Introduction to "Future Internet" Course

Kyung Hee University

Course Description

The Internet has been initially used for information exchange and browsing. Currently, the Internet is being used for much more things (e.g., entertainment, politics, banking, shopping and trading) and one cannot live without it these days. However, the Internet has many problems with important issues such as quality of service and security. Recently, researchers have been working on redesigning the Internet, which is now being referred to as the Future Internet. There are mainly two approaches: evolutionary and revolutionary (or clean slate). In this course, we review the current Internet and investigate its problems. We will also examine the two approaches for designing the Future Internet. And we will focus on the manageability aspect of the Future Internet. We will then discuss and come up with possible areas or methods for overcoming the existing problems for the Future Internet.

So, this class will be discussed principles and technologies arising from the need to spread the research areas of Future Internet.

Introduction to Professor (1)

Prof. CS Hong

- B.S., M.S., Dept. of Electronic Eng., Kyung Hee University
- Ph.D., Dept. of Information and Computer Science, Keio University
- 1988 – 1999, Senor Member of Technical Staff, KT, Korea
- 1999 – Present, Professor, Dept of Computer Eng., Kyung Hee University
- 2012- 2015, Dean, Office of Information Services, Kyung Hee University
- 2016-2018, Dean of Research Affairs
- 2016-2018, President of University-Industrial Cooperation Foundation
- 1988 – 1999, Director, Telecommunications Network Laboratory, KT

Introduction to Professor (2)

- 2007, Best Research Award, KIPS

- 2010, Gahean Research Award, KIISE

- 2010, Excellent Paper Award, ICUFN 2010

- 2011, Best Paper Award, ICOIN 2011

- 2007, 2008, 2015, Best Paper Award, APNOMS

- 2016, Best Paper Award, IEEE ICC 2016

- 2012 - present, Associate Technical Editor, IEEE Communications Magazine

- 2012 - present, Associate Editor, International Journal of Network Management

- 2006 -present, Publicity Manager, Journal of Communications and Networks

- Interesting Research Areas
  - Future Internet, Edge Computing, IoT, Network Security, and so on

Lecture Schedule (tentative)

1. Introduction to FI Lecture /What is Future Internet?

2. Big Data for Smart City and its Services

3. Open Mobile Network Platforms (1)

4. Open Mobile Network Platforms (2)

5. Artificial Intelligent and 5G

6. Mobility and Future Internet

7. Research Issues in Future Internet 1

8. Mid-term Exam

9. Manageability in Future Internet

10. Network Optimization for Future Internet (1)

11. Network Optimization for Future Internet (2)

12. UAVs for Wireless Networks

13. Research Issues in Future Internet 2

14. Research Issues in Future Internet 3

15. Final-term Exam

Questions or Comments