



110 Allen Rd, Basking Ridge, NJ 07920

Screening Test/Interview Questions for Junior Software Engineer (Remote) Position

Instructions: Please precede all your answers with the question you are answering. Use acronyms only after you've explained them.
Use correct spelling and grammar.

Candidate's Name: Yuxuan Qiu

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1. Are you currently employed? No
2. What interests you most about software development?

I can build my own things through programming, although sometimes the process is difficult, doubtful and painful, such as facing all kinds of bug problems need to be troubleshooting step by step, but the success in solving problems can bring me joy, as well as the sense of achievement and satisfaction after completing the development can not be replaced by anything.

3. What aspects of software development do you find the most challenging?

I think of it as thinking outside the box, e.g. after I've finished developing a piece of software content, can I build on the original, revisit the original code and improve the efficiency and simplicity of the code by modifying it and the overall structure.

4. What techniques would you choose to motivate disengaged employees?

I am a very responsible person and I am usually motivated by the fact that I feel the responsibility on my shoulders. But I think proper rewards are still one of the best means to motivate employees, along with an inaccessible passion for software development. It is very important and effective to keep your employees enthusiastic about software development.

5. How familiar are you with relational databases?

A relational database is a database that stores and arranges data based on relationships, where the more important concepts include tables, primary keys, foreign keys, and adding, deleting, and changing the contents of the database through the SQL language. At the same time, relational databases are required to guarantee the ACID attributes, which are Atomicity, Consistency, Isolation, Durability, at a macro level to ensure reliable processing of data.

6. How do you stay updated on current technology trends, news or products?

I usually keep up with the latest tech by reading various tech news, especially in AI, and the recent big hit of AI modeling is also very interesting to me. I also get new information by talking to my friends who are computer science majors.

7. How do you organize your workflow to complete web development projects?

I usually create a task list that lists the various tasks needed for a web development project in order and their priority. Then I design the appropriate UI blueprints for the project. Then develop prototypes to give stakeholders a preview of how the website will work. After that it's all about setting up the front-end and back-end and testing the project.

8. Have you ever identify a potential problem and proactively implemented software solution?

I once had a project to scan license plate levels for cars in a parking lot, and when the traffic is too heavy, there are usually lagging problems, even leading to problems with the next car not being able to be read correctly, so I designed the buffer in the software to temporarily store the license plate image data to make sure that the data from each car is captured and stored, and then processed the data in order. This prevents data loss or errors during peak periods when the processing speed cannot keep up with the capture speed.

9. What do you feel is important to make sure the work gets done efficiently

Effective team communication and cooperation as well as clear mission objectives. This is because it is very easy for semantic ambiguity or dichotomy to occur during software development, and thus a lot of time can be wasted in the wrong direction.

10. Walk me through your portfolio. Which pieces are you most proud of, and why?

My portfolio consists of 2 games that I have designed, one of them is called Pushing Daisies, which is a group project for a 2D game. I designed the drawing style of the game together with another member and successfully implanted it into the game, and I think the overall graphics are what I am most proud of. The second game was a pixelated life simulator game called He Dies, in which my team and I brainstormed ideas that we could incorporate into the game to illustrate the events that the character would encounter as he or she got older.

11. Tell me about yourself and your last/current job/class?

My name is Yuxuan Qiu I am a person who is passionate about life, I like the pleasure of completing the tasks of my system one by one. I am also a chef who likes to work out and cook Chinese food, I really like to share my interest and my favorite things to people around me. My last class was Data-Driven Player Model, which enabled me to intuitively make reasonable

observations and draw reasonable conclusions from a large amount of data, and to use various data visualization tools such as Tableau with SQL to filter and model the data. It provided me with a new dimension to observe players' choices and tendencies.

12. What type of software have you worked with?

I've used a variety of IDEs including IntelliJ, pycharm and also the VS code, jupyter notebook, MySQL, DBeaver, Tableau, Node.js, React.

13. What are your top reads/activities/videography subjects?

I usually like to play a social depiction type of social game like Among us which I used to really enjoy. Also I'm really into realistic video games I don't really like Nintendo type games because I think maybe Nintendo games are too childish. I prefer COD and Dark Soul type games.

14. How long would you expect to work for us if hired and how much will you request per hour if you are hired?

According to my school's requirements I can currently only work 4 month events between May and the end of August. However, I will be able to graduate next year in May 2025, so if I work well with your company during these four months, I would be more than willing to be able to continue working and connecting with your company after graduation. I expect 25\$-32\$ per hour.

15. Will you be able to devote 30 to 40 hours of your time weekly for the company?

No problem at all

Job Description:

Develops software solutions by studying information needs; conferring with users; studying systems flow, data usage, and work processes; investigating problem areas; following the software development lifecycle. Determines operational feasibility by evaluating analysis, problem definition, requirements, solution development, and proposed solutions. Documents and demonstrates solutions by developing documentation, flowcharts, layouts, diagrams, charts, code comments and clear code. Prepares and installs solutions by determining and designing system specifications, standards, and programming.

Benefits:

401(k)

Dental insurance

Health insurance

Paid time off

Vision insurance

Salary range: \$124,000- \$135,000 annually

