Why do you choose engineering?

Because my interests generated from my past that is I was very curious about computers and the backend part of how does it works, the root of interest was the subject called information technology in my 9-10th grade and then I opted for bifocal i.e. computer science in my 11-12th hence the path was set and I wanted to do engineering as it allows me to implement my creative and problem solving skills. I am always been interested in solving a real-world problem of society which can have a positive impact.

Intriguingly, I've long pondered the question: 'Where does all the data of companies get stored?' This question resurfaced during my current pursuit of an honors degree in data science. I was fortunate to find the answer during a pre-placement talk by Mr. Kulkarni, which only deepened my commitment to engineering, especially in the context of data and technology solutions."

What are the roles and responsibilities?

"The job roles at CtrlS encompass a wide range of responsibilities, and they vary depending on the specific position. Here are some general insights into the roles:

Operating Systems Administrators (Linux and Windows): These professionals are responsible for configuring, maintaining, and ensuring the security of both Linux and Windows operating systems. They manage system updates, performance optimization, and troubleshooting.

Databases Administrators: Database administrators handle the installation, configuration, and management of databases, ensuring data integrity, availability, and security. They also optimize database performance and handle backup and recovery procedures.

Networking Administrators: Networking administrators manage the company's network infrastructure. Their responsibilities include configuring and maintaining network devices, troubleshooting connectivity issues, and ensuring network security and performance.

SAP Basis and Hana: Professionals in this role focus on SAP system administration, including SAP HANA. They are responsible for the installation, maintenance, and optimization of SAP systems, ensuring they operate smoothly.

Desk Support: Desk support professionals provide IT support to end-users within the organization. They address user issues, troubleshoot problems, and assist with software and hardware-related inquiries.

Why did you choose CtrlS over other companies?

What is FTP,DNS?

4) DNS

DNS stands for "Domain Name System," and it is an essential component of the internet that translates domain names into IP addresses. A domain name is a human-readable string of characters, such as "google.com," that can be easily remembered, while an IP address is a set of numbers and dots that computers use to communicate with each other over the internet.

The DNS system is a hierarchical, distributed database that maps domain names to IP addresses. When you enter a domain name into your web browser, your computer sends a query to a DNS server, which then returns the corresponding IP address. The browser can then use that IP address to send a request to the server hosting the website you're trying to access.

DNS has several benefits. It makes it possible for humans to access websites and other internet resources using easy-to-remember domain names, rather than having to remember IP addresses. It also allows website owners to change the IP address of their server without affecting the domain name, making it easier to maintain and update their website.

DNS is maintained by a network of servers around the world, and it is constantly being updated and maintained to ensure that it is accurate and up-to-date. This system of servers is organized into a hierarchy, with the root DNS servers at the top and local DNS servers at the bottom. When a DNS query is made, it is passed from one server to another until the correct IP address is found.

2) FTP

FTP, or File Transfer Protocol, is a standard network protocol used for the transfer of files from one host to another over a TCP-based network, such as the Internet. FTP is widely used for transferring large files or groups of files, as well as for downloading software, music, and other digital content from the Internet.

FTP operates in a client-server architecture, where a client establishes a connection to an FTP server and can then upload or download files from the server. The client and server exchange messages to initiate transfers, manage data transfers, and terminate the connection. FTP supports both active and passive modes, which determine the way the data connection is established between the client and the server.

FTP is generally considered an insecure protocol, as it transmits login credentials and files contents in cleartext, which makes it vulnerable to eavesdropping and tampering. For this reason, it's recommended to use SFTP (Secure FTP), which uses SSL/TLS encryption to secure the data transfer.

Difference between HTTP and HTTPS

HTTP and HTTPS are both protocols used for transmitting data over the web, but they have a crucial difference concerning security.

HTTP transfers data in plain text, making it vulnerable to eavesdropping or tampering by malicious entities. In contrast, HTTPS incorporates an additional layer of security using SSL (Secure Sockets Layer) or TLS (Transport Layer Security). This layer encrypts the data being transferred, ensuring that any intercepted information remains unreadable.

https://www.geeksforgeeks.org/difference-between-http-and-https-2/

What is static variable

https://www.scientecheasy.com/2021/10/java-static-interview-questions.html/

Difference between truncate and delete in sql?

Difference between Delete Truncate and Drop

Both the SQL DELETE and SQL TRUNCATE commands can be used to remove records from a table. However, the DELETE command employs the WHERE clause to specify rows in a table for deletion action, whereas the TRUNCATE command does not use any clause and deletes rows all at once. This is the primary distinction between the two commands.

Keep in mind that the TRUNCATE command can be undone in the same way that the DELETE command can.

https://www.tutorialspoint.com/difference-between-delete-and-truncate-in-sql-query

Be sure of networking and operating system concepts

DHCP, DNS, AD

OSI layers

TCP/UDP

Protocols in each OSI layer?

OS : https://www.youtube.com/watch?v=3obEP8eLsCw

NETWORKING: https://www.interviewbit.com/networking-interview-questions/

Difference between microprocessor and micro controller

https://www.geeksforgeeks.org/whats-difference-between-microcontoller-%C2%B5c-and-microprocessor-%C2%B5p/

what is the difference between dbms and rdbms

https://www.interviewbit.com/blog/difference-between-dbms-and-rdbms/

https://www.youtube.com/watch?v=dl00fOOYLOM

How to configure log shipping for different domain servers ?.

https://www.sqlshack.com/how-to-configure-sql-server-log-shipping/

write a program for pascals triangle

https://www.geeksforgeeks.org/pascal-triangle/

Can C handle errors and exceptions

https://www.tutorialspoint.com/cprogramming/c_error_handling.htm

- **They asked about project, then questions from C , comp networks and OPERATING systems**
- **some python programs, about myself, about our projects**
- **Learn the port numbers.. Socket address definition.. Ipv4 ipv6 address definitions etc**
- **Whats the difference between Lan and Wan.. Difference between switch and router..**
- **Write a c program for Pascal triangle**
- **what does tier 4 of CtrlS tier network security mean?**
- **Brief duscussions on my resume and questions on ece.**