



Advanced Software Engineering

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17 September 2013

Aloha from Harold

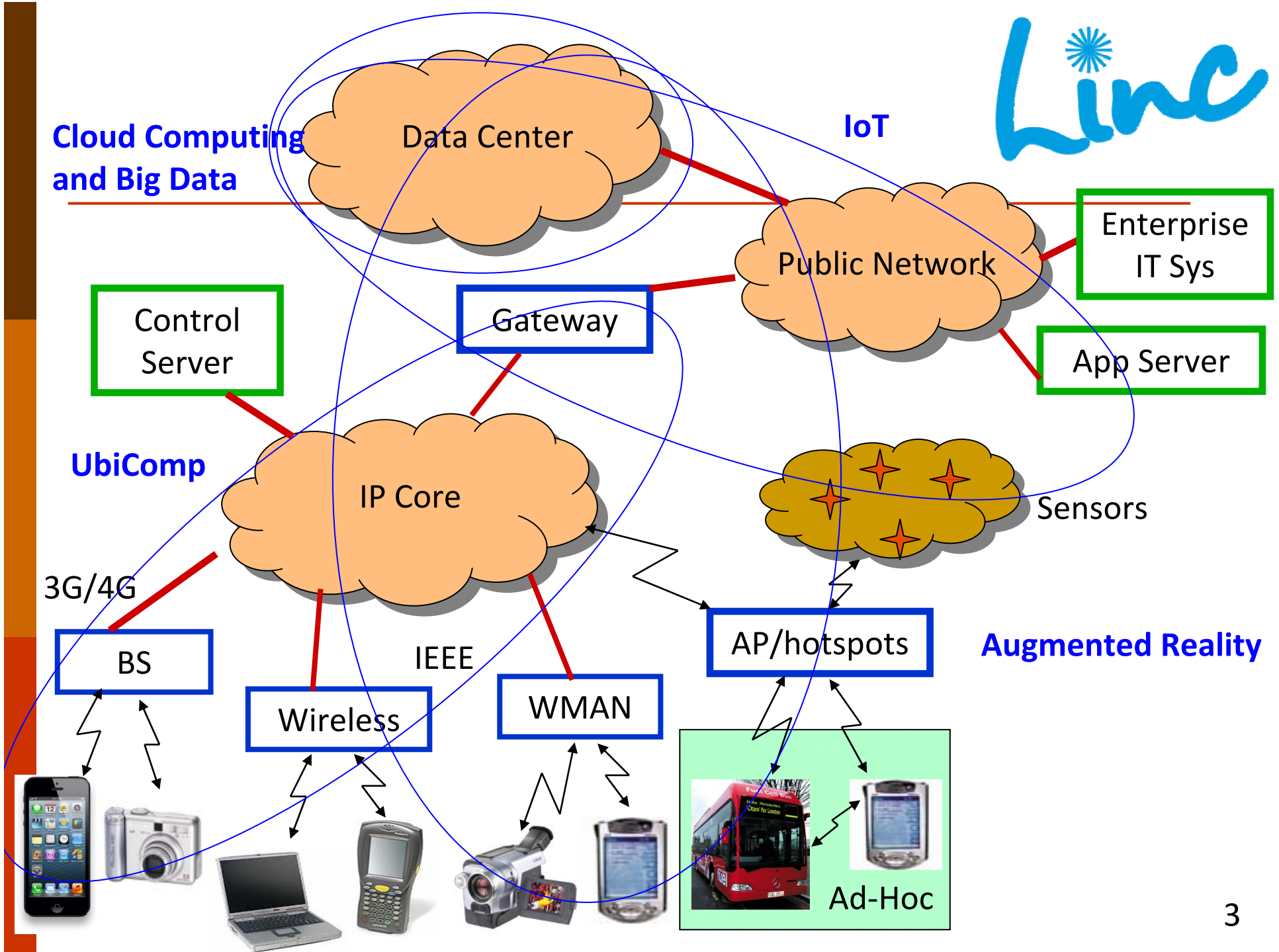
- Head of Department of Software Service Engineering
- <http://haroldliu.weebly.com>
- B.Eng. degree from EE Dept.
[Tsinghua University](#)
- Ph.D. degree from EEE Dept.
[Imperial College, UK](#)
- Staff Researcher
[IBM Research - China](#)
- PostDoc Researcher
[Deutsche Telekom Labs, Germany](#)
- Visiting Researcher
[IBM T.J. Watson Research Center, USA](#)

