



University of  
Genoa

# Serious Games

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# STRATEGOS

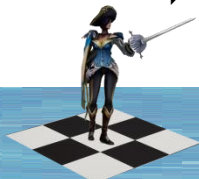
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## About me

- Professor @**UNIGE** (DITEN, EliosLab)
  - ⇒ [www.elios.diten.unige.it](http://www.elios.diten.unige.it)
- Founder of **Wondertech** SRL
  - ⇒ [www.wondertechweb.com](http://www.wondertechweb.com)
- Teaching
  - ⇒ "**Autonomous Agents in Games**" (5 ECTS)
    - ▼ Strategos Master Course
  - ⇒ "Programming Fundamentals" (6 ECTS)
    - ▼ Electronic and Information Technology Bachelor Course
- Research interest
  - ⇒ Internet of Things, **Serious Gaming Technology**, Electronic Applications
- Contacts:
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## SG Society

- ELIOS Lab was the coordinator of the Games and Learning Alliance (GALA) Network of Excellence on Serious Games
  - ⇒ UE big project on SGs (2010 – 2014)
- Serious Game **Society (SGS)**
  - ⇒ [www.seriousgamessociety.org](http://www.seriousgamessociety.org)
- International **Journal** of SGs (IJSG)
  - ⇒ [journal.seriousgamessociety.org](http://journal.seriousgamessociety.org)
- International **Conference** on SGs (GALA)
  - ⇒ <https://conf.seriousgamessociety.org>





## What is a Serious Game?

- "A game designed with **a different purpose** than pure entertainment (e.g., education, training, advertisement, persuasion/politics)"  
⇒ *Wikipedia*
- "Differently than computer games, SGs **use pedagogy to infuse instruction** into the game play experience"  
⇒ *ACM J. **Educational** Resources in Computing*
- "Serious Games challenge the learner and keep her **engaged during the learning process**. It's the difference between watching a nature documentary and going backpacking in the wilderness"  
⇒ *eLearn Magazine*





## What is a Serious Game?

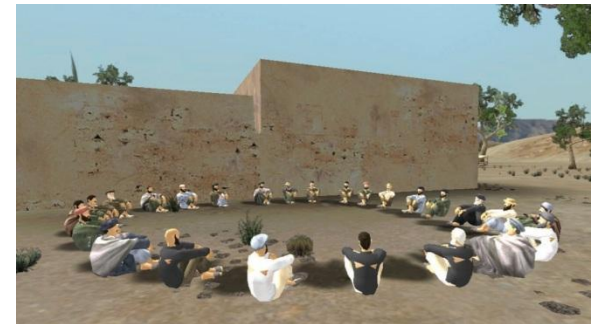
- Using immersive entertainment to enhance corporate training, education, health, public policy, strategic communication, etc.
- Key aspects
  - ⇒ engagement (**explicit**)
  - ⇒ content (**implicit**)
    - ✓ constructing knowledge by situating cognitive experiences in virtual worlds, authentic activities
  - ⇒ the language of “Digital natives”





## Example: Cultural living worlds

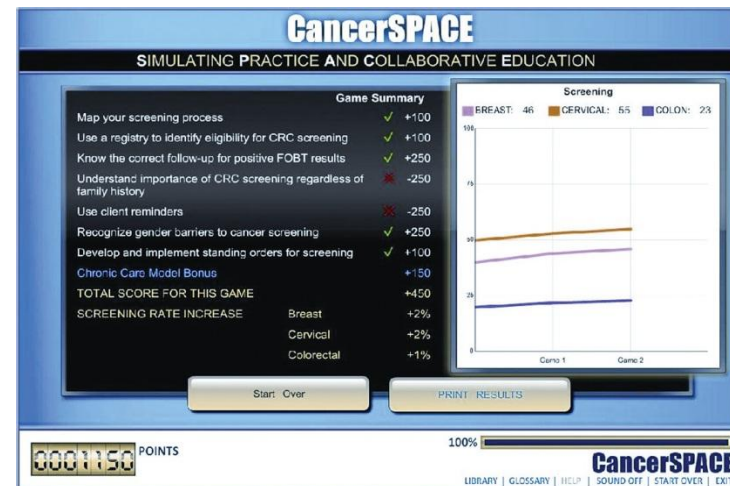
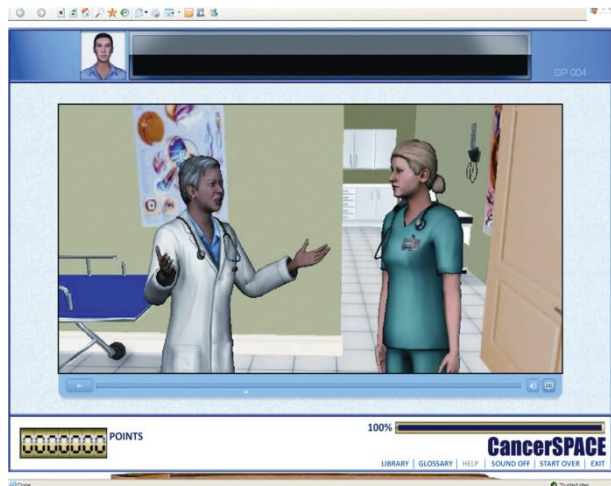
- Virtual Humans modeling the afghan culture (military training)
  - ⇒ simulation of people's daily activities
  - ⇒ simulation of religious rites and civil activities
  - ⇒ facial expressions
    - ▼ way of speaking and gestures
  - ⇒ personal reputation building in a different population
    - ▼ simulation of information spreading in a community
  - ⇒ different roles and the social hierarchy
  - ⇒ Goal: **to be accepted in the community**





## Example: CancerSpace

- Simulation game for improving cancer screening rates
  - ⇒ US National Cancer Institute
  - ⇒ targeted users: professionals working in health centers
- Role-playing
  - ⇒ real-world situations in which the player must make decisions
  - ⇒ patient-provider interactions
    - ▼ the decider must talk with a patient reluctant to get screened







## Our work: Draweva

- Draweva
  - ⇒ a 3D multiplayer game to teach leadership skills
- Developed in collaboration
  - ⇒ EliosLab, Wondertech, Qchallenge
- Game goal:
  - ⇒ create awareness about the wrong pattern of “invisible silos”
  - ⇒ managers are aware only of their own targets, missing the opportunity to create synergies







## Live Example

### ➤ The Wondertech Simulators...





Interested?  
Next year, first semester!  
@Strategos  
Thank you!

