Before the interview, I took a look at your company's website. / After listening to your wonderful explanation earlier, I understand that your company has various business systems catering to different industries. Different business divisions provide services to clients from diverse industries. Part of my job involves providing solution support to each business division. I noticed that your company utilizes technologies such as SAP/Oracle, and I have experience with them as well. Therefore, I believe I am suitable for this position.

Does your company provide services to clients from various industries?

It's impressive that your company supports a wide range of tasks with a small number of employees.

I heard that your company is involved in designing and developing systems related to the financial industry. In my previous position, I was responsible for designing and developing the accounting module for the telecommunications support system.

Part of my job involves providing solution support to each business division. Additionally, I have experience with technologies like SAP and Oracle, which are used in your company. Based on these experiences, I believe I am well-suited for this position.

Your company primarily works with JavaScript, PHP, and Go frameworks. In my previous role, I mainly used JavaScript and PHP. Last year, I also utilized TypeScript and PHP for projects that I published on GitHub. Therefore, I believe I have the necessary technical skills for this role.

I feel that your company fosters a warm environment with good communication, and I am drawn to it. That's why I decided to apply.

I believe my strength lies in being able to tackle challenges and achieve results without fear, even in new environments. I would like to fully utilize my strengths, such as programming and database maintenance, and in the near future, I aspire to become independent, just as I am now.

I have accumulated years of experience in maintaining existing systems and backend development. I hope to leverage my expertise in a new position. Specifically, I am interested in backend development.

Your company is a venture enterprise with great potential for growth. I am also interested in applications within the education industry because my daughter is currently in elementary school.

I apologize for intruding on your day off.

I'm sorry for bothering you on your day off; I apologize for the inconvenience.

Not at all. I am still in the learning process.

I have had around 10 interviews with other companies, including the current situation, but the job responsibilities didn't quite match.

My name is Li Hong.I am from Liaoning Province, China.

I currently reside in Shenyang and intend to move closer to the company if I join.

I am 40 years old with a family of three. I have one daughter.

I graduated from Xi'an University of Posts and Telecommunications in September 2006. My major was Telecommunication Engineering. I have been working in the IT industry since graduation.

I am skilled in programming development and database management in my work.

Currently, I work at Neusoft Group, specializing in blockchain development.

I have been studying Japanese for six months.

Although I have never been to Japan, I have always had a fondness for the country.

That concludes my basic introduction. Next, I will briefly explain my work experience.

1. From 2006 to 2011, I worked as a software engineer in the Beijing Telecom Support Department at Pactera. My main responsibilities were the development and design of the accounting management module for Beijing Telecom's Business Support System (BSS).

2. From 2011 to 2015, I worked as an Operations and Development Engineer at Renren's data center. My main responsibilities included database maintenance for the website and participation in the development and design of automated operation platforms and data statistics platforms.

3. In 2015, due to personal reasons, I moved to Shenyang. From 2015 to 2023, I worked as a Senior Software Engineer in the Technical Strategy Development Department at Neusoft Group. I provided technical support to various departments and was responsible for the design, development, and operation of blockchain platforms.

I am skilled in web system design, development, and database maintenance in a Linux environment. The programming languages I frequently use for work are PHP, JavaScript, Python, Java, and Go.

That concludes my self-introduction.

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I apologize if it was difficult to hear.

To conclude: Thank you very much for your valuable time today.

Technological advancements are happening rapidly, and I am interested in exploring new technologies.

The resignation and departure procedures will take approximately two months, so I will be available to join in approximately three months.

I have very little experience in this field.

Providing solutions to corporate clients is my focus.

Last year, I shared a project I created on GitHub. This project is essentially about analyzing data from the Japanese stock market, conducting initial screening based on certain patterns, and facilitating deeper screening from these strong stocks.

https://github.com/Harvey-Specter/plunge_ui

For the frontend, I use TypeScript (Vue3).

For the backend, I use PHP (Laravel).

For data collection and analysis, I use Python and Golang.

--.

During my time at Renren, I ensured the guarantee of an SNS without a database.

The website had over 2,000 database instances running on nearly 1,000 Linux servers.

My responsibilities included database migration, optimization, backups, and troubleshooting.

I monitored thousands of database instances using Zabbix, and when monitoring thresholds were exceeded, automatic alerts were triggered.

Through secondary development based on MHA, I achieved automatic failover for MySQL clusters in case of failure.

Currently, I am working at Neusoft Group, where I am responsible for the development of blockchain-related products.

