Hi, I'm Lingyu Gong, and I'm almost done with a Master’s degree in Electronic Information Engineering at Trinity College Dublin. Before this, I completed my Bachelor's in Computer Science and Technology at Capital Normal University in China.

Throughout my studies, I’ve built a solid foundation in both computer science and electronic engineering, where I found myself very interested in FPGA design and digital systems. I’ve designed and implemented both single-cycle and multi-cycle CPUs, where I have done works like defining instruction sets, designing datapaths and coding in Verilog. These projects not only deepened my understanding of CPU architecture but also improved my skills in hardware description languages and simulation tools.

In addition, I completed an FPGA-based project where I brought the classic Snake game to life on an FPGA board. This project was an extension of my EDA coursework, and it gave me hands-on experience using Verilog and Vivado to turn digital designs into working hardware.

For my Bachelor’s thesis, I successfully rebuilt a constellation framework and verified the XY algorithm using OPNET software, following the latest research at the time. Currently, my Master’s thesis focuses on "Enhancing On-Chip Network Predictions with Advanced AI Techniques," where I’m using machine learning to improve performance predictions in Network-on-Chip systems, which has been a great way to reduce simulation dependency and speed up development.

Through these experiences, I’ve developed strong problem-solving skills and the ability to learn new things quickly. I’m really excited about the opportunity to apply what I’ve learned to new challenges and contribute to innovative projects in electronic engineering.

Thanks so much for the opportunity to introduce myself.