爱沙尼亚close to japan(介绍)

Estonia and japan(meeting in january 2018)

School :

Modern campus

Cooperation with world top technology enterpries

学生组成：

2000 emplyees

12000students

Producing robots for ex. Amazon

School of IT (学校课程介绍)

Very interdisciplinary

From telecom app to e-government

Cooperation with world top technology enterpries

Company: ABB, Microsoft google

Project example:

Cyber exercise- world’s largest cyber security live fire exercise locked shields

Blockchain tech

Successful start

Self-driving car

Sensors

Software

Robot operating system

Autoware

Ragnarok 2.0 smart workwear

Positing and tracking

Speech to text notes

Fall detection

Immortal: facts and figures

Immortal-integrated modelling, fault management, verification and reliable design environment

Serious games in the wild

What is cyber security ?

A new emerging meta-discipline.

Is cyber security different?

School system does not teach relevant aspects of CS

School dropouts might be brilliant CS experts

What are serious games? Is this games?

Table talk, to do with computer(liscence), team,

Large scale exercises(locked shields)

Cyber defense exercises

Set up Realistic network map

Why need to exercise?

Over 200 cyber security exercises: 50% have a performance objective focusing on learing

Enthusiasm of participants for the knowledge gained and lessons learned

After-action reports…..

Is it worth all the money?

A simple/practical methodology?

Measurement -🡪 effective feedback

Only a piece of a puzzle….

In-game learning measurements

(technical implementation 🡪 skills evaluations)

(conceptual design 🡪 technical design)

5.competencies

4.skills

3.tasks

2.game event log

1.raw data

We tried it out…

Industrial control system

..RT objective for fuel spilling at airpot

..BT has time to mitigate before all fuel is spilled

Data sources:

Implementation considerations

Benefits:

Cyber hygiene and awareness

White hat hacker

Clonclusion

Measurements aligned with learning objectives:

Traditional