We provide services to many corporate and government clients with blockchain operation and maintenance platforms based on Hyperledger Fabric, as well as cross-chain blockchain platforms.

We offer services to numerous corporate and government clients.

--

I currently have a stable job, but I feel a bit lacking in a sense of achievement.

It is because I cannot see the possibility of career advancement,

and I want to increase the pace of growth in the workplace.

What kind of responsibilities can I expect to have?

I am eager to integrate with everyone as soon as possible, so please let me know if there is anything I should study in advance before joining.

--why Japan

I believe that Japan is more developed and civilized than China. In this case, I am specifically considering Japanese companies and greatly appreciate their meticulous work style and the importance placed on technology. I also find Japanese education attractive and would like my daughter to attend school in Japan.

I have previous experience collaborating with colleagues from Japan, and I was impressed by their work ethics and skills. Therefore, I would like to work with Japanese professionals in Japan.

Japan and China are at different stages of civilizational development. Personally, I feel that China gives a slightly rougher impression.

--talk about a project

I was involved in the design and development of a blockchain application platform during my time at Neusoft. This platform was a secondary development based on Hyperledger Fabric. The main challenge of this project was to optimize the performance of the blockchain and apply blockchain technology to real-world business scenarios. By studying the source code of Hyperledger Fabric, I extended and optimized many of its functionalities. For example, I

added support for multiple encryption algorithms, multiple state databases, multiple containers, and automated smart contract generation, among other enhancements.

-- education

First, there are several differences between the education systems, examination systems, and evaluation methods in China and Japan. The Chinese education system focuses on subject knowledge and exam preparation, with exam results playing a crucial role in student selection and further education. On the other hand, Japanese education emphasizes students' overall development, self-learning abilities, and creative thinking skills.

Next, the teaching methods also differ. In China, teachers impart knowledge, and students are encouraged to memorize and digest a vast amount of information. In contrast, Japanese education values dialogue and participation. Teachers encourage students to think, question, and collaborate, fostering their creative and critical thinking skills through group discussions and practical activities.

Lastly, the educational values also vary. Chinese education emphasizes academic achievements and competition, subjecting students to significant academic pressure. Conversely, Japanese education values students' character, social responsibility, and civic awareness. It emphasizes personal development and interpersonal relationships, encouraging students to cultivate self-discipline and cooperation.

Based on my knowledge and experience, objectively evaluating both education systems is challenging for me personally. However, I believe that the Japanese education system places emphasis on students' overall development and nurturing their creative thinking skills. This approach is highly beneficial for their personal growth and future careers.

-- Team Leader

As a Team Leader in a software development team, you are typically responsible for the following tasks:

Project Management: Responsible for project planning, organization, and management. This includes creating project plans, setting milestones, assigning tasks and resources to ensure timely project delivery and meet quality standards.

Team Leadership: As the leader of the team, you provide guidance and support to team members, motivating them to achieve individual and team goals. Team Leaders should foster a spirit of collaboration, encourage communication, and promote knowledge sharing.

Technical Guidance: At the technical level, Team Leaders should have extensive technical experience and expertise. They provide technical guidance and advice to team members, solve technical challenges, and ensure the team follows best practices in development.

Personnel Management: Responsible for managing team members, including recruitment, training, and performance evaluations. Team Leaders need to understand the capabilities and interests of team members, assign work tasks effectively, and provide necessary training and development opportunities.

Communication and Coordination: Team Leaders act as a bridge for communication within the team and with external stakeholders. They need to effectively communicate and coordinate with other teams, project managers, and stakeholders to ensure smooth information flow and project progress.

Risk Management: Responsible for identifying risks and issues in the project and developing appropriate mitigation measures. Team Leaders need to address issues promptly and minimize the impact of risks on project progress and quality.

Quality Control: Ensure quality control measures are implemented throughout the software development process, including code reviews, unit testing, and integration testing. Team Leaders need to ensure the team adheres to best practices and standards to deliver high-quality software products.

Overall, Team Leaders are versatile individuals who need to possess comprehensive skills in project management, team leadership, technical guidance, and personnel management. Their responsibilities include ensuring efficient team operations, successful project delivery, and promoting the growth and development of team members.

-- optimizing SQL

I have extensive experience in optimizing SQL queries, and performance issues in SQL queries are commonly caused by the following three problems:

Improper or unused indexes: This type of problem can be resolved by examining the execution plan of the SQL query and identifying appropriate index usage.

Large number of records in data tables or excessively long field lengths: When the data volume exceeds millions of records or when a field has a very large length, performance issues are more likely to occur.

