Candidate Problems for Future Internet Mid-term Examination

2019. 4. 25

1. Why do we need Future Internet?

2. What are the 4 core technologies for Future Internet?

3. What are the Clean Slate and Evolutionary Approaches?

4. If you are an Internet designer, how can you accomplish Clean Slate approach and Evolutionary approach, respectively?

5. Explain the basic concept of OPEN Flow (or ONOS).

6. Why do we make smart city?

7. What are the key technologies to establish Smart City? Pls explain in details!

8. What are key drivers for success of smart city?

9. What are pros and cons of smart city?

10. Explain an architecture for Smart City operation and management system.

11. What are KPIs for the smart city standardization?

12. Propose your own new idea for smart city services!

13. Explain the representative open source SWs of Infrastructure/Software/Services layers for networking.

14. What is OpenAirInterface?

15. Explain mobile core SW function blocks in 4G and 5G.

16. Explain the differences in capabilities and performances or structure between 4G and 5G.

17. What are the main philosophy of the Telecommunication Information Networking Architecture (TINA)?

18. Describe the Architecture for SDN.

19. Describe the Architecture for NFV

20. Explain the differences (or relationship) between the SDN and NFV.

21. Explain in supervised learning/unsupervised learning/reinforcement Learning.

22. Explain the training phase and testing phase in supervised learning.

23. Explain on neuron, synopsis, activation function, weight, input layer, output layer.

24. Explain the representative AI algorithms such as CNN, RNN, etc.

25. Express your thought on how to use AI for 5G.

26. What are the security measures?

27. Explain the security metrics.

28. Explain a lifecycle of security modelling and analysis.