

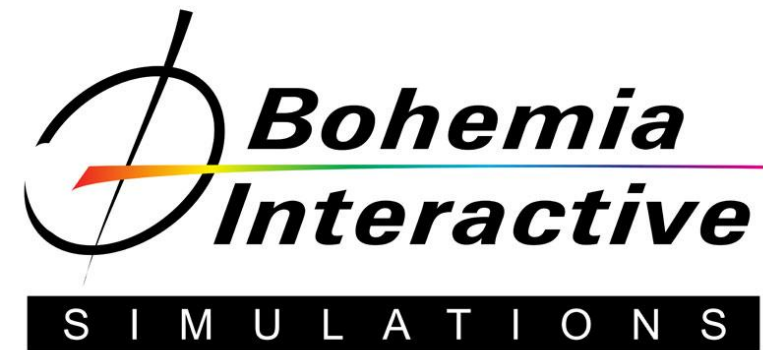
Computer Games and Academia



Andy Fawkes

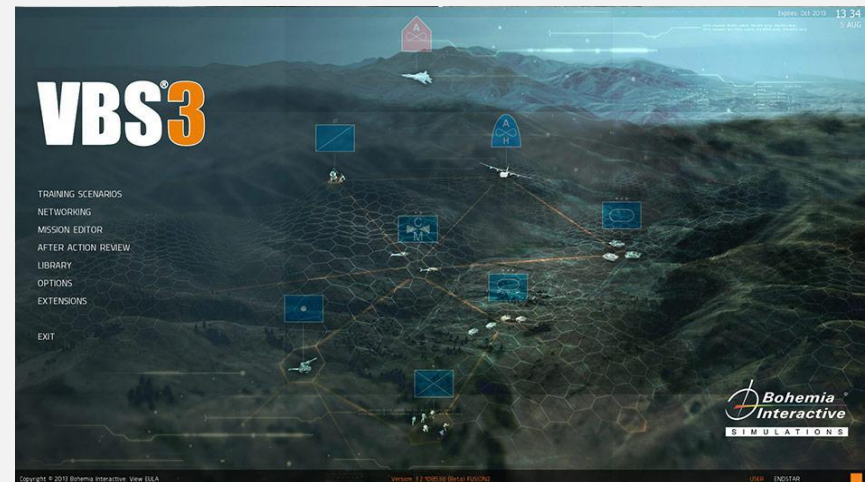
Outline

- BISim Academic Liaison
- Games Market
- UK Higher Education and Computer Games
- Typical Courses
- Wider Application
- Related Technologies



Bohemia Academic Liaison

- VBS Licence for Academic Usage for No Fee
- Industry Interface for Student/Academic VBS Projects
- Channel for Intern/Employment at BISim



