# Health Care Security Scenario

## Özgür Kafalı

Consider a health care scenario involving the security of patient's electronic health records (EHR).

Hospitals are bound by law to keep their patient's electronic health records (EHR) secure. Therefore, health care workers who have access to patients' EHR must not share their credentials (username and password) with anyone. If health care workers need to use a public computer (such as the computer in the emergency department), they must log off from the computer as soon as they are finished reviewing the patient's EHR. Moreover, health care workers must not view the EHR of their friends unless they are responsible for their treatment.

#### Agents

WORKER, PHYSICIAN, PATIENT, HOSPITAL

### Propositions

 $true, emergency, share\_id, share\_password, access\_ehr, public\_computer, \\ logout, friend, treating$ 

#### **Deliverables**

- Specify the natural language requirements for the scenario
- A requirements analyst has come up with the following norms for the scenario:

P(WORKER, HOSPITAL, true, share\_id OR share\_password)

 $\mathsf{C}(\mathsf{WORKER}, \mathsf{HOSPITAL}, true, logout)$ 

 $P(WORKER, HOSPITAL, true, access\_EHR)$ 

Your task is to come up with a refinement of this design using the above agents and propositions, so as to satisfy the requirements for the scenario.