

# INSTITUTE OF DIGITAL GAMES



Report on the Activities  
of the Institute 2013-2018

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## Highlights

- Msc in Digital Games: **Top 25 Game Design Schools** – *Princeton Review*: **22<sup>nd</sup> place** in 2018 (up from 23<sup>rd</sup> place in 2017)
- We have published more than **170 papers** since 2013
- IDG research has received almost **11,000 citations**
- IDG members attracted over **3 million Euro** of research funding to UM since 2013.
- IDG participated in projects worth of **15 million Euro** in total
- We have delivered more than **100 Keynotes** and Invited Talks
- IDG has received **11 awards** for papers in top-tier conferences and journals and for games we designed
- IDG grew from 4 members to **22 members** within 5 years of operations.
- Synergies with **14 different UM departments**, faculties, and institutes.
- Released **4 games** which received broad exposure outside of project deliverables
- 3 Alumni have **released games** that have been nominated or won **awards**

## MSc in Digital Games

The Institute of Digital Games has been ranked amongst the **top 25 post-graduate programmes** for *Game Design* by the **Princeton review** in **2017** and **2018**. We have achieved our goal to reach the top of the list rising 1 spot in the ranking from 23<sup>rd</sup> to 22<sup>nd</sup>.

Our MSc has grown substantially and over the course of the first 5 years it has managed to maintain a healthy intake (with respect to numbers and student quality). In 2012 (under MaKS) we started with 5 students but we have since then managed to receive a minimum of around 15 applications a year (we reached a new peak in 2018). See figure 1 - IDG student admissions for the detailed numbers. After a decline in applications the Institute has revised its communications and outreach strategy, this has clearly paid off dividends as the applications have increased to near the highest point in its short history. We're looking to build on the existing communications strategy and increase applications over the coming years. The Institute's marketing strategy paid off and resulted in more applications of better quality. However, many of the applicants were international and due to the increased risk associated with moving abroad, coupled with the late deadline of the University of Malta, many declined or were unable to make the move to Malta (due to visa constraints as well as time and financial limitations). Responsiveness and student guidance are areas where we must improve in order to meet our goal to increase our global reputation.

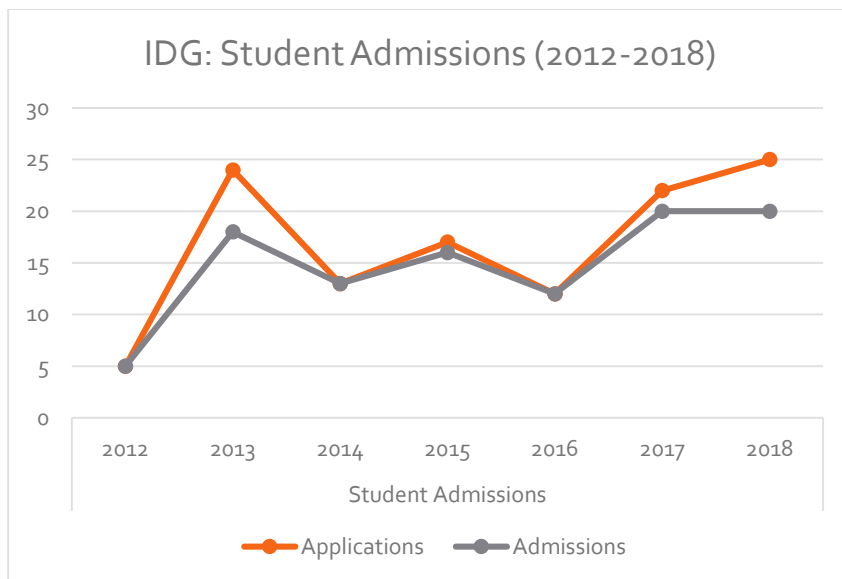


FIGURE 1 - IDG STUDENT ADMISSIONS

Comparatively to other Institutes at the University the Institute of Digital Games still manages to attract a significant amount of students.