**Imperial College
London**



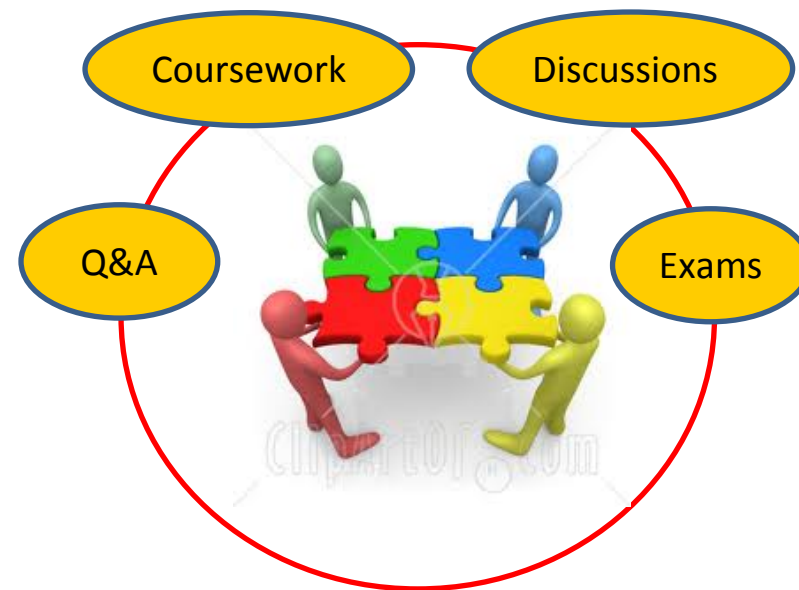
IBM Research





Course Arrangement

- ❑ TA: Dr. Alex Ren
- ❑ Lecture time: WK4-21, Tues 2:00pm-4:50pm, Rm 423
- ❑ Office Hours: Friday 1:30-2pm
- ❑ Notice board
- ❑ How am I evaluated?
 - Attendance: 20'
 - 2 Courseworks: 30'
 - 1 team project: 20'
 - Final exam: 30'
 - "Extra" incentives: 10'



Syllabus

- Advanced Software Engineering Theory
 - WK4-11
 - Coursework 1

- Cloud Computing and Big Data :
 - WK12-14
 - Coursework 2
 - WK13 Project: completion within 5 weeks

- Internet-of-Things: WK15-18

- Q&A: WK19
- Examination: WK20/21

Coursework Grading:

- 10: excellent
- 8: fair
- 6: poor

Project Grading:

- 18-20: clear contribution
- 14-17: limited contribution
- 13: completion
- 12: submission

Advanced Software Engineering Theory

- WK4(17 Sept): Introduction
- WK7(8 Oct): Requirement Engineering
- WK8(15 Oct): Software Design1
- WK9(22 Oct): Software Design2
- WK10(29 Oct): Agile Development
- WK11(5 Nov): Project Management



Introduction to Cloud Computing and Big Data

- WK12: Introduction to Cloud Computing
- WK13: Datacenter Networks
- WK14: Key technologies for Cloud Computing

