TIES410
Future Internet

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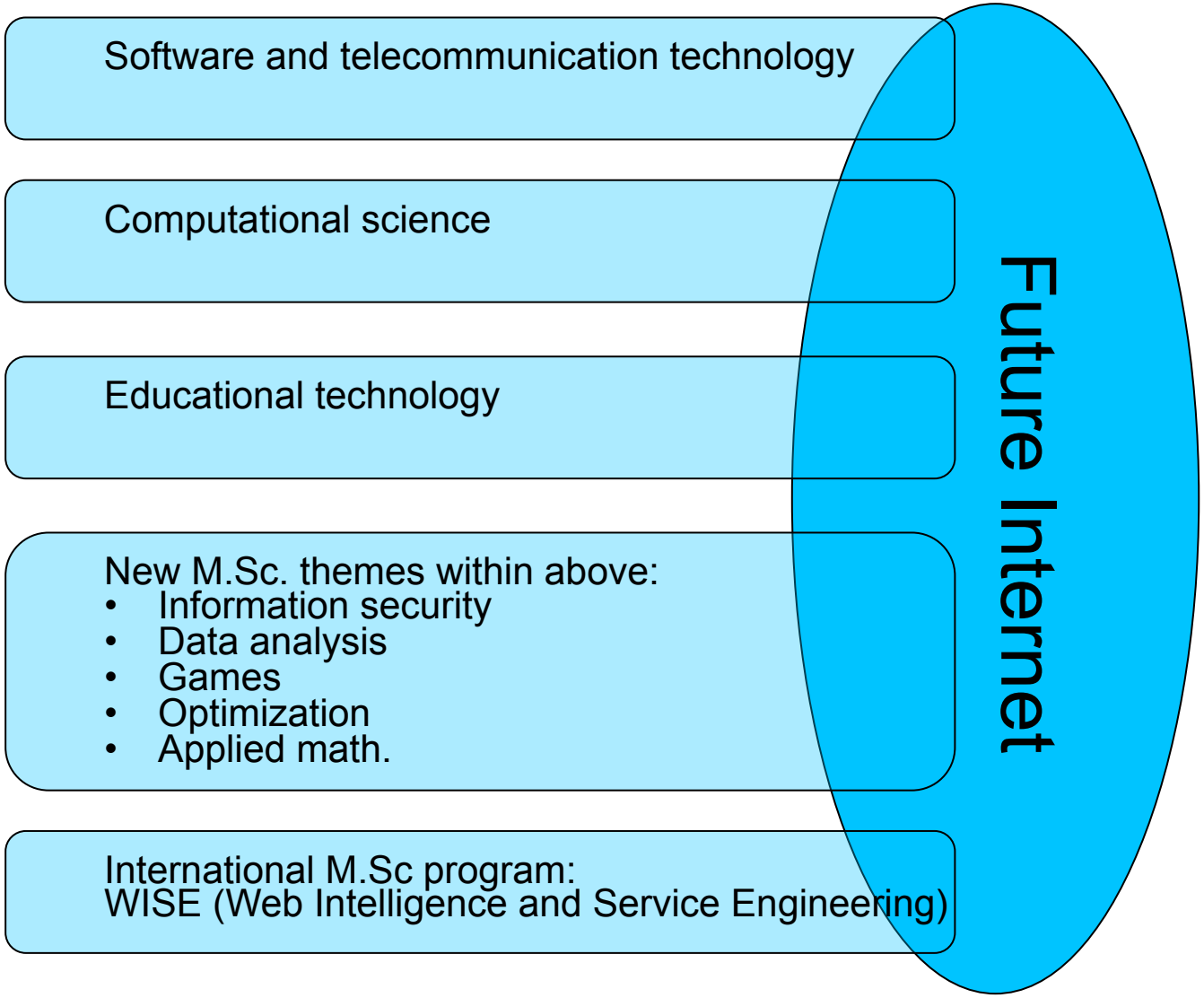
TIES410 Future Internet – Quick facts

- 5 ECTS
- Lectures
  - 16.1. – 13.3. (weeks 3-11)
  - Wednesdays, 14-16, Ag Auditorium 2
  - Thursdays, 12-14, Ag Auditorium 2
  - Exceptions:
    - no lecture on 23.1. & 6.3.
- Lot's of visiting lectures:
  - Experts from many DIGILE (www.digile.fi) Strategic Research programs, e.g. "Internet of Things", "Cloud Software", "Need 4 Speed"
  - Experts from companies (e.g NSN and HP) and academia (e.g JYU, TUT and VTT)
- Goal: to recognize and understand the latest achievements and challenges in the wide area of Internet research and to reflect that against student's prior knowledge.