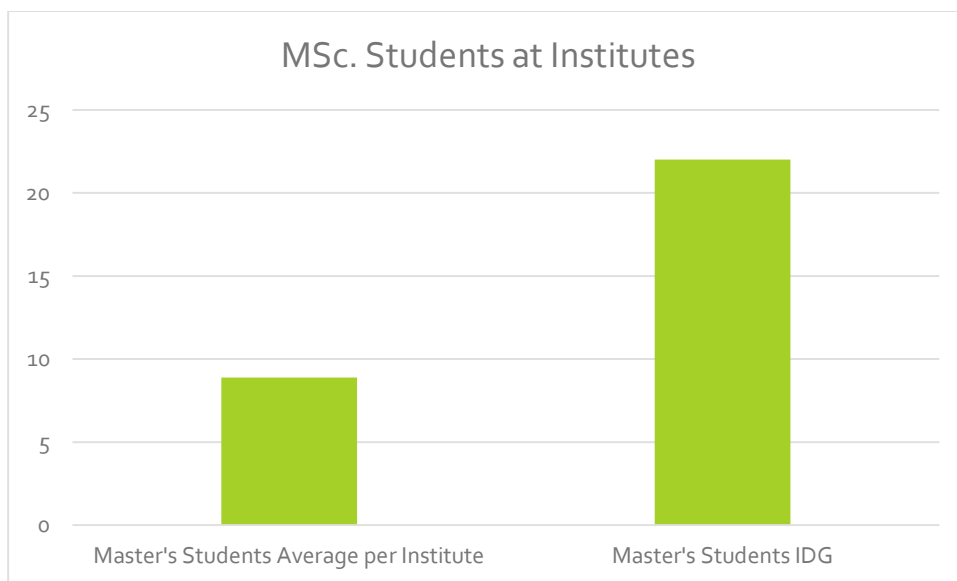


FIGURE 2 - MSc STUDENTS AT INSTITUTES <sup>1</sup>

**Looking ahead**, one of our principal goals is still to increase the amount of applicants to the MSc with a view on eventually capping at 30 rather than 20 students. The Institute attracts enough quality applicants to be able to take in 20 high-quality students, however we feel there is a need to improve the quality and timeliness of the feedback provided students regarding their admissions status. We feel the need to foster and mould our future PhD track from the cohort of students that are more interested in an academic path than an industry one. In

<sup>1</sup> Source Registrar's Office

2017, we've taken our first step, however more applicants are required for us to achieve our targets in quantity and quality.

## Institute's Growth

An important indicator of a healthy and sustainable research environment is the number of researchers that have been employed at the institute over the years. While back in 2013 the Institute started its operations with **4 resident academics** and a teaching assistant, nowadays it hosts **23 members**: 5 resident academics, 1 assistant lecturer, 2 visiting scholars, 3 postdoctoral fellows, 6 PhD students, 5 research support officers and 1 clerk. Two additional PhD students are expected by the end of 2018.

## Publications

The staff at the Institute have been prolific in their research ventures over the years. Since 2013, IDG staff has collectively managed to publish a total of **168 peer-reviewed publications**.

In particular, we have published

- 2 Books
- 4 Edited books
- 25 Book chapters
- 32 Journal articles
- 114 Conference and workshop papers

Please see the Appendix A: Publications for 2013-201 for a full list of the Institute's research output.

The Institute has a healthy publication output. We estimate that the University of Malta has published 4710 papers (between 2013 and 2015) and the IDG has 128 of these. This results in a very high ratio of papers to academics. Comprising about 0.6% of the University's academics (Counting only resident academics)<sup>2</sup> and the IDG produced about 3% of the University's total papers.

The research published by the IDG is on the cutting edge of game technology and game analysis and is reflected in the venues where the articles are published. The measurable impact of IDG's work is reflected by the **10,911 citations** (Google Scholar, Nov 2018) that its academic members and research associates have received collectively. It is also important to note that Prof. Georgios Yannakakis is the academic with the **highest h-index** (46) at the University of Malta (Google Scholar, Nov 2018). Collectively the IDG members contribute substantially (via citations and h-index counts) to the ranking of the UM in the European and the global educational setting.

