

3 Lecture - CS101

Important Subjective

1. **What is the difference between computer science and computer engineering?**

Answer: Computer science is concerned with the theoretical aspects of computing, such as algorithms, programming languages, and data structures. Computer engineering, on the other hand, is focused on the design, development, and testing of computer hardware and software systems.

2. **How is cybersecurity important in today's digital world?**

Answer: Cybersecurity is essential in today's digital world to protect against cyber threats, such as hacking, data breaches, and identity theft. It helps safeguard sensitive information, networks, and systems from unauthorized access and attacks.

3. **What is machine learning, and how is it used in computer science applications?**

Answer: Machine learning is a subset of artificial intelligence that uses algorithms to analyze and learn from data. It is used in computer science applications such as image and speech recognition, fraud detection, and personalized recommendations.

4. **What is virtual reality, and what are its applications in computer science?**

Answer: Virtual reality is an immersive technology that simulates a real or imaginary environment. It is used in computer science applications such as gaming, education, and training simulations.

5. **What is cloud computing, and how is it used in computer science applications?**

Answer: Cloud computing is a technology that allows users to access and store data and applications over the internet. It is used in computer science applications such as online storage and backup, software as a service (SaaS), and virtual machines.

6. **What is data mining, and how is it used in computer science applications?**

Answer: Data mining is the process of analyzing and discovering patterns in large datasets. It is used in computer science applications such as market research, fraud detection, and personalized recommendations.

7. **What is artificial intelligence, and how is it used in computer science applications?**

Answer: Artificial intelligence is a branch of computer science that focuses on creating intelligent machines that can simulate human thinking and behavior. It is used in computer science applications such as natural language processing, machine learning, and robotics.

8. **What is computer graphics, and how is it used in computer science applications?**

Answer: Computer graphics is the field of computer science that deals with creating, manipulating, and displaying visual content on a computer. It is used in computer science applications such as gaming, animation, and virtual reality.

9. **What is the role of big data in computer science applications?**

Answer: Big data refers to large, complex datasets that require advanced computing technologies to analyze and process. It is used in computer science applications such as data analytics, artificial intelligence, and machine learning to gain insights and make informed decisions.

10. **How do computer networks play a vital role in computer science applications?**

Answer: Computer networks enable communication and data exchange between multiple devices and systems. They play a vital role in computer science applications such as online transactions, remote access, and real-time collaboration.