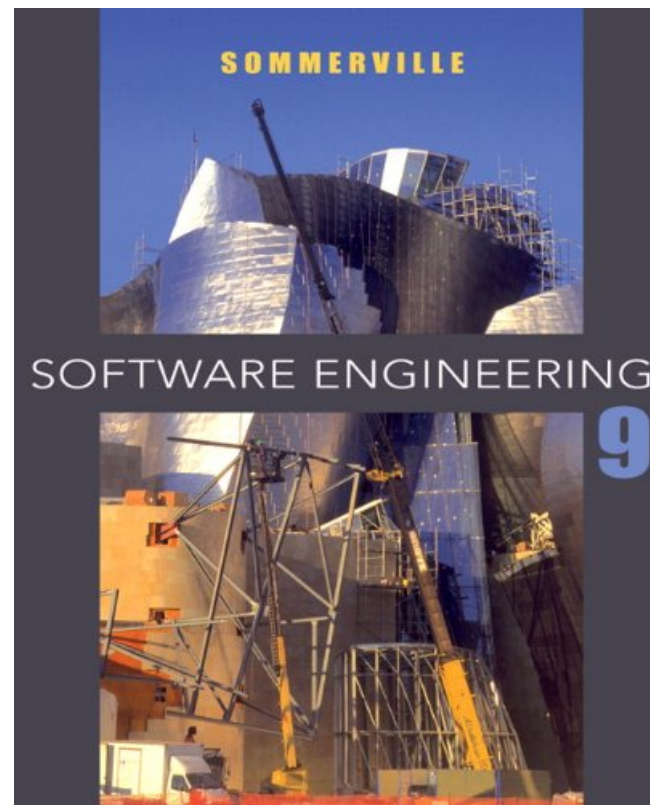


Introduction to the Internet-of-Things

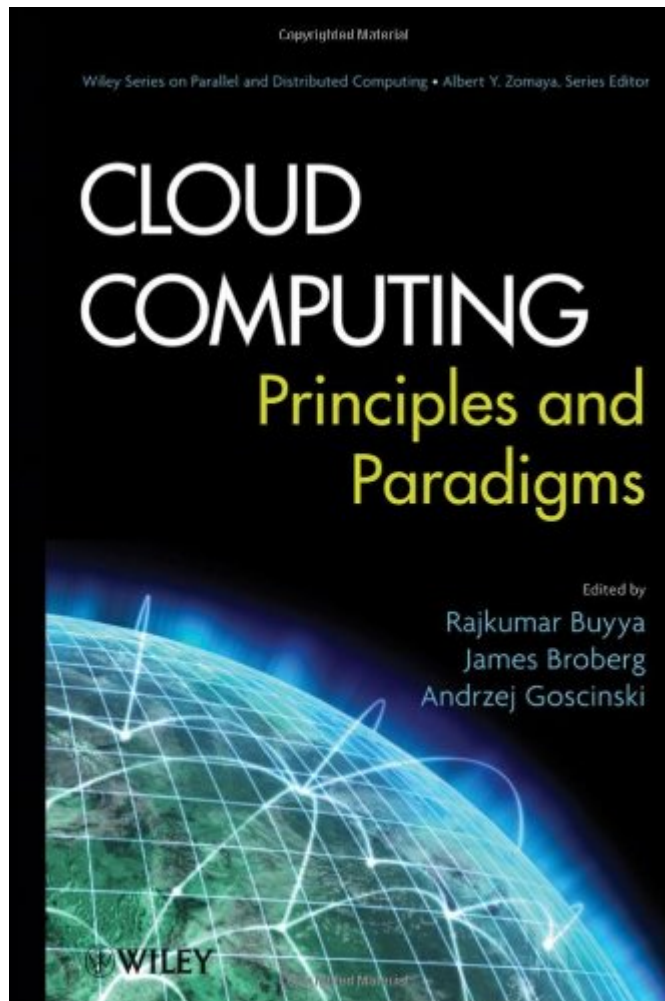
- WK15: Introduction
- WK16: Sensor Technologies and RFID
- WK17: Positioning Systems
- WK18: Wireless Broadband Network and Mobile Communications Networks