Usage of GROUP BY in aggregate queries: The use of GROUP BY in aggregate queries can often lead to performance problems.

--ppt echotrust

The light blue box represents our product, the blockchain application platform. It supports multi-center deployment, where centers collaborate to manage smart contracts and databases.

Both parties involved in transactions cannot unilaterally modify or update data or smart contracts. The platform can be integrated with customers's existing business systems through REST APIs.

Technologies Used at Neusoft

The frontend of the blockchain platform utilizes the VUE3 framework in JavaScript.

The backend employs the SpringBoot framework in Java and the Beego framework in Go.

It supports mainstream container environments.

The databases used are MySQL and PostgreSQL

10. Responsibilities at Renren

i) Renren has 400 million users, with approximately 10 million online users daily, primarily consisting of students.

j) The website requires extensive data statistics every day for product optimization and user growth. To address this, we developed a statistics platform and incorporated periodic statistical reports into the platform.

k) Once development of a product is complete, it is necessary to submit the SQL statements in the code for review by us. The criteria for review commonly include the use of indexes in SQL statements and the prohibition of aggregate queries.

11. High Availability Solution for Renren's MySQL Database

l) The website has approximately 2,000 MySQL database instances.

m) We utilize the Master High Availability (MHA) solution for high availability, monitoring the entire database cluster with Zabbix and creating database backups using xtrabackup.

n) Due to the large number of users, we perform sharding (partitioning) to avoid excessive data volume in a single table.

12. Performing Failover with MHA

Here is a brief explanation of the workflow using MHA:

1) To ensure data consistency, MySQL databases utilize semi-sync replication to synchronize the master and slave.

2) When an MHA manager detects a failure in the master database, the selection of a new master database begins.

3) In that case, the MHA manager calls a script to determine which slave is the most up-to-date and sets it as the new master, reconfiguring the pointer of the other slave to the new master to establish the relationship of the new master-slave.

4) A virtual IP is set for the new master.

5) The administrator is alerted via email or SMS.

13. MySQL Data Statistics Platform

Our department is also responsible for the company's data statistics requirements.

1) To address periodic statistical requirements, we developed a statistics platform. Colleagues from the business department can view statistical reports on the platform.

2) With numerous daily statistical requirements and distributed data across different databases, we developed a framework using the Python language to perform cross-database statistics.

3) With this framework, complex queries spanning databases can be executed with just a few lines of code.

14. Technologies Used at Renren Data Center

These are the technologies utilized at Renren. In the latter part of Renren, most of the operational tasks are automated, involving only daily report checks and system health monitoring.

Do you have any questions regarding the aforementioned points?

8. Beijing Telecom Business Support System (BSS) Simplified Deployment Architecture

This is a simplified deployment architecture diagram of the Business Support System.

a) The database utilizes Oracle 11g RAC cluster and stores essential business data, customer information, payment records, and transaction logs.

b) The middleware employs Oracle's Tuxedo, where high-security services are developed in C++ and deployed on Tuxedo. Examples include payment and credit management.

c) The application server utilizes Oracle's WebLogic for deploying Java services and frontend applications.

d) I am responsible for the maintenance of the Oracle database and WebLogic server. Primarily, I handle database storage expansion, identify and tune SQL queries that impact system performance. Oracle demonstrates excellent performance for complex queries, and performance issues mainly arise from improper use of indexes.

9. Technologies Used in BSS

The following is a summary of the technologies I used at Asiainfo:

e) The frontend of the system employs JavaScript and JSP.

f) At that time, there was no Spring Boot framework for Java programs, so popular MVC frameworks like Struts, Spring, and iBatis were used for the backend.

g) Tuxedo services are developed in C++. However, to be honest, I have not used C++ since this project.

h) Shell scripting and SQL are utilized for database maintenance and statistics. Linux and the database are consistently reused. Next, let me explain my work experience with Renren Network.

Do you have any questions regarding the above information?

--技术困难

In the blockchain platform project I participated in, we encountered a technical challenge of handling the performance and scalability of large-scale transactions.

Our project involved processing a significant amount of transaction data and required an efficient system to handle and store this data. However, in the initial stages, we found that the system's performance degraded when dealing with large-scale transactions and couldn't meet the expected throughput requirements.

To address this issue, I took the following steps:

Performance analysis and tuning: Firstly, I conducted a performance analysis of the system to identify bottlenecks. I used performance analysis and monitoring tools provided by Hyperledger Fabric to collect and analyze system metrics and performance data. Based on the analysis results, I identified key components and operations causing performance bottlenecks.

