PROGRAMME AT A GLANCE

September 18
08.30-15.00 Registration
09.00-09.15 Welcome
09.15-10.00 Keynote Alan Hinchcliffe
10.00-10.30 Coffee Break
10.30-12.00 Session: Procedural Game Generation and Mechanics
12.00-13.30 Lunch
13.30-14.30 Session: Game AI
14.30-15.00 Coffee Break
15.00-16.00 Session: Playing Styles
16.00-17.00 Invited Talk: Joseph Delappe
19.00 Social Programme – Dinner at the DCA (Dundee Contemporary Arts) centre-(not included in the conference fee, on a voluntary basis only).

September 19
09.00-15.00 Registration
09.00-10.00 Keynote Mike Cook
10.00-10.30 Coffee Break
10.30-12.30 Session: Game Development Methodology and Mobile Gaming
12.30-13.30 Lunch
13.30-14.30 Session: Serious Gaming I
14.30-15.00 Coffee Break
15.00-16.00 Session: Serious Gaming II
16-30-18.00 VR Workshop
20.00-23.00 Conference Visit and Dinner

September 20
09.00-09.30 Registration
09.00-10.00 Session: Augmented Play
10.00-10.30 Coffee Break
10.30-12.00 Online Gaming
12.00-12.15 Closing Session
GAME-ON’2018 FINAL PROGRAMME

Overhead and LCD Projector are standard
The underlined authors are usually the presenters.
Conference Site: the Hannah MacLure Centre on the 3rd floor of the Student Centre
Building at Abertay University, Bell Street, DD1 1HG Dundee, Scotland, United Kingdom
For any local information contact David King: 📞 Tel. +44 01382 308297, 🌐 Email: d.king@abertay.ac.uk,
Coffee breaks at the Hannah MacLure centre (3rd floor Student Centre) and lunches at the
Bar One, 2nd floor of the Student Centre

Only papers in gray boxes are eligible for the best paper award

Tuesday, September 18, 2018

08.30 - 15.00  Registration

09.00 - 09.15  Hannah MacLure centre - WELCOME

Welcome Address
University Principal Prof. Nigel Seaton

09.15 - 10.00  Hannah MacLure centre - SESSION I
KEYNOTE SPEAKER

09.15-10.00  Session Chairperson:
David King, Abertay University, Dundee, United Kingdom

GAME_KEY_03
Bringing Expressive Virtual Characters to Life
Allan Hinchcliffe, Lead Engineer, Character Engine
London, United Kingdom
Tuesday, September 18, 2018

10.00 - 10.30  Coffee Break in the Hannah MacLure centre

10.30 - 12.00  Hannah MacLure centre - SESSION II
PROCEDURAL GAME GENERATION AND MECHANICS

10.30-12.00  Session Chairperson:
David King, Abertay University, Dundee, United Kingdom

GAME_DEV_METH_06
Computational Creativity and Game Design: Towards Procedural Game Generation
Jorge Ruiz Quiñones and Antonio J. Fernández-Leiva ....................... 55

GAME_DEV_METH_07
Fast Configurable Tile-based Dungeon Level Generator
Ondřej Nepožitek and Jakub Gemrot.................................................. 61

GAME_ANIM_01
Creating Gameplay Mechanics with deformable Characters
Grant Clarke ..................................................................................... 66

12.00 - 13.30  Lunch in Bar One, 2nd floor of the Student Centre

13.30 - 14.30  Hannah MacLure centre - SESSION III
GAME AI

13.30-14.30  Session Chairperson:
Grant Clarke, Abertay University, Dundee, United Kingdom

GAME_AI_02
Monte Carlo Tree Search for Quoridor
Victor Massagué Respall, Joseph Alexander Brown
and Hamna Aslam........................................................................... 5

GAME_AI_03
Monte Carlo Tree Search for Love Letter
Tamirlan Omarov, Hamna Aslam, Joseph Alexander Brown
and Elizabeth Reading.................................................................... 10
Tuesday, September 18, 2018

14.30 - 15.00 Coffee Break in the Hannah MacLure centre

15.00 - 16.00 Hannah MacLure centre - SESSION IV
PLAYING STYLES

15.00-16.00
Session Chairperson:
Grant Clarke, Abertay University, Dundee, United Kingdom