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<sup>2</sup> UM had on average 933 resident academics and an average of 738 visiting academics between 2012 and 2016. The IDG has an average of 5.3 academics in the same period (not counting 2012 as the IDG was not set up yet).

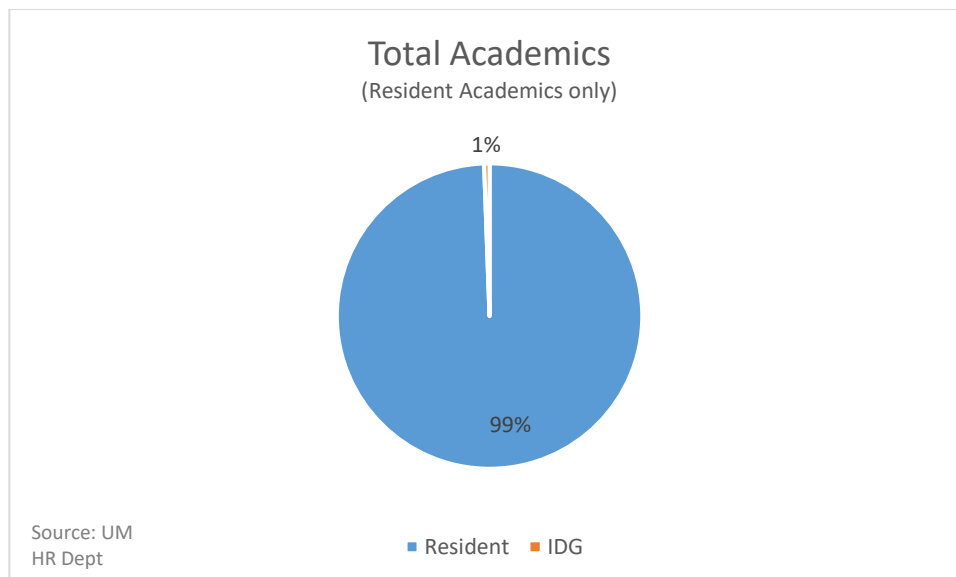


FIGURE 3 - RESIDENT ACADEMICS TOTALS

## Keynotes

Over the last 5 years IDG members have been invited to give a total of **28 keynote talks** in top-tier international conferences and about **82 invited talks** in various meetings, events and academic institutions across the globe. Please refer to Appendix B: Invited Talks for 2013-2018 for a detailed list of Keynotes and other Invited Talks.

## Awards and Honours

IDG researchers have won the following awards.

- **Best Paper Award:** G. N. Yannakakis, R. Cowie, and C. Busso, "The Ordinal Nature of Emotions," in *Proceedings of the Seventh International Conference on Affective Computing and Intelligent Interaction (ACII)*, 2017.
- **IEEE Transactions on Affective Computing -- Most Influential Paper Award:** G. N. Yannakakis and J. Togelius, "Experience-Driven Procedural Content Generation," *IEEE Transactions on Affective Computing*, vol. 2, issue 3, pp. 147-161, 2011. (Selected from **168 papers published during the 5 first years** of the journal.), 2015
- **Best Paper Award:** A. Liapis, C. Holmgard, G. N. Yannakakis, and J. Togelius, "Procedural Personas as Critics for Dungeon Generation," in *Proceedings of Applications of Evolutionary Computation*, 2015.
- **Stibo-Foundation Award** for doctoral studies (**96000 DKK**) – for the doctoral work of Christoffer P. Holmgard.
- **Best Paper Award:** A. Liapis, G. N. Yannakakis, and J. Togelius, "Designer Modeling for Sentient Sketchbook," in *Proceedings of the IEEE Conference on Computational Intelligence and Games*, 2014. IEEE.
- FP7 Marie Curie CIG *AutoGameDesign* project ranks **1<sup>st</sup> out of 1102** grant proposals across all disciplines with an evaluation score of 97.2 out of 100, 2014.

