripts and configuration management (e.g. Chef, Salt, Puppet).
- Certifications such as LFCS/LFCE from Linux Foundation, LPI, RedHat or SuSE.
- ITIL awareness.
- Experience with Agile/Scrum methodologies.

1. Tell me about yourself.

2. What words would a classmate or co-worker use to describe you?

3. Why are you interested working for this company?

4. What is your biggest weakness?

5. What networking fundamentals or frameworks do you know, or can you work with? Describe your experience with them.

6. Tell me about a time when you made a mistake. How did you handle the situation and what did you learn from the experience?

7. Tell me about a situation when you reached a goal and tell us how you achieved it.

8. Describe a situation where you saw a problem with a system and took steps to fix it. What would you do if you couldn't figure out how to fix it?

9. What if you had multiple projects that you needed to complete in a short time frame. How will you make the deadlines?

10. What would you do if your boss started giving you some constructive criticism over your work that you were proud of?

11. What would you do if you were working hard on a project and were almost finished when the goals or priorities were changed?

12. Where do you see yourself in 5 years?

13. Do you have experience working remotely? How do you keep yourself focused?

14. Do you have any questions?

Rubric

How You Did:	Comments:
You're Hired! - stellar resume (no grammar or typing errors) - great poise, professional dress, great eye-contact - very confident - detailed and specific answers to questions - sells skills and references previous experience - clear understanding of the organization and job description - appears very honest and easy to work with - interviewee is professional when responding - very clear and concise manner of speaking - above-average maturity - expresses a strong interest in the position -prepared well developed questions directly related to the company and the position	
We're Considering You… - thorough resume (no grammar or typing errors) - decent poise, professional dress, good eye-contact - somewhat confident - specific answers to questions - sells some skills related to the job description - appears to have **some** understanding of the organization and job description - appears honest and non-conflict prone - interviewee is usually professional when responding - clear manner of speaking - noticeable maturity -expresses **moderate** interest in the position -prepared questions directly related to the company and the position	
We Might Have Hired You But… - resume is organized, but shows little experience (some typos) - not enough poise, semi-professional dress, some eye-contact - confidence is not convincing (nervous) - specific answers to some questions, others too general (answers are not thorough enough) - comes off as a little too inexperienced - doesn't have the necessary skills or experience - appears to have some communication problems - lacks motivation, dedication and commitment to the organization - interviewee attempts to be professional when responding (are they following S.T.A.R technique situational questions?) - manner of speaking is comprehensible, but a bit unclear - some maturity evident - has prepared questions at the end	
Keep Working at It! - resume feels incomplete or has errors - no poise, dress too casual or inappropriate, poor eye-contact (discuss what they should wear according to the job) - lack of confidence and inexperience is obvious - answers to questions are not convincing, relevant, or sufficient - unexplained absences from their employment history on resume - does not come across as a dependable employee - interviewee is not professional when responding - manner of speaking is unclear, jumbled or poorly worded - interviewee needs more experience and maturity - used profanity or inappropriate conversation - they did not ask any questions even though they were prompted	

Programming Job Description

Software Developer (Android/iOS)
From XOMBO Jobs

Who we look for
A role at XOMBO gives team members a chance to produce meaningful work and gain experience in the fields of health/fitness, e-commerce, and data privacy. We are now seeking applications from motivated candidates who are excited about helping define, plan, and implement our next R&D phase.

Do you have a personal interest in helping others improve wellness, promote a healthy lifestyle, and manage chronic illnesses?

Are you a team player that can help contribute to the growth of an early-stage Vancouver start-up?

We're looking for someone who is creative, ambitious, detail-oriented, time-conscious, and who wants to do work where they have the opportunity to empower others in reaching their personal goals. Our ideal candidate will be able to demonstrate their positive thinking, realistic vision, and an appreciation for human potential through all the work they produce.

Our product mission
XOMBO develops personal fitness products to help monitor weight loss and health goals with the guidance of a certified professional. We've developed and launched a Minimum Viable Product (MVP) using a "Service-Oriented Architecture" that collects and analyzes user data from commercially available, off-the-shelf hardware and software like Instagram, Fitbit, and Google Fit. Our back end also integrates with APIs like Amazon AWS, Amazon FBA, Stripe, Mailchimp, Trello, Pushbullet, ShipHero, Twilio, and Sendgrid.

Personal Development
XOMBO strives for quality in the work that we do, and we look for that in our people, too. Continuous self-improvement is core to our business model. This position has the opportunity for you to learn and grow while demonstrating your unique skills. You are encouraged to provide constructive feedback to everyone on the team and recommend improvements to our processes.

Flexibility
This role will allow you to work remotely from anywhere in British Columbia, Canada. You'll be more successful if you're organized and self-motivated. Our team keeps office hours throughout the day, so we can accommodate students with class schedules.