GAME_OPP_01 – VIDEO PRESENTATIONS
Dynamically Extracting Play Style in Educational Games
Reza Khoshkangini, Annapaola Marconi, Santiago Ontañón
and Jichen Zhu .................................................................37

GAME_OPP_02
Playing Styles in Starcraft
Yaser Norouzzadeh Ravari, Sander Bakkes and Pieter Spronck......47

16.00 - 17.00 Hannah MacLure centre - SESSION V
INVITED SPEAKER

16.00-17.00
Session Chairperson:
Grant Clarke, Abertay University, Dundee, United Kingdom

GAME_INV_01
Head Shot! Playing Politics in Computer Games
Joseph DeLappe, Professor of Games and Tactical Media Division of
Games and Art, Abertay University, Dundee, Scotland, United Kingdom
Tuesday, September 18, 2018

17.00 - 18.00 Kydd Building
POST GRAD STUDENT EXHIBITION

17.00-18.00

At the Centre for Excellence in Games Education
2nd floor of the Kydd Building
room 2523

19.00 - FREE EVENING OR JOIN US FOR AN INFORMAL DINNER ON A VOLUNTARY BASIS (NOT INCLUDED IN THE CONFERENCE FEE) AT THE

DCA (Dundee Contemporary Arts) centre
152 Nethergate, DD1 4DY Dundee
Tel: +44 (0)1382 432 444
Tel Jute Café Bar: +44 (0)1382 909 246
Wednesday, September 19, 2018

09.00 - 15.00 Registration

09.00 - 10.00 Hannah MacLure centre - SESSION VI
KEYNOTE

09.00-10.00 Session Chairperson:
David King, Abertay University, Dundee, United Kingdom

GAME_KEY_01
Watch This Possibility Space: The Future of Creative AI in Games
Mike Cook, Senior Research Fellow University of Falmouth, Falmouth, United Kingdom and researcher/developer at Games by Angelina

10.00 - 10.30 Coffee Break in the Hannah MacLure centre

10.30 - 12.30 Hannah MacLure centre - SESSION VII
GAME DEVELOPMENT METHODOLOGY AND MOBILE GAMING

10.30-12.30 Session Chairperson:
Chris Acornley, Abertay University, Dundee, United Kingdom

GAME_AFFECT_01
Affective Games: A Multimodal Classification System
Salma Hamdy and David King ................................................................. 19

GAME_DEV_METH_02
Player Age and Affordance Theory in Game Design
Hamna Aslam, Joseph Alexander Brown and Elizabeth Reading ..... 27
Wednesday, September 19, 2018

GAME_DEV_METH_04
Role and Experiences of Tutorial in Location Based Game
Kaïsa Könnöla, Tuomas Ranti, Tapani N. Joelsson
and Tuomas Mäkilä.................................................................91

GAME_DEV_METH_01
Quality Assurance in a Mobile Game Project: A Case Study
Maxim Mozgovoy ........................................................................96

12.30 - 13.30 Lunch in Bar One, 2nd floor of the Student Centre

13.30 - 14.30 Hannah MacLure centre - SESSION VIII
SERIOUS GAMING I

13.30-14.30 Session Chairperson:
Karen Meyer, Abertay University, Dundee, United Kingdom

GAME_SER_02
Motivational Game Design and Pro-Environmental Elements in
Sustainability Applications
Kaïsa Könnöla, Tuomas Mäkilä, Kaapo Seppälä
and Teijo Lehtonen....................................................................129

GAME_SER_03
Gamifying Learning of Maritime Standard Operational Procedures
Olli I. Heimo, Tapani Joelsson, Sari Nyroos and Tuomas Mäkilä... 133

14.30 - 15.00 Coffee Break in the Hannah MacLure centre

15.00 - 16.00 Hannah MacLure centre - SESSION IX
SERIOUS GAMING II

15.00-16.00 Session Chairperson:
Karen Meyer, Abertay University, Dundee, United Kingdom
Wednesday, September 19, 2018

GAME_DEV_METH_03
Designing Gamification for Constructive Competition
Mark Featherstone

GAME_SER_05
Developing a Gamified Platform to Involve Unemployed Youth in Job-Seeking Activities
Juho Mattila, Eeva Leinonen, Ilkka Hietaniemi, Aryan Firouzian and Petri Pulli