- **IEEE CIS Outstanding TCIAIG Paper Award** for the paper: N. Shaker, G. N. Yannakakis and J. Togelius, "Crowdsourcing the Aesthetics of Platform Games," *IEEE Transactions on Computational Intelligence and AI in Games*, vol. 5, issue 3, pp. 276-290, 2013.
- **European Learning Game of 2013 Award**: The SIREN Game. Games and Learning Alliance (GALA) Network of Excellence, 2013. (Rilla Khaled was the lead designer of the game; Georgios Yannakakis and Antonios Liapis contributed to the design).
- **Best Student Paper Award**: A. Liapis, G. N. Yannakakis, J. Togelius: "Towards a Generic Method of Evaluating Game Levels," in Proceedings of AAAI Artificial Intelligence and Interactive Digital Entertainment Conference (AIIDE), 2013.
- **Best Paper Award**: A. Liapis, G. N. Yannakakis, J. Togelius: "Enhancements to Constrained Novelty Search: Two-Population Novelty Search for Generating Game Content," *Proceedings of Genetic and Evolutionary Competition Conference (GECCO)*, 2013.
- **Runner-up Best Student Paper Award**: A. Liapis for "Data-driven Design: A Case for Maximalist Game Design" at *International Conference of Computational Creativity*, 2018.

## Notable award nominations

The game *Will Love Tear Us Apart* was nominated for a Webby Award - Games Category in 2014, an Experimental Award at SXSW Interactive in 2014 and an Innovation Award at the Festival Du Cinema Nouveau, Montreal, in 2013.

The work of Yannakakis, Liapis and Martinez has collectively been nominated **two more times** for a best (IEEE CIG 2013) and an outstanding (ACM ICMI 2014) paper award.

## Funded Projects

IDG researchers have managed collectively **to attract more than 3 million Euro** to fund their research activities at UM by coordinating or participating in research projects of over **15 million Euro** in total. During the first 3 years of operations we managed to attract 1.7m Euro. Putting the funding attracted in perspective can be done on a per academic basis, namely the Institute which comprises less than 1% of the University Academics has been able to attract over 7.1% of the total funds the University has attracted over the period of 2012-2016. Note that during that period the IDG was also not yet set up until after 2013.