TIES410 Future Internet – Dept. MIT edu&reseach



TIES410 Future Internet – Themes for the lectures

Internet and Mobile Broadband Evolution

”Challenges, trends, mobile ecosystem”, Alex Sayenko, NSN

”Future wireless and standardization”, Alex Sayenko, NSN

”Self-organizing radio networks”, Prof. Tapani Ristaniemi, JYU

”TBD”, Prof. Pertti Raatikainen, VTT

Internet of Things (IoT)

”DIGILE IoT –programme and IoT Ecosystem”, Dr. Oleksiy Mazhelis, JYU

”Interopertability on the IoT”, Dr. Artem Katasonov, VTT

Software & Cloud computing

”Web browser as a computing device”, Prof. Tommi Mikkonen, TUT

”Need4Speed – strategic research program”, Prof. Pasi Tyrväinen, JYU

”Software Defined Networks”, Teemu Toppila, Hewlett-Packard

Security and Privacy

”Critical Infrastructure Protection”, Prof. Amir Averbuch, JYU

”Information Security and Society”, Dr. Martti Lehto, JYU

”Privacy in Future Learning Games”, Dr. Hanna-Kaisa Isomäki

Future learning environments

”Future Learning Technologies”, Prof. Marja Kankaanranta, JYU

… and more …

TIES410 Future Internet – Schedule

- Schedule at the moment

Date	Speaker	Title
16.1.	Prof. Tapani Ristaniemi	Introduction to the course
22.1.	Dr. Alexander Sayenko, NSN	State of art of wireless technologies and development trends
29.1.	Dr. Alexander Sayenko, NSN	Multi-carrier and small cell trends
30.1.	Dr. Alexander Sayenko, NSN	Standardization and intellectual property in telecommunication
5.2.	Dr. Oleksiy Mazhelis, JYU	Internet of Things (IoT)
6.2.	Dr. Artem Katanosov, VTT	Interoperability on the IoT
12.2.	Prof. Tommi Mikkonen, TUT	Web browser as a computing device
13.2.	Dr. Martti Lehto, JYU	Information Security and Society
19.2.	Dr. Teemu Toppila, HP	Software Defined Networks
20.2.		
26.2.		
27.2.		
5.3.	Research Director Hanna-Kaisa Isomäki, JYU	Privacy in future learning games
12.3.		
13.3.		

Other lectures to come (the date to be fixed later)

“Self-organizing radio networks” by Prof. Tapani Ristaniemi, JYU
“Critical Infrastructure Protection”, Prof. Amir Averbuch, JYU
“Future learning technologies”, by Prof. Marja Kankaanranta, JYU
“Need4speed – strategic research program”, Prof. Pasi Tyrväinen, JYU
“TBD” Prof. Pertti Raatikainen, VTT

TIES410 Future Internet – Learning diary

- Requirement for passing the course: **Learning diary**
- Write a learning diary based on the lectures/material given.
- No need to include all the given lectures, **a diary from 10 lectures is a minimum**.
- What to include in the learning diary? A combination of the following:
  - ”Recap”: identify the main points of the subject and write a short summary about it (this is like explaining the matter to your classmate).
  - ”Problems”: make a list of things you found difficult to understand or things you felt poorly explained.
  - ”Criticism”: write down your thoughts (related to the subject matter ☺) during the lecture, your opinions or even counterarguments/objections (in that case try to justify your statement).
  - ”Perception”: write down your own experience about the subject matter if any.
  - ”Deepening”: deepen your knowledge on some part of the subject matter (need to find more information than that in the lecture)
- Length: ~2 pages per lecture. To be returned **by the end of March, 2014.**

TIES410 Future Internet – Supplementary material

If you are not able to attend some of the lectures, there exist couple of ways to get around:

1. Supplementary material will be provided for each lecture:
   - Handouts, scientific articles, books
   - Selected TED-talks (www.ted.com): 18minutes or less talk “given by world’s most fascinating thinkers and doers”.
2. Other special lectures (to be announced by Tapani Ristaniemi)
   - E.g., a visiting lecture in the department or a doctoral defense on related topic.
   - NB: You are not allowed to choose such a lecture by yourself, all these opportunities will be selected & announced by TR.
3. Video (in case the lecturer agrees)

TIES410 Future Internet - AOB

- Email-list generated: futureinternet2014@korppi.jyu.fi
- web-pages: http://users.jyu.fi/~riesta/TIES410.htm ... under construction ...
- Questions?

- The first lecture on Wednesday 22.1.:

"State of art of wireless technologies and development trends"

Dr. Alex Sayenko

Nokia Solutions and Networks