16.00 - 18.00 LOCATION TBC - SESSION X
VR WORKSHOP

16.00-18.00 Session Chairperson:
Grant Clarke, Abertay University, Dundee, United Kingdom

The idea behind the VR workshop is to have an open discussion around the locomotion problem in VR games. The workshop will be broken into 2 stages:

Stage 1: Split the delegates into groups and experiment with a varied collection of VR games that take different solutions to allow the player to move around a virtual space. The idea is to have a number of VR stations where everyone can sample more than one title. The titles themselves will be a collection of demos built by Abertay staff and students along with some external titles.

Stage 2: Each group would then have a round table discussion and present their findings to the other teams. The idea here is to collect common points raised by each group that may form a useful set of guidelines when tackling this problem.
Wednesday, September 19, 2018

CONFERENCE DINNER

19.00-23.00

The Conference dinner will be held on Wednesday the 19th of September at
Discovery Point
Discovery Quay
DD1 4XA Dundee
Scotland, United Kingdom

Tel: +44 (0)1382 309060
Email: admin@dundeeheritage.co.uk
Thursday, September 20, 2018

09.00 - 09.30    Registration

09.00 - 10.00    Hannah MacLure centre – SESSION XI
AUGMENTED PLAY

09.00-10.00    Session Chairperson:
David King, Abertay University, Dundee, United Kingdom

GAME_AUG_01
Beyond Pokemon Go Advances in Augmented Reality for Games
Ken Newman, Tina Gates and Bilal Ahmed................................. 75

GAME_AUG_02
Immersion Issues in Haptic Experiences
Helena Barbas ........................................................................... 81

10.00 - 10.30    Coffee Break in the Hannah MacLure centre

10.30 - 12.00    Hannah MacLure centre – SESSION XII
ONLINE GAMING

10.30-12.00    Session Chairperson:
David King, Abertay University, Dundee, United Kingdom

GAME_ONL_01
Trade-offs and Challenges of Cloud Gaming in Practice
Robert J. Grigg and René Hexel.............................................. 101

GAME_ONL_02
An Audience Participation Angry Birds Platform for Social Well-Being
Yuxuan Jiang, Pujana Paliyawan, Ruck Thawonmas
and Tomohiro Harada.............................................................. 116

GAME_ONL_03
Citizen’s Interactions in “Smart Game Playing Environments”
Liliana Vale Costa, Ana Isabel Veloso and Óscar Mealha .......... 121
Thursday, September 20, 2018

12.00 - 12.15  Hannah MacLure centre – SESSION XIII
CLOSING SESSION AND BEST PAPER AWARD

12.00-12.15  Session Chairperson:
David King, Abertay University, Dundee, United Kingdom
Philippe Geril, EUROISIS-ETI, Ostend, Belgium

SOCIAL PROGRAMME INFORMATION

Lunches and Coffee breaks

Coffee breaks will be served in the Hannah MacLure centre, which is on the 3rd floor of the Student Centre Building and lunches will be served in Bar One, on the 2nd floor of the Student Centre Building.
Abertay University
Bell Street
DD1 1HG Dundee
Scotland, United Kingdom

Tel: +44 (0)1382 308 000

Conference Dinner on the 19th of September

The Conference dinner will be held on Wednesday the 19th of September at Discovery Point
Discovery Quay
DD1 4XA Dundee
Scotland, United Kingdom

Tel: +44 (0)1382 309060
Email: admin@dundeeheritage.co.uk-
SESSION CHAIR INFORMATION

Information for Session Chairs

Session Chairs are chosen on a voluntary basis by proposals by either authors or local committee members or are appointed by the Track Chairs, General Program Chair or General Conference Chair. They are responsible for their assigned session. They make sure their speakers are available, take care of the timing within the session, chair the discussion after each presentation and introduce each speaker based on the CV’s given to them by the authors. In case they chair a session featuring extended papers, then they are required to distribute and collect the reviews of that or those papers at the beginning and end of the session. If they have time they should also indicate in their papers the number of session participants.