Textbooks and References - Theory

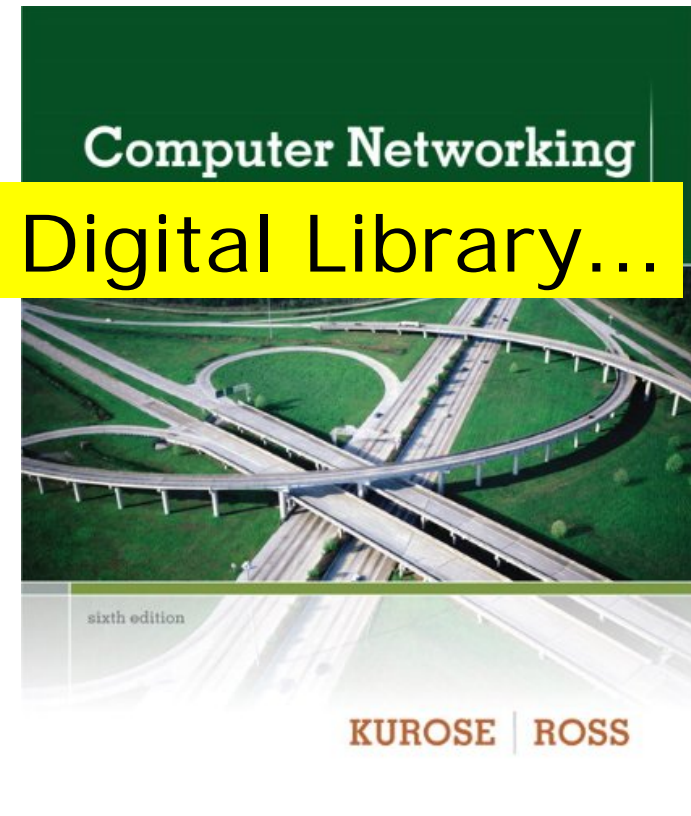
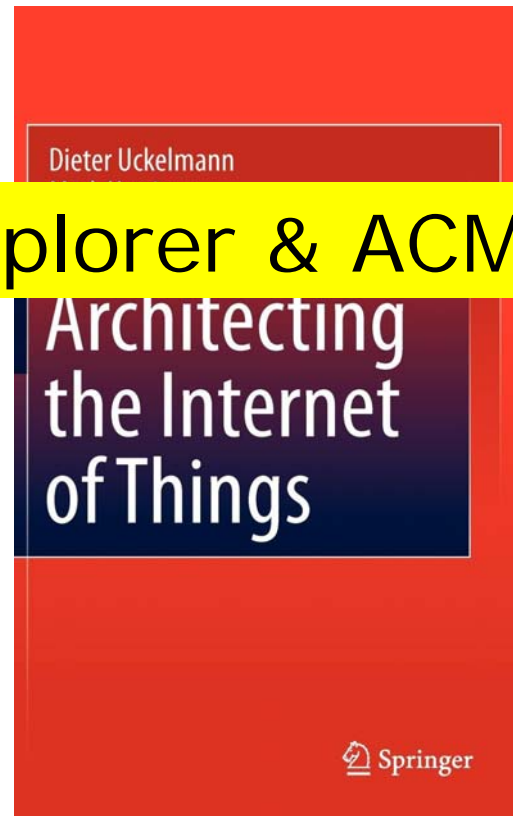
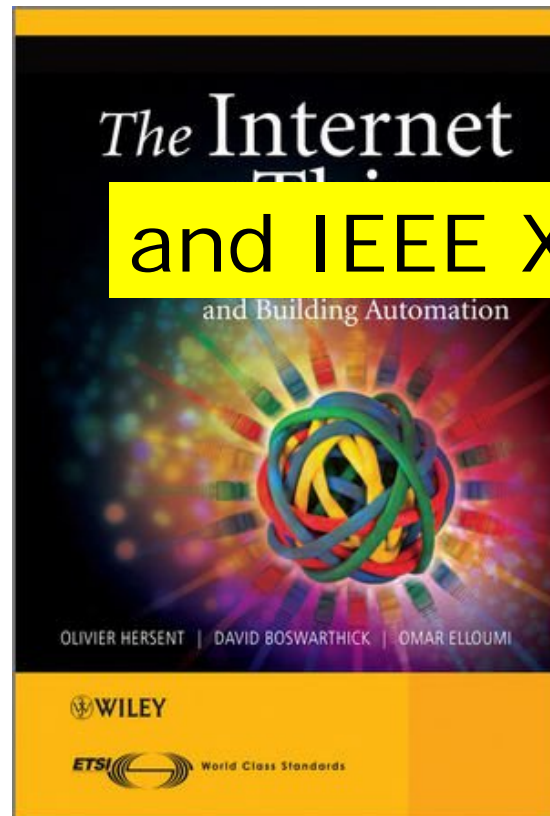
- ❑ Software Engr. by Ian Sommerville



Cloud Computing and Big Data



Internet-of-Things



and IEEE Xplorer & ACM Digital Library...

Homework

<http://haroldliu.weebly.com/teaching.html>

Advanced Software Engineering (2013 Autumn, International Students)

TA: Dr. Alex Ren

Lecture time: WK4-21, Tues 2:00pm-4:50pm, Room 423 (Software Building)

Office Hours: Friday 1:30-2pm, Room 316 (Software Building)

Hand-in your homework through Email ase_bit@yahoo.com, with subject line: name+id+Homework#, attachment in PDF only!

Coursework-1:

Submission deadline: TBD

- What is software life cycle?
- Explain and compare the pros, cons and feasibility of Waterfall model, V model, Spiral model, Incremental and iterative model.
(more to come...)