1. **Tell me about yourself**
    a. Thank you for giving me an interview today. I'm Bin Han. I graduated from Korea University and my major is computer science. I am currently working as a research assistant at the Korea Institute of Science and Technology. The main research interests are Human Computer Interaction, Augmented Reality /Virtual Reality, and the recent areas of interest are Affective Computing and Virtual Humans. The future that I dream of 20 years from now is for people to communicate equally in society without discrimination in terms of disability. I'm interested in research to relieve people's discomfort.

2. **Is there a reason why my English scores are not good? Will you be able to do well at PHD?**
    a. GRE didn't have much time to prepare, so I was in a hurry to take the test, so my grades were not good. I'm planning to take the test again this month. I think there will be no problem in communication even when I go to the U.S. because I am working with foreigners in the laboratory in English. Of course, I will do my best for the rest of the year.

3. **Why phd?**
    a. I want to be a Scienctist rather than an engineer. I want to focus on research value rather than profitability. Also, I think I can do research independently because my expertise increases when I become a phd. I did research as an undergraduate and master's student. I thought that the higher the degree, the more independent I could research. From this point of view, I think I can design a research project more independently if I become a phd.

4. **Why you should pursue your PhD Study in USA?**

    a. Although Korea has developed a lot in the Computer Science field, I think there are many things I can learn in the U.S. at the moment. I think more schools are funding AR/VR research and leading research. Also, I will be able to get a lot of inspiration because there are more diverse people in the United States. Finally, there will be more opportunities to collaborate with the best companies in Silicon Valley.

5. **Specific company examples about your field in USA?**
    a. 대표적으로 메타, 마이크로소프트가 있습니다. 해당 기업들은 전반적인 it 분야에서 우수하기도 하지만 AR/VR 산업에 많은 지원을 하고 있습니다. 마이크로소프트는 홀로렌즈와 hologrphic 에대한 연구를 많이 하고 있습니다. 메타는 VR에서 선도적인 기업입니다. 최근 오큘러스 퀘스트를 이용한 게임과 인터랙션에 대한 연구가 많이 이루어지고 있습니다.
    b. Typical examples are meta and Microsoft. The companies are excellent in the overall it field, but they have a lot of support in the AR/VR industry. Microsoft is doing a lot of research on HoloLens and Hologrphic. Meta is a leading company in VR. Recently, a lot of research has been conducted on games and interactions using Oculus quests.

6. **Specific research examples about your field in the USA?**

a. At MIT Media Lab, many researchers are actively working on ar, vr, and accessibility. Among them, I was greatly influenced by Professor Pattie Maes of Fluid interface Lab. She is actively researching AR and VR, and recently, she is conducting research for children who have speech disorders.

7. **Plans after phd**

   a. I am planning to become a professor in Korea and do research with my students. I want to develop AR/VR research in Korea, and I also want to be a female professor in the Department of Computer Science and help to improve female engineers.

8. **Why will you come back korea?**
   a. There are two reasons. First, I want to develop AR and VR research in Korea. Secondly, there are very few female professors in the CS field in Korea. In Particular, there is no female professor in my university. I want to be a professor and be helpful to girls in science and engineering. My dream is to teach my juniors at the school I graduated from.

9. **Could your research help the United States society?**
   a. The field I want to study is to develop a technology that can help people with disabilities engage in social activities without any inconvenience. Therefore, the study will help people who have difficulty in social activities or education due to disabilities in the United States. As a result, I think it is helpful for the U.S. because it is helpful for cultivating talented people in American society.

10. **Could your research help Korean society?**
    a. **same as question 9.**

11. **How can it help Korea-U.S. relations?**
    a. I think that if AR/VR becomes more active, the barriers caused by physical distance will be lowered in the world. Currently, in order for the U.S. and Korean people to collaborate, they move directly or use zoom to collaborate, but if the field of remote collaboration, especially among AR/VR, is actively carried out, the two countries will have the same effect as being together.

12. **Which school do you want to go to the most?**
    a. I want to go to the University of Washington with CMU, UCB. What the three research teams have in common is that they are interested in A-accessibility and are doing research using AR/VR

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13. **Why do you work at KIST now?**
    a. Until last, I have been a student. When I graduated from my master's degree, I wanted to use what I've studied so far. Over the course of a year, I had enough time to think about what I really wanted to do and what I wanted to do. In conclusion, I have a firm determination to become a doctor in the future. It's good to apply for a doctor right away, but I think these times of concern create a stronger will.

14. **Why do we have to choose you?**
    a. I want to make a technology that is helpful to society. Through this research, I want to create a technology that not only Korea and the U.S. but also many

people receive help. If you choose me, I will do research that will help the happiness of the majority rather than financial gain. Trust me and invest.

15. Did you apply for another scholarship?
   a. I applied for a scholarship to the KFAS and failed. I was preparing a paper for an important academic conference during the preparation period and was insufficient to prepare documents.

16. Is there a reason why the grades are not high compared to other applicants?
   a. I majored in Architecture Engineering. However, in order to achieve my dream, I thought it would be more helpful to major in computer science, so I majored in double major. It was difficult to manage grades while studying two studies at first, so my grades are not high. However, I gradually adapted to my major class after that, and the grade of the computer department is relatively good at 4.0 out of 4.5.

17. Why did you choose computer science?
   a. While studying architectural social environment engineering, I felt that there were not many things that I could change. It didn't suit my inclination to have a physical law to build a building and to design economically in line with the law. I wanted to be more creative and proceed with free projects and invent them, so I chose CS for this reason.

