September 25, 2020

President's September Graduation Ceremony Address for AY 2020

Yuji Oie, President, Kyushu Institute of Technology

Today's graduation ceremony for the 2020 year brings great joy to our university. As you turn this auspicious corner in your lives, I offer you my congratulations. I also wish to sincerely congratulate the guardians and family members whose joy must be even greater, given both the material and emotional support they have provided their students up until this day.

Recently, with the global spread of COVID-19, our various social activities have been significantly impacted. During the past half year as you have engaged in research work, you have been unable to meet directly with faculty and peers for full discussion and had to take measures to prevent infection even when conducting experiments and other such activities. I know it has been extremely difficult. It is in that context that I want to express my great respect for each you attending today's graduation ceremony.

As you reach this turning point, I would like you to join me in reflecting on the past, learning from it, and thinking about how to approach the future.

As you know, science and technology have made enormous advances in recent years, advances that have disseminated through society with shocking speed. They say the agricultural revolution took 1,000 years before its effects were fully felt by society, while the industrial revolution took 100 years; with the digital revolution, however, it has taken a mere 10 years.[1] Looking back at networks, it was about 50 years ago in 1969 that ARPANET, the computer network that would later grow into the Internet, was tested between computers at four U.S. universities. Then in 1989, a mere 20 years after that test, the world's first commercial ISP (Internet service provider) was created in the U.S. I imagine that most of you were born in the 1990s, the decade when Internet services became available to ordinary people in the world's countries. What had been a network of just four computers grew in the span of 50 years into the Internet, used by 3.9 billion people (51% of the world's population) in 2018 and predicted by Cisco to reach 5.3 billion users (66% of the world's population) by 2023.[2]

Meanwhile, looking back at computers, it was nearly 50 years ago in 1971 that Intel developed the

4004, the world's first microcomputer. It was a 4-bit microcomputer created for a Japanese calculator maker. Moreover, Intel was a young corporation that had been formed only a few years earlier in 1968. Not 20 years had passed from that time before an A4-size notebook computer came on the market in 1989. Since then, semiconductor device technology has continued to be improved in leaps and bounds until today, when we use hand-size smartphones on a daily basis. And, looking ahead, we see not only smartphones and computers but also appliances and various other things connected by networks.

There will be much for us to learn in the future. In order for new technologies to emerge and disseminate through society, for example, we needed developers who have intellectual curiosity and take risks. Moreover, we should understand that in order to take such risks, they have needed colleagues as well as people who recognized and sympathized with the value of taking them. It is important to imagine that our digital revolution entails the involvement of an enormous and diverse collection of people.

At the moment, the global spread of COVID-19 has made it very hard for people to move around. The future is never transparent. For us to have a future filled with hope, we must maintain our intellectual curiosity and take risks while repeatedly making adjustments as needed. Even in a time like this, rather than isolate ourselves and push others away, we must respect one another and work to produce knowledge of all kinds. I pray that you and your colleagues will successfully overcome this challenging time.

In closing, I wish you great success as you turn this auspicious corner in your lives today and hope the many beneficial connections you have made at Kyutech serve you well in your productive futures to come. Once again, congratulations.

References:
[1] *Technology in 2050: Predictions by U.K. Magazine* The Economist. Published by Bungei Shunju, 2017 (Japanese translation of *Megatech: Technology in 2050.* Edited by *The Economist*, 2017)
[2] Cisco Annual Internet Report (AIR)
https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annual-internet-report/white-paper-c11-741490.html