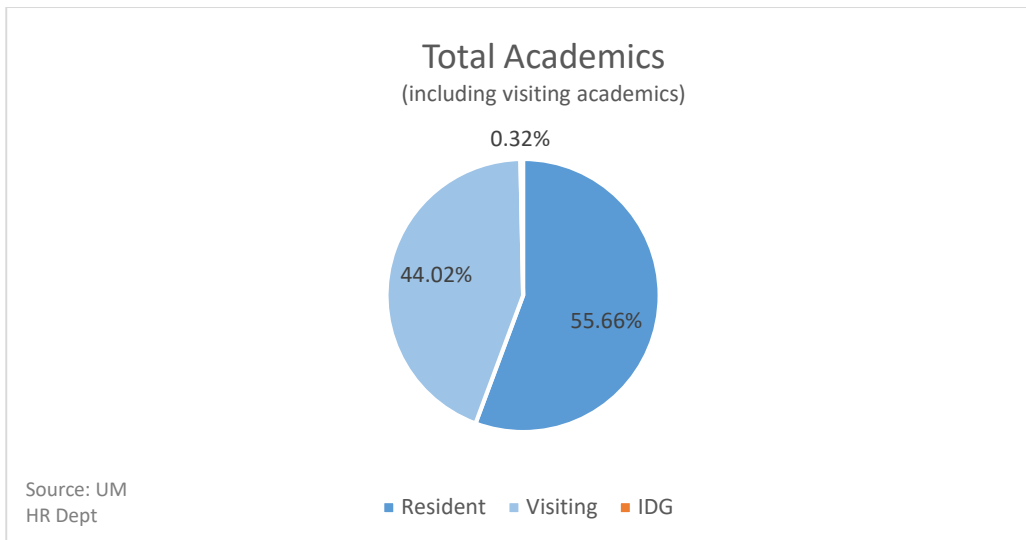


FIGURE 4 - TOTAL ACADEMICS UM

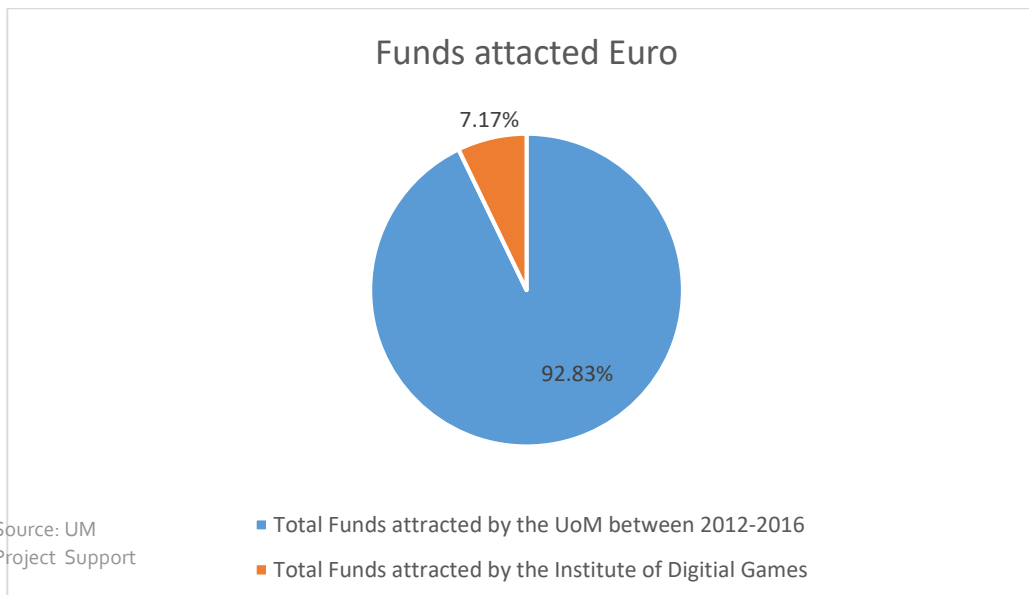


FIGURE 5 - FUNDS ATTRACTED

The IDG has established a strong background in research which has enabled them to attract a number of significant research projects, in part due to their high-calibre PhD students and the prominence of existing researchers. Furthermore, the IDG is open to collaborating with the various different and interrelated departments of the University to ensure that their projects have the right skillset and involve the right stakeholders. An example of this, is the recent collaboration with the ICT department in the high profile eCrisis project, where game-based learning will be used to foster the development of social, civic and intercultural competences such as conflict resolution, creative thinking, and reflective debate in primary and secondary education students.

The strength of the IDG in attracting funding for the University is particularly evident when taken on a per academic basis. With an average of 5.3 academics over the 2012-2016 period

the IDG has managed to attract 1,976 million in funding or just over 370 thousand per academic.

