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Serious Games and Digital Health

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Serious Games & Digital Health

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Serious Games for Post-Stroke Rehabilitation

Funded by NI Chest, Heart & Stroke Association
Serious Games for Respiratory Physiotherapy

Partner with Nottingham University Hospitals
EU Regional Development Fund

3D Visualisation for Anatomy Education

Real-time Medical Visualisation of Human Head & Neck Anatomy and its Applications for Dental Training

Partner with
- Laboratory of Human Anatomy
  University of Glasgow

Funding
- NHS Education for Scotland

3D Visualisation for Physiology Education

Partner with
School of Life Sciences, University of Glasgow
Funded by
Physiological Society David Jordan teaching grant

Sur-Face: A mobile app for educating patients regarding corrective surgery of facial deformities

- Orthognathic surgery - a complex procedure to correct the underlying facial deformities
- Patients make voluntary decisions
- Understand the intricacy of the techniques & potential risks of the surgery before they sign the consent form
- Interactive 3D visualizations in healthcare app

Available on Google play, search Sur 'FACE' Yeshwanth
Oculus Surgery
a mixed reality surgical training experience

Over crowded operating rooms
Don’t worry Sir, you are in safe hands. We played the game well!


http://www.springer.com/engineering/computational+intelligence+and+complexity/book/978-3-642-54815-4
Mixed Reality Virtual Survivors for Holocaust Education

- The *Interact* Project
- **Partners**
  - The National Holocaust Centre & Museum
  - University of Huddersfield
  - Bright White Ltd
- **Funding:** NESTA, AHRC, The Arts Council England

Interaction of Holocaust Testimony and QA

Inspiring tomorrow's professionals
Flow chart of **Interact**

- Spoken question
- Speech recognition
  - text
- Query Elaboration
  - Standardised question
- Information Retrieval
  - Unique answer ID
- Logic
  - Has the answer just been played? Is the VH waiting/listening to questions?
- AV Playback
  - Meta data
  - Spoken answer
- 3D Graphic Engine

Virtual patients for training doctors’ communication skills

Thank you

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