Topic 1: Describe and Reflect Upon Your Experience of Undergraduate Study

What was your degree/major? Why did you study this?

I majored in Computer Science because I've always been fascinated by how technology can solve real-world problems. I was especially interested in edge computing and machine learning, as these fields are rapidly transforming industries.

What do you think about the courses you took?

The courses I took provided a strong foundation in data structures, algorithms, and machine learning, which were essential to understanding how AI systems work. However, I think some courses could have focused more on practical, hands-on experience.

What is one thing you would change in your courses if you could?

If I could change one thing, I would include more project-based learning to help bridge the gap between theory and real-world applications.

What is one thing you would keep in the course?

That said, I'd definitely keep the strong emphasis on theoretical knowledge, as understanding the fundamentals is crucial for solving complex problems. Without this foundation, it's hard to tackle the more advanced concepts in the field.

What course did you enjoy the most as an undergraduate? Why?

The course I enjoyed most was Machine Learning, as it allowed me to apply algorithms to real data and sparked my passion for the field.

If you were going to study as an undergraduate again what would you do differently?

If I were to study again, I would have sought out more internships and research opportunities earlier. Gaining practical experience would have helped me apply what I learned in the classroom to real-world problems, further enhancing my education.

Topic 2: Describe Your Research Using Clear and Simple Language

What is the general topic of your research?

My research focuses on federated learning, a type of machine learning where models are trained collaboratively across decentralized devices without sharing raw data.

What is your research project about?

The project involves developing algorithms and techniques for improving the efficiency and privacy of federated learning. These methods are crucial for applications like healthcare and finance, where privacy is a key concern.

Why are you interested in this area of research?

I am fascinated by how data privacy can be maintained while still allowing machine learning models to be trained collaboratively. This has the potential to revolutionize industries like telecommunications, healthcare, and banking.

Why is research in your area important to society?

This research is important because it contributes to the development of privacy-preserving technologies that can improve sectors like personal data protection and secure AI systems. It also addresses the growing need for ethical AI in the digital age.

Can you give an example of a real-world application of your research?

A real-world application of my research is in healthcare, where federated learning can allow hospitals to collaborate on AI models for disease diagnosis without sharing sensitive patient data. This improves the accuracy of models while ensuring privacy.

What main challenges have you faced in research you have done until now?

The main challenge has been developing efficient communication protocols and handling data heterogeneity between different devices to ensure accurate model training. Moreover, dealing with data privacy concerns while maintaining model performance has been another complex challenge.

What do you hope to achieve in your research?

I hope to improve the scalability and privacy of federated learning models, enabling them to be used effectively in real-world applications. By doing so, I aim to contribute to the creation of more secure and efficient AI systems in industries such as healthcare, finance, and telecommunications.

Topic 3: Describe an event (or situation) where you were required to speak in English as a research postgraduate.

What was the event and where did it take place?

I delivered an oral presentation as part of my postgraduate admissions interview. The event took place offline, which was required by the professor to assess my communication and research abilities.

How long was the presentation?

The presentation itself was approximately 15 minutes, followed by a 5-minute Q&A session where I answered in-depth questions from the professor.

Why did you attend it?

I attended this interview as a crucial step in my application process for the graduate program. The presentation allowed me to showcase my previous research experiences and achievements.

Were you able to prepare in advance for it? If so, in what way?

I created a detailed slides presentation, drafted a script to guide my speech, and practiced many times to ensure clarity and confidence.

What did you talk about? Were you successful? Why/Why not?

I talked about my undergraduate and master research. The presentation was successful because I was well-prepared and could answer the questions effectively, demonstrating both my knowledge and communication skills.

Did the event require much conversation and/or exchange of information with others? Or was it mainly a solo presentation?

The event required both a solo presentation and an interactive exchange during the Q&A session. The conversation allowed me to clarify certain aspects of my research and engage with the professor on a deeper level, showcasing my ability to discuss complex topics.

Topic 4: Describe Your Experience of Speaking or Presenting Your Research in English

When did you speak about your research/academic areas of interest?

I delivered an oral presentation as part of my postgraduate admissions interview. The event took place offline, which was required by the professor to assess my communication and research abilities.

Have you had much chance to speak about your research in English? If not, have you had opportunities to speak about academic topics in English?

This interview was one of the few formal opportunities I've had to present my research in English. However, I have also participated in academic discussions and group projects where English was the primary language, which helped me practice and improve my communication skills.

What do you find most challenging about speaking about your research and/or academic topics in English?

English is not my first language, the most challenging aspect is conveying complex scientific concepts in a clear and concise manner.

What do you like about presenting your research in English?

I enjoy the opportunity to reach a broader audience, as English is widely spoken in the academic community. Presenting in English allows me to share my research with international scholars and engage in a wider academic dialogue.

What would you like to improve about your English presenting skills?

I would like to improve my ability to respond to questions more confidently during Q&A sessions. Enhancing my vocabulary, especially with technical terms, would also help me communicate more effectively.

When do you speak? To whom do you speak? Where do you speak? Other details?