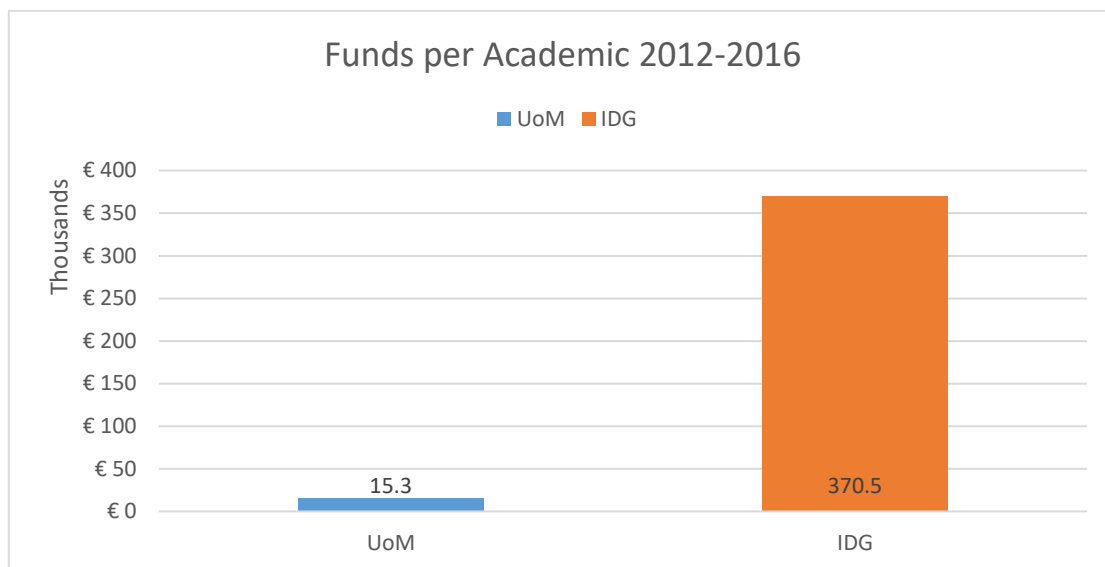


FIGURE 6 - FUNDS PER ACADEMIC

## Completed and Ongoing

The following is a list of IDG funded projects that are completed, currently ongoing or pending a review:

### Completed

- Rilla Khaled has been awarded and completed the **FP7 Marie Curie CIG REFLECT project (€100k for UM)** from 2013 – 2017.
- Georgios Yannakakis managed and completed **the FP7 ILearnRW project (€430k Euro for UM)** which run from 2012 – 2015. Other involved researchers: Rilla Khaled and Hector Martinez.
- Georgios Yannakakis managed and completed the **FP7 C2Learn project (€520k Euro for UM)** which run from 2012 – 2015. Other involved researchers: Mirjam Eladhari, Antonis Liapis and Phil Lopes (PhD student).
- G. Yannakakis and A. Liapis coordinated and completed the University of Malta Research Innovation and Development Trust project **Deep Design (€7k for IDG)** which run from 10/2016 to 10/2017
- IDG was part of **EUCROMA project** (2012 – 2013) which is part of the MEDIA Programme, Story Worlds education, involving cooperation between several European Universities.

### Ongoing

- G. Yannakakis manages **Com N Play-Science** a H2020 SwafS, Research and Innovation Action. Funded with an evaluation score of 14.5/15. Total budget: 3,344,590 Euro. **Budget for UM: € 242,500**

- G. Yannakakis and A. Liapis manage the **H2020 Envisage Project**. Project Partners: Centre for Research & Technology Hellas (GR), Ellinogermaniki Agogi (GR), goedle.io Gbmh (DE), Aalborg University (DK). Total budget: **€215k for UM**
- G. Yannakakis and A. Liapis are coordinating the **H2020 CrossCult project**. Project Partners: Luxembourg Institute of Science and Technology, Centre Visuel de la Connaissance sur l'Europe, Universidad de Vigo, Universidad de Peleponnese, University College of London, University of Malta, Centre National de la Recherche Scientifique, The National Gallery London, Technological Educational Institute of Athens, GVAM, Università degli studi di Padova. Total budget: **€291k for UM**
- Georgios Yannakakis manages the **eCrisis Project: Europe in Crisis**. Project Partners: University of Malta, National Technical University of Athens, University of Vienna, Ellinogermaniki Agogi, and St. Ignatius College. Total budget: **€136k**
- Stefano Gualeni, Marcello Gómez Maureira, Philip Bonanno manage **FORETELL: Flood and Fire Safety Awareness in Virtual Worlds**. Project Partners: Hellenic Open University in Greece, Felcos Umbria in Italy, University of Malta, and the Fire Safety and Civil Protection Directorate in Bulgaria. Total budget: **€243k**
- S. Gualeni is the main investigator for University of Malta Research Fund project: **'GAME Design as a TrAnsformative Practice'** ('GADTAP')
- Gordon Calleja manages the **GoGoGozo Erasmus+ project**. Project partners: University of Malta, the University of Manchester, Warwick University, Utrecht University and Palacký University Olomouc. Total budget: **€210k**.
- Georgios Yannakakis has been awarded the **FP7 Marie Curie CIG AutoGameDesign project (€100k for UM)** which runs from 2014 to 2018. The application was ranked 1<sup>st</sup> out of 1102 proposals in the EU.
- Georgios Yannakakis is currently the coordinator of the **Reach High AutoSemanticGame** project (**€200k for UM**) which was awarded to the postdoctoral fellow Owen Sacco. The project will run from 2016 to 2019.
- S. Gualeni is the coordinating the **CURIO** Erasmus project which runs until end of 2018. Total Budget: **€120K (38K for UM)**

