

UNIK4750 L2 Internet of Things

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- Handouts [Media:UNIK4750-L1-Introduction.pdf](#)
- Lecture Notes [Media:UNIK4750-L1-LectureNotes.pdf](#)
- 28Jan - L2: Internet of Things J
  - Video introduction: IBM introduction to IoT  , TED talk of John Barrett 
  - Handouts [Media:UNIK4750-L2-Internet\\_of\\_Things.pdf](#), Internet of Things
  - Lecture Notes [Media:UNIK4750-L2-LectureNotes.pdf](#)
- 4Feb - L3: Security in IoT G - Paper selection
  - List of papers
  - [Guide on how to search for Literature](#)
- 11Feb - L4: Smart Grid, Automatic Meter Readings (AMR) G
- 18Feb - L5: Service implications on functional requirements G,(J)
- 25Feb - vinterferie



## “Your take on IoT”

- Privacy challenge, Ethical  
Security  
Safety  
“IT natives vs population”  
 UNIK 4750, Measurable Security for IoT - #IoTSec  
  - Example: Patients
  - augmented reality
  - IoT → service enabler
  - environments
  - easier everyday
  - Smart Everything
  - Robots
- Change in Society  
- Privacy  
IPSec evolution  
- protocols  
- IP limitations  
Sensor support  
- easier  
- reduced errors
- Technology gap  
- developing economies  
"1984"
- Crisis response  
- fast  
- more dependable

Jan 2016, György Kálmán, Josef Noll

# Sociable Internet of Things



- "Things" become socially intelligent
  - yes, without doubts
  - requires new trust model
  - measurable security
- Growing Internet of Things (IoT) market
  - broad connectivity
  - essential openness of smart "*everything*"
  - security, privacy, dependability
- «What about me?»
  - The Internet of People, Things and Services (IoPTS)

Imagine a world where things are connected, but unsociable. Every interaction would have to be explicitly scripted or it wouldn't happen. Oh wait, you don't have to imagine it. That's the current model for the IoT, and it won't scale.

<http://www.linuxjournal.com/content/true-internet-things>



# Common architecture of IoT systems

Core system consists of

- sensors and devices
- network and communications
- services
- intelligent overlay

Ability to adjust

- from sensors to services

Composing security