Desired Experience

- Apple Watch App Development and Apple iOS Health Kit API experience is wanted
- Bluetooth Low Energy experience is wanted
- Knowledge of working in one or more popular Android/iOS development tools (i.e. Android Studio, Xcode)
- Development in Java, Swing, Objective-C, or another mobile-targeted programming language with a willingness to learn
- Knowledge of object-oriented programming
- Knowledge of design patterns
- Knowledge of HTTP(S) and DNS, at a high level
- Knowledge of JSON / XML formats, at a high level
- Integration with 3rd-party APIs (RESTful/GraphQL)
- Integration with 3rd-party SDKs (Bluetooth Low Energy, Apple Health Kit, Apache Cordova)
- Knowledge of version control with Git / GitHub
- Experience with Apache Cordova / PhoneGap a Plus
- Experience with cross-device, automated testing tools a Plus
- Prerequisites: Object Oriented Programming and mobile development

Fine Print

Due to our work dealing with heath and financial information, a background and credit check will be conducted as a pre-condition to being offered the job and may be performed periodically during the engagement, as required by our client(s). You will be required to log your working hours and document information pertaining to the work you performed in order to claim SR&ED credits for your eligible R&D work. XOMBO retains the intellectual property developed during the engagement. Funding for this role and subsequent placement of a candidate may be contingent upon pre-approval for grant funding from one or more funding partners; as such, you may be asked questions to assess eligibility for these programmes during the hiring process and be subject to pre-approval. Placements in this role are being supported by the Digital Skills for Youth Wage Subsidy, NRC-IRAP, Student Work Placement Programme(s) (ex. Biotalent, MAGNET, TECHNATION, WIL Digital, etc.), Mitacs, New Ventures BC, Innovate BC, and/or other grant partners.

Programming Interview Questions

1. Tell me about yourself.

2. What words would a classmate or co-worker use to describe you?

3. Why are you interested working for this company?

4. What is your biggest weakness?

5. Tell me about a time when you made a mistake. How did you handle the situation and what did you learn from the experience?

6. How do you handle constructive criticism? Have you ever given constructive criticism?

7. What programming languages or frameworks can you work with? Describe your experience with them.

8. Describe a situation where you saw a problem and took steps to fix it.

9. Tell me about a long-running project you handled. How did you manage your time to meet your deadlines?

10. What would you do if you disagreed with the way a manager wanted you to handle a problem or task?

11. What would you do if you were asked to perform a task that you have never done before?

12. You've been assigned a major project and are halfway through when you realize that you've made a mistake that requires you to go back to the beginning to fix it. How do you handle that while still trying to make your deadline?

13. Where do you see yourself in 5 years?

14. Do you have experience working remotely? How do you keep yourself focused?

15. Do you have any questions?

Rubric

How You Did:	Comments:
You're Hired! - stellar resume (no grammar or typing errors) - great poise, professional dress, great eye-contact - very confident - detailed and specific answers to questions - sells skills and references previous experience - clear understanding of the organization and job description - appears very honest and easy to work with - interviewee is professional when responding - very clear and concise manner of speaking - above-average maturity - expresses a strong interest in the position -prepared well developed questions directly related to the company and the position	
We're Considering You… - thorough resume (no grammar or typing errors) - decent poise, professional dress, good eye-contact - somewhat confident - specific answers to questions - sells some skills related to the job description - appears to have **some** understanding of the organization and job description - appears honest and non-conflict prone - interviewee is usually professional when responding - clear manner of speaking - noticeable maturity -expresses **moderate** interest in the position -prepared questions directly related to the company and the position	
We Might Have Hired You But… - resume is organized, but shows little experience (some typos) - not enough poise, semi-professional dress, some eye-contact - confidence is not convincing (nervous) - specific answers to some questions, others too general (answers are not thorough enough) - comes off as a little too inexperienced - doesn't have the necessary skills or experience - appears to have some communication problems - lacks motivation, dedication and commitment to the organization - interviewee attempts to be professional when responding (are they following S.T.A.R technique situational questions?) - manner of speaking is comprehensible, but a bit unclear - some maturity evident - has prepared questions at the end	
Keep Working at It! - resume feels incomplete or has errors - no poise, dress too casual or inappropriate, poor eye-contact (discuss what they should wear according to the job) - lack of confidence and inexperience is obvious - answers to questions are not convincing, relevant, or sufficient - unexplained absences from their employment history on resume - does not come across as a dependable employee - interviewee is not professional when responding - manner of speaking is unclear, jumbled or poorly worded - interviewee needs more experience and maturity - used profanity or inappropriate conversation - they did not ask any questions even though they were prompted	