### Funded Projects contributing to IDG and UM indirectly:

- In 2016 and 2017 the Institute has secured funding from the Art Fund to bring prominent industry professionals to speak at the Game Jam and to judge the award of the Malta Digital Game Fund. Furthermore, assigned IDG staff was mentoring the teams involved.
- Gordon Calleja secured an Art Fund grant to develop the *Posthuman* game.
- Rilla Khaled and Pippin Barr: *Initiative for Indigenous Futures*. SSHRC Partnership Grant funded at CAD\$2.5M for 7 years. Role: Co-investigator. (Principle investigator: Dr. Jason Lewis.)
- Rilla Khaled. Internal Concordia fund: *Reflective Game Design* (2015 — 2017)

### Under review

- All members of staff have been and are currently involved in numerous project proposal applications. The Institute receives a great deal of invitations to join project consortia showcasing its establishment and recognition in the European game research scene.

- We are proud to have hosted and trained some of the most influential researchers in the field of game technology that now hold prestigious positions in other universities or in the industrial sector. Indicatively, Dr Christoffer Holmgaard, a postdoctoral fellow with the H2020 Envisage project was recently appointed Assistant Professor at the College of Arts, Media and Design, at the Northeastern University. Dr Phil Lopes, a PhD student of IDG secured a position as a postdoctoral researcher at the University of Geneva a few months before his PhD defence. Dr Hector Martinez, a postdoctoral fellow with the FP7 iLearnRW project is a lead data scientist at Massive Entertainment (Ubisoft Studio in Malmo, Sweden). Dr Amy Hoover, a postdoctoral fellow with the FP7 C2Learn project is now Assistant professor at the New Jersey Institute of Technology. Finally Dr Antonios Liapis, a postdoctoral fellow of IDG with the FP7 C2Learn project is now a Lecturer at IDG.

