GG 820
Research in Bright ICT (밝은정보사회 연구)
Spring 2017

Course Information

Class Schedule	T,Th 14:30 – 15:50
Classroom	9303 (Green Classroom)
Instructor	Cho, Daegon (조대곤), Ph.D.
Office Location	S284
Phone	02-958-3331
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Office Hour	by appointment

I have an open door policy for student questions. For quick questions, feel free to contact me; I will do my best to respond quickly. If you would like to meet in person, feel free to e-mail me to make an appointment.

TA	TBA
Textbook & Reading	There is no required textbook. A coursepack will be available.
SLACK Team	We use SLACK as an experiment of flipped learning. Now, enter `brightict.slack.com/signup` on your browser, and get involved. Course announcements, homework, lecture notes, and web readings will be posted. Active discussions and postings are encouraged. Try to use the cloud-based team collaboration tool that is currently being widely used by technology firms and software developers.
Prerequisite	There are no specific prerequisites.

Important Note:
This course will begin at the second half of the spring semester in 2017.
I would like to emphasize that this course will cover various aspects of "Bright Internet Framework" suggested by Jae Kyu Lee, emeritus professor at KAIST and a former president of the AIS (Association of Information Systems).

Course Overview

Bright ICT Initiative (excerpt from the website:`http://aisnet.org/?page=BrightICT`)

Global societal knowledge infrastructures and communication platforms have made life and business more efficient and effective. However, many serious side effects have emerged alongside these information and communications technology (ICT) platforms, imperiling the foundation of future not only in a particular country, but also across borders.

So far, there has been no dedicated academic discipline or society that aims to solve these problems through systematic research on a global scale. Therefore AIS Council agreed to adopt the vision of ICT-enabled Bright Society as an AIS Grand Vision Project (in short Bright ICT Initiative) in Dec. 2014, and established a task force.

The initiative will encompass the development of relevant technologies, business models, public policies, social norms, international agreements, metrics of measuring national progress and more. This endeavor is expected to create many research opportunities to make AIS research outcomes more available and significant for society.

You have probably heard that security and privacy issues are not just about technology. This course will help your understanding with some key economics, policy and managerial frameworks that explain key challenges in security and privacy for individuals, firms and the nation with a special emphasis on the Bright Internet Framework. For example, we will examine topics for the course, but not limited to:

- Economics of computer security and privacy
- Responsibilities of cyber security and obligations of Internet platform providers
- Design of traceable anonymity that secures both privacy and security
- Policy aspects of Internet crimes and privacy violation
- Effects of privacy concerns on online consumer behaviors
- (if allowed,) Exploration of cyber bullying and online harassment in social networking sites

We will analyze these questions within specific economic and policy principles and examine how individuals, firms and governments behave in a different way. Security and privacy are complex and multi-faceted concepts. This course combines economic, legal and policy perspectives to present a holistic view of its role and value in the digital age.

By the end of the course, students are expected to know key managerial and policy issues surrounding information security provisions, the role of policy and economics tools in engendering desired outcomes, and the limitations and challenges of such interventions.

Students also understand the concept of Bright Internet Framework by which a new Internet governance and architecture are designed.

Course Objectives

The purposes of this course are twofold:

1. It aims to help students build a "mental map" of contemporary research on strategic management of information technology (IT) in the "Bright Internet" discipline. This course focuses on a range of core topics related to Bright Internet issues, so that the students can develop broad and deep understanding of the newly emerging topics

2. Note that this course is newly-designed this semester, and, as an experiment, we will cover many research papers, industry reports, and news articles related to information security, privacy, and Bright Internet framework. This course intends to guide the students to become scholars and practitioners who can produce original and high-quality ideas. Toward that end, the students are required to submit **Weekly Briefs assignment** every week and **a complete research proposal** at the end of the semester.

Learning Objectives

- Provide an informed and critical view on security and privacy
- Understand key terms and critical concepts of Bright Internet
- Learn practical cases and discuss about the key issues
- Understand threats posed to information security and privacy
- Find interesting and important research topics

To achieve these objectives we will use a combination of lectures, reading materials, paper presentations and, if needed, special guest speaker lectures.

Tentative Course Topics

Module I: Information Security and Cyber Security

— Economics of information security
— Externalities and market failure

Module II: Privacy in the Digital Age

— Economics of privacy
— Managerial and policy implications

Module III: Bright Internet Framework

— Technology, Policy, and Global Collaborations
— Opportunities and Challenges

Grading Schemes

Grading Policy	Participation (individual)	15%
	Short Essay (individual)	5%
	Homework (individual)	15%
	Paper Presentation (individual)	10%
	Case Study (group)	15%
	Research Proposal (individual or group)	40%
	TOTAL	**100%**

Grading Components (subject to change)

- **Participation & Attendance (15%):** Attendance is important and will be taken regularly every week. Please make every effort to be present for the beginning of class. If an emergency or conflict occurs which prevents you from attending class, it is your responsibility to notify the teaching team. Please let us know your absence for every class that you missed – not later than one week after missing it. You may use the SLACK as a communication channel for this matter.

  ONE MORE THING: This course uses SLACK for multiple purposes: 1) course logistics (announcements, Q&A, homework, lecture notes, and web readings), 2) knowledge share (news articles, reports, and 3) productive communications (with classmates or team members). I hope you to have fun with using the advanced and convenient tool. Note that I also consider students' activities in this virtual space as a part of your attendance.

- **Short Essay (5%):** One short assignment will be given to provide an opportunity to think of the course. The write-up will be weighted (5%) of your final grade. Detailed topics of these assignment will be provided at the beginning of the semester.
- **Homework (15%):** There will be 3 homeworks. The problem sets will be equally weighted and count for a total of 15% of your final grade – i.e., each homework accounts for 5% of your final grade.
- **Paper Presentations (10%):** Each student is required to present a paper and lead the discussion of the paper. The number of presentations will depend on the number of students enrolled. The paper will be assigned at random and be announced in a week.
- **Case studies (15%):** There will be 2 case studies and you will be assigned to one of them. More detail will be provided later. This accounts for 15% of your grade.
- **Final Research Proposal (40%):** Each student is required to write a **complete research proposal**. The research topic can be related to what we covered in the course!

(PRELIMINARY) Course Schedule

Week	Date	Topic	Assignment
1	3/30 (Thu)	Course overview, introduction of Bright Internet	
	4/4 (Tue)	Econ. of information security (1)	HW#1 out
2	4/6 (Thu)	Econ. of information security (2)	
	4/11 (Tue)	Policy and legal aspects of information security	HW#1 due, HW#2 out
3	4/13 (Thu)	Attacks and Authentication	
	4/18 (Tue)	Case#1: ChoicePoint	HW#2 due
4	4/20 (Thu)	Econ. of privacy (1)	
	4/25 (Tue)	Econ. of privacy (2)	HW#3 out
5	4/27 (Thu)	Policy and legal aspects of privacy	
	5/2 (Tue)	Case#2: Apple: Privacy vs. Safety?	HW#3 due
6	5/4 (Thu)	NO CLASS	
	5/9 (Tue)	Election Day (No Class)	ShortEssay#1 out
7	5/11 (Thu)	More on Bright Internet Framework	
	5/16 (Tue)	Wrap-up	ShortEssay#1 due
8	5/18 (Thu)	Final Presentation	

Important Note:

- Note that this week-by-week schedule program is **tentative and subject to change** as the class progresses. I will notify you of any schedule-related changes in advance if such events occur.
- In addition, reading materials will be updated or can be modified as we progress. You will be notified of any changes in advance.
- **Please be attentive to notifications during classes and through our Slack.**