I usually speak about my research in formal settings such as interviews, academic conferences, or group meetings. My audience includes professors, peers, and industry professionals, all of them have a deep understanding of the subject matter, which adds to the pressure to present well.

Any difficulties?

The main difficulty I face is ensuring that my language proficiency does not hinder my ability to explain complex ideas. This requires careful preparation and sometimes additional practice to ensure that I can convey my thoughts clearly and effectively.

Topic 5: Describe why you chose to study at HKUST(GZ).

What did you hear about HKUST(GZ) before you came here?

Before coming to HKUST(GZ), I knew about its strong reputation in research and innovation, particularly in science and technology. I had heard that the university is highly regarded for its interdisciplinary approach in the Greater Bay Area.

What attracted you to study at HKUST(GZ)?

I was particularly drawn to HKUST(GZ) because of its state-of-the-art research facilities, renowned faculty, and the vibrant academic community. The university's focus on cutting-edge research and innovation aligned perfectly with my academic interests.

What are your first impressions of the campus?

My first impressions of the campus were extremely positive. It is modern, well-designed, and equipped with the latest technologies, providing an excellent environment for advanced research and study.

How does HKUST(GZ) compare to the university of your undergraduate studies?

Compared to my master university, HKUST(GZ) offers a more research-focused environment with

greater access to resources and interdisciplinary opportunities.

What do you know about your research department at HKUST(GZ)? Which professors will you be working with?

I am excited about the research opportunities in my department, particularly in the area of AI. I look forward to working with Professor Menglin Yang, who is an expert in geometric machine learning, closely related to my research interests.

Aside from studies, what else do you hope to achieve at HKUST(GZ) or in Guangzhou?

Beyond academics, I hope to engage with the local culture in Guangzhou and build a strong network within the Greater Bay Area. I am also interested in participating in collaborative projects that connect academia with industry, which will enhance my overall experience and professional growth.

Topic 6: Describe a Challenge You Faced in Your Studies or at Work

What was the challenge?

One significant challenge I faced in my research was the theoretical analysis required to develop and understand complex machine learning models, especially when it came to proving their accuracy and convergence properties.

Why was it a challenge?

This was a challenge because the mathematical foundations behind these models can be very complex. The difficulty increased as I needed to balance theoretical rigor with practical feasibility, ensuring the models not only worked in theory but also performed well in real-world applications.

What did you do to overcome it?

To overcome this challenge, I dedicated time to studying advanced mathematical methods and theoretical frameworks related to machine learning. I also collaborated with experts in the field to discuss theoretical proofs and refine the models.

Did you handle it well? Why?

I believe I handled the challenge well because I tackled it step by step. By breaking down the problem into manageable components, focusing on one aspect of the theory at a time, I was able to gradually overcome the complexities involved in the analysis.

What did you learn from this challenge?

This experience taught me that in AI research, understanding the theoretical aspects is just as important as practical implementation. I learned that rigorous analysis and mathematical proofs are essential for ensuring the reliability and validity of AI models.

Would you deal with it differently now?

If I were to face a similar challenge now, I would seek mentorship earlier in the process, particularly from individuals who specialize in mathematical theory and proof techniques. Their guidance could have helped me navigate the theoretical challenges more efficiently.

Topic 7: Describe a Time When You Attended an Interview

What type of interview did you attend?

I attended a postgraduate admissions interview that required me to present my undergraduate research in English. This interview was a key part of my application to the graduate program.

Did you do well? Why?

I believe I performed well during the interview. My success was largely due to thorough preparation,

which involved creating a clear and concise presentation, practicing my delivery multiple times, and anticipating potential questions. Additionally, my ability to engage in a constructive discussion with the professor and explain my research confidently played a significant role in the positive outcome.

What did you learn from this interview?

This interview taught me the importance of effective preparation, especially when presenting in a second language. I also learned how vital it is to communicate complex ideas in a simple and clear manner, ensuring that the interviewer understands the key points.

Do you think presentation skills are important for interviews? Why?

Absolutely. Presentation skills are crucial in interviews because they demonstrate your ability to communicate your ideas effectively. This is especially important in academic settings, where explaining complex concepts clearly is a vital skill. Moreover, strong presentation skills help create a positive impression and convey confidence.

How can these skills be improved?

These skills can be improved through continuous practice. Participating in more presentations, mock interviews, and discussions can help build confidence and enhance one's ability to perform under pressure. Additionally, seeking feedback from others after presentations can provide valuable insights into areas of improvement.

Should universities teach students such skills?

Yes, universities should definitely teach presentation skills as part of their curriculum. Not only are these skills crucial for academic success, but they also contribute significantly to professional development. The ability to communicate effectively is essential in almost every career.

What are your expectations for your experience at HKUST(GZ)?

I expect to gain advanced research skills, collaborate with leading experts, and immerse myself in the vibrant academic and cultural environment of Guangzhou. My goal is to leverage these opportunities to enhance my knowledge and professional network in the field of AI.

How will you get along with your new classmates?

To have a good relationship with new classmates, first, be friendly and introduce yourself with a smile. Then, actively participate in class discussions and group works. Share your thoughts and experiences. Also, respect everyone's differences and be helpful when possible.