18. Weakness and strength
   a. I find it difficult to deal with it quickly. For this reason, the interview environment in which questions and answers are quickly conducted feels difficult. However, I am a person who thinks hard enough and solves problems step by step. Therefore, rather than producing big results in a short period of time, I am confident in thinking and planning enough when it becomes a long-term project and solving it one by one.
   b. Thanks to this strength, I think it is suitable for HCI research, where ideas are thought, programs are made, experiments are done, and papers are written.

19. Why did you apply for a scholarship when the engineering department would receive a lot of support?
   a. I agree that the engineering line is relatively well supported. However, there are times when it is difficult to go because there is no funding in the rap I want to go to. In order to do the research I want to do, I want to do the research in the rap I want. So I want to expand my options with the support of Fulbright Scholarship.

20. Please elaborate on your master's thesis
   a. My master's research implements an environment that allows remote students to be located and communicated in a real environment using Mixed Reality in a remote classroom environment. In this process, we used a technique called a portal to expand the space so that it could be placed in many student spaces. As a result, it was confirmed that it provides a better user experience than the existing AR/VR and the current Zoom environment.

21. Tell me about the research you'd like to do while phd
   a. I want to do two studies during my Ph.D. course. The first is the study of accessibility. I want to use AR/VR technology to conduct research that is helpful to people with disabilities or discomfort. Second, I want to create a system that responds appropriately to people's emotions. For example, the study of virtual humans that respond appropriately to human emotions.

22. Why did you do undergraduate research in two labs?
   a. I studied at Hypermedia Lab for two years. In this lab, we studied algorithms, semantic webs. The subject of the study was interesting, but as I took the HCI class in the fourth grade, I thought HCI was more suitable, so I moved it, and I am still actively communicating with the professor of Hypermeia lab.

23. What technology do you want to help disabled people with?
   a. I'm interested in research that helps people with all kinds of disabilities. Among them, the blind and hearing impaired are particularly interested. I am interested in using the important computer vision in AR to understand space instead of people and to provide appropriate information to users. The second is to analyze sound and provide appropriate information to deaf people.

24. You're interested in a lot of research topics, but isn't it a wide field to do during your PhD
   a. It seems to be a variety of fields, but it can be grouped under the theme of spatial computing. I think we need additional skills depending on what kind of people we want to help. When I do HCI research, I think I need to know these various fields. However, I think this research environment suits me well, who is interested in various fields.

25. What do you think about the VR/AR/metaverse?
   a. I think there are many areas to be studied more. For now, I think the device should be lighter and more accessible, and in the not too distant future, I think it will be possible to spread AR and VR devices like everyone has a smartphone. I think that would make the interaction research that I'm working on very important.

26. Have you ever helped disabled people with the technology you actually developed?
   a. There is a study that has not been written in the SOP because it is currently in progress. Deaf people find it difficult to talk to someone wearing a mask. So I did research and wrote a paper on how to render a corresponding lip sync animation by analyzing voices when hearing-impaired people and others are talking. This study will help reduce communication efficiency due to masks.

27. Have you ever helped your uncle with technology?
   a. It may not be a technology, but I took a 360-degree video of a place where it was difficult for my uncle to go and showed it to me through VR HMD. It was a 360 video of Korea University.

28. Tell me about the project "Character Animation Synthesis from Text Description"

a. It's an ongoing study. In the past, it takes a lot of professional effort to make character animation. However, we are doing research that analyzes the emotions and intentions of characters by analyzing the text through deep learning and generates animation corresponding to them. I think this technology will make and utilize animations easily for various people. Furthermore, this technology can also be used to create virtual humans.

29. Tell me about the project "Non-face-to-face Patient Monitoring System"

a. It's an ongoing study. Our lab's goal is to develop a non-face-to-face understanding of the patient's condition through conversations with virtual humans. Among them, my role is to analyze the user's emotions by analyzing the user's facial expressions and answers with a webcam. If these technologies are commercialized, many people will be able to get health care easily.

30. Tell me about the project HD Haptic Technology for Hyper Reality Contents

a. This study increases immersion by giving appropriate sound, vibration, and onomatopoeia feedback when a collision occurs in a VR environment. I was responsible for generating the entire scenario and providing haptic feedback in this project.

31. Why did you research the semantic web and algorithms?

a. I was in the hypermedia lab for two years as an undergraduate student. The lab is primarily interested in research on how to commercialize the Semantic Web and teaching students computer thinking.

32. Tell me about the paper "A P-NP predicate with one variable whose domain is a set of worlds"

a. It is a study on the P versus NP problem, one of the world's top seven challenges. We explored what mathematical proofs would be possible if P and NP were the same.

33. What did you learn and what was difficult while studying architectural engineering?

a. Architectural engineering doesn't have many parts that can be changed into individual ideas when doing a project. Designing safely according to the laws of physics is a top priority for that field. It didn't fit me. However, the computer that creates and develops ideas with more creativity was more interesting, and I also majored in computer science to realize this.

34. What is the virtual human and how can we use that technology

a. The field that can be used the most is metal counseling. Many people around the world are suffering from depression or mental difficulties. It is good to go to the hospital to solve these problems, but there are many people who cannot go because of financial and time difficulties. A Virtual Human can use any platform, anytime, anywhere, to have an apology conversation. If people

use these technologies, people can talk more freely about their emotions and help their mental health

35. What is the strength of the Fulbright program?

    a. Because of its long history and many alumni, I think we can interact with

    each other and develop.

36. Do you want to say something?

    a. Thank you for giving me an interview today. Through my research, I want to create a world where many people can demonstrate their skills equally. I think the first step to this goal is to study in the Ph.D. course. If you consider choosing me, I will repay you with the results of a lot of research going forward. Thank you.