Big Business

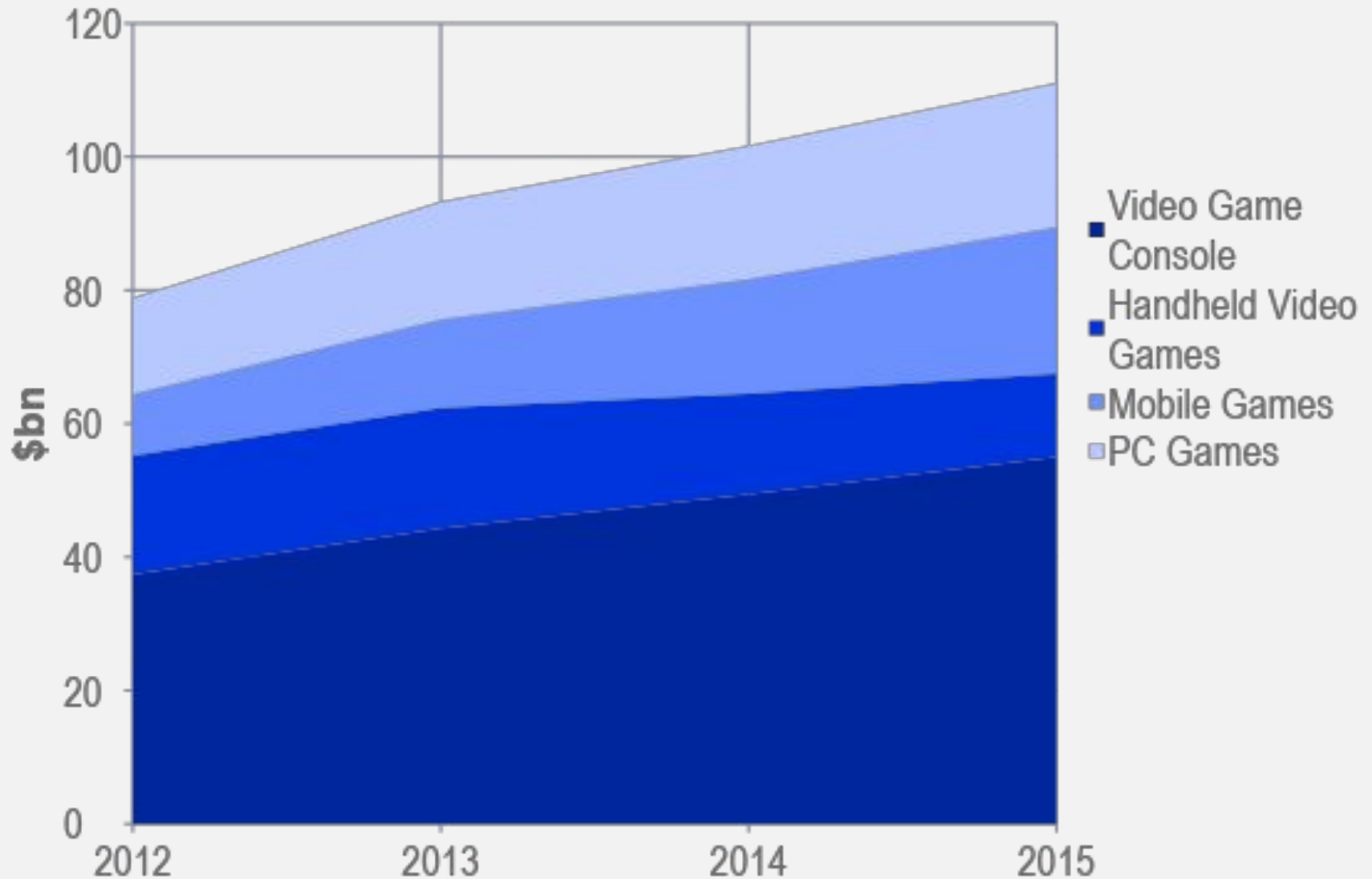
- Grand Theft Auto V
 - five years' work by a team of over 1,000 people
 - game's combined development and marketing budget over US\$265m
 - US\$1 billion sales within first 3 days



- Candy Crush Saga
 - Daily Revenue est. US\$826k
 - Daily Installs 30,090
 - Daily Active Users 8,031,750
 - On Facebook and Smartphones

Worldwide Video Game Market Revenue (\$Bn)

(Gartner Oct 13)



UK Higher Education Computer Games Courses (Undergraduate)

UCAS

[Home](#) / [How it all works](#) / [Apply](#) / [Members & providers](#) / [Data & analysis](#) / [News & events](#) / [About us](#)

[Back to search home page](#)

Where do you normally live?*:

Search by **any** or **all** of the following

Course:

Provider:

Location:

Search >

Availability

[Courses open to new applicants](#)

Applying through Extra

[Show courses in Extra \(291\)](#)

Single/Combined subjects

[Single subject \(246\)](#)

[Joint subjects \(66\)](#)

Combined (0)

[Major with a minor subject \(9\)](#)

Major with more than one minor (0)

[Triple subjects \(1\)](#)

Other type of combination (0)

Providers

Courses

Map

323 courses found (order may not be alphabetic)



Computer Game Applications Development

University of Abertay Dundee (Main Site)

Undergraduate Degree

Qualification	Duration	Study mode	Course code
BSc (Hons)	4 Years	Full-time	G450



Computer Games Technology

University of Abertay Dundee (Main Site)

Undergraduate Degree

Qualification	Duration	Study mode	Course code
BSc (Hons)	4 Years	Full-time	G470



Game Design and Production Management

University of Abertay Dundee (Main Site)

Combined (0)

[Major with a minor subject \(5\)](#)

Major with more than one minor (0)

