

# Selected topics in mobile security

Instructor: N. Asokan

Guest instructor: Kari Kostiainen

Format:

- Today: Mobile platform security architectures
- Tomorrow: Security for end users (B 222)
- Tutorial style lectures in two sessions on each day



## **Credit**

#### 1 CR (pass/fail)

- Attend both days (remember to mark the name sheet)
  - If you have not registered yet but want credit, write your name down and register today (Oct 10).
- Choose 3 papers (in priority order) you want to read from the list and send e-mail to me by end of day Oct 11.
  - I will assign one paper to each person on Oct 12
- Write a report (2-4 pages) on what you learnt from
  - the lectures (~1 page)
  - the paper assigned to you (~ 1-3 pages)
- Due before Wednesday, Nov 7



## **Credit**

#### Special assignment (up to 4 credits)

- available to selected students
  - Programming and research
  - ~3 months work (due around mid January)
- basis for further special assignments or thesis work
- Based on interest, quality of the report, skills
  - android app dev, facebook app dev, server-side development (Ruby-on-Rails, JS, MySQL), Bluetooth, protocol design and implementation, using crypto libraries, user testing
- Interested? Talk to me after class and send e-mail



## **Feedback**

After the course you will get e-mail with request to feedback asking you about

- 1. Presentation speed
- 2. Understandability of the material
- 3. Level of background knowledge assumed for each sub-section (about 18 in total)

Please respond. It will help us improve the tutorials. Thanks.



## Reminders

E-mail me the list of papers you want to read (3 in priority order) by the **end of the day Oct 11 (today)**Respond to the e-mail requesting feedback
Submit your report by e-mail to me by **Nov 7** 

If you are interested in doing a **special assignment** for additional credit (possibly developing into an MSc thesis), talk to me and send e-mail.



## **Example topics**

- Build a Bluetooth/WiFi scanner framework for Android and a sample application that uses it
  - Android dev
- Design and implement an app to locate friends-of-friends in proximity without losing privacy
  - Android dev, protocol design, applied crypto
- Build a Facebook app to help users warn friends about malicious apps or links (later collect data and analyze)
  - Facebook dev, UI design, web app dev (Ruby-on-rails, MySQL, JS)
- Build an app to strongly encrypt files you store on clouds, but access them from multiple devices
  - Android/Windows/Linux/MacOS dev, crypto library usage