Code and configuration optimization: Based on the performance analysis, I optimized and improved the code. I reviewed the logic and implementation of the chaincode to minimize unnecessary computations and access operations. I also optimized network configurations and parameter settings to enhance the system's throughput and responsiveness.

Concurrency and parallel processing: To improve the system's scalability and concurrent processing capability, I introduced concurrency and parallel processing mechanisms. I utilized the concurrent execution model provided by Hyperledger Fabric and designed effective mechanisms for parallel processing to fully utilize system resources and multicore processing capabilities.

Stress testing and performance optimization: To validate the improvements, I conducted a series of stress tests and performance optimizations. I used tools and frameworks to simulate large-scale transaction loads and monitored the system's performance. Through continuous testing and optimization iterations, I progressively enhanced the system's performance and scalability.

Through these steps, we successfully addressed the technical challenge and achieved high performance and scalability in our system. Our system can handle large-scale transaction data and meet the expected throughput requirements. During the problem-solving process, I extensively studied the performance characteristics and optimization strategies of Hyperledger Fabric. I utilized performance analysis tools and testing frameworks to assist in problem-solving. I focused on improvements in code optimization, configuration adjustments, and concurrency processing to enhance the system's performance and scalability. Through this experience, I enhanced my technical skills and problem-solving abilities in Hyperledger Fabric projects.

-- communication

In a team project supported by Neusoft Group, we encountered a challenge related to communication and collaboration among team members. Due to the large scale of the project, team members were located in different geographical locations, which made communication and collaboration more complex.

To address this issue, I implemented the following measures:

Optimization of communication channels: I advocated for the use of more online collaboration tools and communication channels within the team, such as team chat tools like Feishu and collaborative editing tools like WPS Docs. This allowed team members to conveniently communicate, share documents, and collaborate in real-time, thereby improving communication efficiency.

Standardization of communication processes: I established clear communication processes, including regular team meetings and progress updates, as well as tracking and documenting issues and decisions. This enabled team members to stay informed about project progress and issues, and actively participate in decision-making and provide feedback.

Provision of technical training and support: I recognized that there might be skill gaps among team members in certain technical areas. As a result, I organized technical training sessions and knowledge-sharing events to enhance the team's technical capabilities. I also encouraged team members to support and collaborate with each other to collectively solve technical challenges.

Promotion of a collaborative team culture: I encouraged team members to foster positive collaborative relationships and advocated for a culture of mutual support and respect within the team. I organized team-building activities and team dinners to facilitate mutual understanding and trust, and enhance team cohesion.

Through these measures, we successfully improved communication and collaboration among team members. Team members engaged in more frequent communication and collaboration, resulting in improved speed and quality of problem-solving. Additionally, the team atmosphere became more positive, and the collaborative relationships among members were strengthened.

This experience has helped me recognize the importance of communication and collaboration in team projects, and I have learned how to address collaboration challenges by optimizing communication channels, standardizing processes, providing support, and fostering a collaborative team culture.

When I left Beijing, my annual income was approximately 7.5 million yen. At that time, my daughter was just born, and my wife didn't like Beijing, so I returned to Shenyang, China. Shenyang is a city with a very poor economy, so the salary is significantly lower. In fact, I am not sure myself how much salary I should seek. I believe that the economy in Tokyo is much better than Beijing, and the cost of living is also higher. Therefore, based on the purchasing power in Beijing, I hope for a salary of 7 million yen. However, my main concern is to ensure the basic livelihood for myself and my family--How much salary do you think would be appropriate?

What will be the take-home salary per month?

To maintain my wife and child's household, we need about 200,000 yen per month.

Will the remaining money be enough to live in Tokyo?

What factors make up the annual income?

Understood. I will think about it. I will get back to you by next Monday.

Initially, I will go alone, stabilize my work, and accumulate some savings. Then, when the time is right, they will come to Japan, and we will be reunited.

My family also supports my decision to work for a Japanese company. My wife trusts me, so I can confidently pursue the path I desire. If I have the opportunity to join your company, it will bring happiness to my family. I have always wanted to work in Japan, and I hope to enroll my daughter in a Japanese school.

I have been studying for over six months now, but I still feel there is a slight gap between my listening and speaking abilities. That's why I practice every day. Sometimes, I also struggle with using keigo (polite language) correctly, and my speaking style tends to be too direct.

I attempted to take the Japanese Language Proficiency Test twice, but in China, the seats for the test are highly competitive, and many people are vying for them. The registration fills up quickly。