[Triple subjects \(1\)](#)

Other type of combination (0)

Provider types

117 Providers

[Home](#) / [How it all works](#) / [Apply](#) / [Members & providers](#) / [Data & analysis](#) / [News & events](#) / [About us](#)

Where do you normally live?*:

Search by **any** or **all** of the following

Course:

Provider:

Location:

Search >

Providers

Courses

Map

117 providers found



University of Abertay Dundee

[View provider details](#)

[View 4 relevant courses](#)



Aberystwyth University

[View provider details](#)

[View 2 relevant courses](#)



Anglia Ruskin University

[View provider details](#)

[View 3 relevant courses](#)



University of the Arts London

[View provider details](#)

[View 2 relevant courses](#)

323 Courses

Typical Courses

- University of Hull
- MSc in Games Programming
 - Advanced Rendering and AI for Games
 - C++ Programming and Design
 - Development Project
 - Game Development Architectures
 - Real-time Computer Graphics
 - Simulation and Concurrency
- National Film and Television School
- MA in Games Design and Development
 - Game Design
 - Game Production
 - Game Art/Animation

Colleges Recently Visited

- Bournemouth University
- Defence Academy/Cranfield University
- Imperial College London
- Queen Mary University of London
- Staffordshire University
- University of Hull
- University of Portsmouth
- Wiltshire College

Exploiting Games/Simulation in Wider Academia

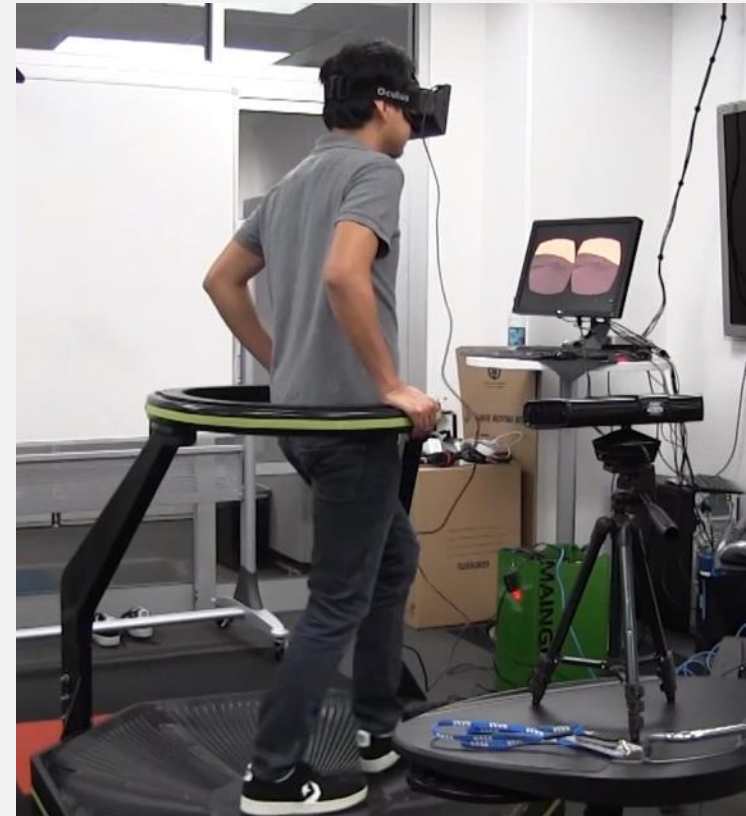
- War Studies
- High Performance Computing
- Visual Recognition Systems
- Robotics and Autonomy
- Psychology
- Healthcare
-

Innovation

New Low Cost Consumer Devices are Inspiring Innovation



New (Inexpensive) Interfaces



Wearable Computing, Tracking and Sensors



Beyond Simulation? – AI - Robotics



Boston Dynamics

Exciting Times!

Simulation

Computing

Games

Sensors

Robotics

Psychology

Training

Virtual Reality

Performance Arts

Telepresence

Mobile

Education

Artificial
Intelligence

Internet



Thoughts

- Big Business!
- Untapped by Simulation Community?
- Academia very keen to work with Industry
- Takes time to build Relationships
- Academia have their own Priorities and Timescales
- Innovation through Emerging Low Cost Consumer Products





Questions?