SEE YOU ALL NEXT YEAR AT GAMEON 2019, September 18-20, 2019, NHTV Breda University of Applied Sciences, Breda, The Netherlands

Proposals for special tracks/tutorials/demos can be sent in by January 30th 2019
CONFERENCE LOCATION

Conference Venue

Abertay University
Hannah MacLure centre, 3rd floor of the Student Centre Building (directly opposite the university main entrance).
Bell Street
DD1 1HG Dundee
Scotland, United Kingdom
Tel. +44 01382 308297
Email: d.king@abertay.ac.uk

Dundee City/University Campus Map
CONFERENCE LOCATION

How to Reach Dundee

By Plane
Dundee Airport, located in the heart of Scotland, is the most convenient fly-in destination for some 1000 square miles of central Scotland and operates 2 flights on week days to and from London Stansted (Loganair).
Taxis are available upon request from outside Dundee Airport and should take approximately ten minutes to arrive at the University. Alternatively fly in through Edinburgh Airport and take a train from Edinburgh Waverley station to Dundee.

By Rail (Dundee Station)
We are just ten minutes' short walk from the train station. Taxis are available outside its main entrance. Journey information is available from National Rail Enquiries. Tickets can be bought directly from East Coast and Virgin Rail.

By Coach and Bus: National coach services
We are just ten minutes' short walk from the bus station. Taxis are available in Trades Lane. (National Express Coaches, Megabus and Citylink).

By Car
Driving directions can also be generated from Google Maps.
There are a number of public car parks available around Abertay University.

Useful Links
- Dundee Weather Forecast
- Visit Dundee
- Dundee Travel
- Visit Scotland- Dundee
EUROSIS Forthcoming Conferences

**ESM'2018**  
October 24-26, 2018  
Ghent University, Ghent, Belgium

**SCIFI-IT'2019**  
April 1-3, 2019  
De Krook, Ghent, Belgium

**ISC'2019**  
Week of June 1st, 2019  
ISEL  
Lisbon, Portugal,

**NASTEC'2019, GAMEON-NA'2019**, Canada

**GAMEON'2019**, September 18-20, NHTV Breda University of Applied Sciences, Breda, The Netherlands

**ESM'2019**, October 2019, Palma de Mallorca, Spain (TBC)

**FOODSIM'2020**, April 6-9, 2020, [University of Leuven Research Centre](http://www.uhb.be), Ghent, Belgium
EUROSIS was borne out of discussions with the European Community to set up a new kind of Society, which would be project driven instead of driven by pure membership and conferences.

The aim of the new Society is to set up topic related Technical Committees which link directly to European Projects in the field of computer simulation and related areas and to act as a knowledge pool for future European Networks of Excellence, like MOSAIC.

If you would like to receive more information about EUROSIS, please contact

Philippe Geril  
EUROSIS-ETI  
European Simulation Office  
Greenbridge Science Park  
Ghent University – Ostend Campus  
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Plassendale 1  
B- 8400 Ostend  
Belgium  
Tel: +32.59.255.330  
Fax: +32.59.255.339  
Email: Philippe.Geril@eurosis.org

Please send me info on EUROSIS:  
Name: .................................................................................................................................
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# GAME-ON’2018 Registration Form

Please legibly print or type and fill out completely. (Check appropriate boxes where necessary)

<table>
<thead>
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<th>FIRST NAME</th>
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**COMPANY OR AFFILIATION**

Mailing address (tick one): [ ] HOME [ ] BUSINESS

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1. [ ] EUROIS member € 565 Member Number: _______________________________ €__________
2. [ ] Members of Sponsor or Affiliate Society € 565 €__________
3. [ ] Non-Member Participant € 610 €__________
4. [ ] Students, who are not authors but who wish to attend the conference, or ONE DAY PARTICIPANTS pay: € 450 €__________

(Above registration fees include, one copy of the PROCEEDINGS, all midday meals, cocktail, refreshments, coffees and social program.) One Day Participants and Non-Author Students cannot participate in the conference dinner.

5. [ ] Conference Dinner Ticket for Companion € 90 [ ] Lunch Ticket for Companion € 25/day €__________
6. [ ] Extra Conference Proceedings € 40 Cash and Carry €__________

VAT Number if applicable: _______________________________

**TOTAL AMOUNT DUE** €__________

**TOTAL AMOUNT REMITTED** €__________

Pay by CREDIT CARD and fill in the information below:

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