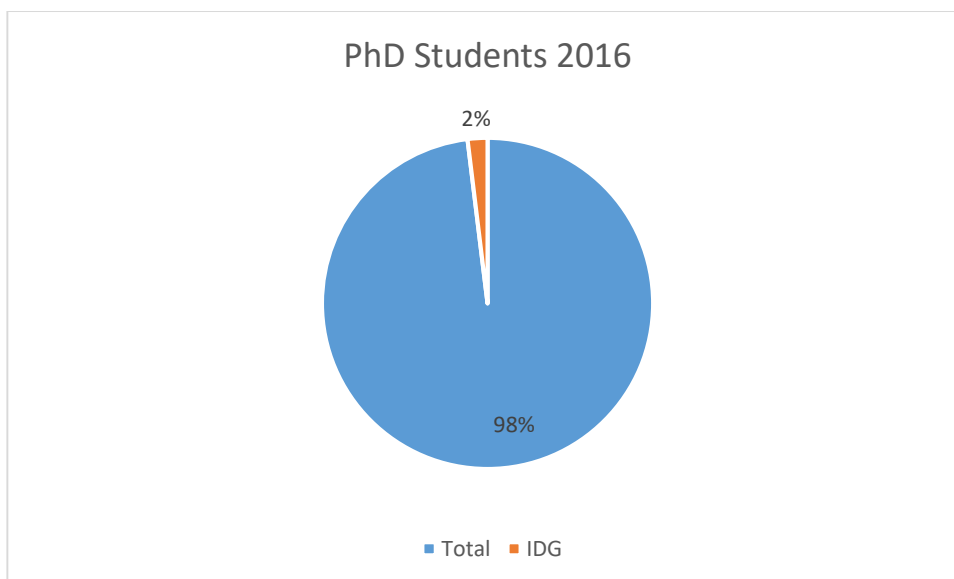
## Game Research Training

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## PhD Students

Over the years we have received a considerable amount of requests for students to do their PhDs with us from Malta and elsewhere. We have established our PhD board and **we currently have 5 PhD students (Daniele Gravina, Daniel Karavolos, Renata Ntelia, David Melhart, Melinda Sue Borg)**. We also have **one PhD student (Jessica Rose Marcotte) affiliated with Concordia** University and supervised by Rilla Khaled and another PhD student (Jean Michel) affiliated with Dakar University and co-supervised by Georgios Yannakakis. Due to the extensive research conducted and the large amount of publications in high impact journals we are able to attract high-quality PhD students and this is an area that could lead to greater international recognition for the Institute.

Demonstrating the strength of our PhD programme is the amount of PhD students the Institute has when compared globally to the Academics at the University of Malta. When taking into account both Resident and Visiting Academics the IDG makes up less than 1% of the total academics, however has 2% of the total PhD students.



Finding sources of income (on top of the local scholarships) for such students to sustain themselves while in Malta is necessary. Right now we are restricted to local students and foreign students that have the resources to be self-financed for the three years or that have a scholarship from another country. The extension of our PhD programme depends strongly on the funds available (which we try hard to obtain from EU and national resources). **PhD training is a core focus of the Institute.**

The Institute has recently signed an agreement with Maltco for research funding which could help to support PhD students in specific areas of research. Agreements with industry such as these are one of the ways the Institute is exploring to ensure that students are able to focus on their research.

We have also undertaken another initiative to attract good PhD students to Malta and put our name on the map with regard to doctoral education. The Institute of Digital Games is part of the EPSRC Centre for Doctoral Training in Intelligent Games and Game Intelligence (IGGI) <http://www.york.ac.uk/news-and-events/news/2013/iggi/> This is a program in PhD training in game technology/design coordinated by York University, Goldsmiths and Essex (involving many companies and Universities in Europe). Being partners in this program means that in the next 5 years IDG will host a number of PhD students for different periods, co-supervising their activities.

## Research Visitors

Over the last 5 years the institute has managed to attract the interest of several academics, researchers and PhD students that spent some considerable time in Malta collaborating with members of the Institute. Most notably we had the following visits

- **3 Sabbaticals:**
  - Prof. Thomas P. Runarsson, University of Iceland, Iceland (2014);
  - Dr Carlos Martinho, INESC-ID, Portugal (2014),
  - Prof. Jean Claude Martin, Paris South University (2013).
- **3 Academic Erasmus Visit:**

- Prof. Mark Grimshaw from Aalborg University.
- Prof. Alan Meades from Canterbury Christ Church University
- Dr. Jaroslav Svelch from University of Bergen
- **8 Extended Research Visits:**
  - Claire Dormann from Ottawa University (2014)
  - Nicholas Ward from University of Limerick (2014)
  - Michelle Westerlaken Malmö University (2017)
  - Ricardo Chalmeta from Universidad Jaume I (2018)
  - Mike Cook (2018; University of Falmouth's Games Academy)
  - Nele van de Mosselaer (2018; University of Antwerp)
  - Ivan Rokošný (2018; Trnava University)
  - Jan Proner (2018; Trnava University)
- **4 Visiting PhD students:**
  - Mario Madureira Fontes (2015; Pontifical Catholic University, Brazil),
  - Christoffer Pedersen Holmgaard (2014; IT University of Copenhagen),
  - Antonis Liapis (2013-2014; IT University of Copenhagen),
  - Eva A. Alblas (2015; Behavioral Science Institute of the Radboud University of Nijmegen)
- **1 Fullbright Scholar** – in 2019 we're expecting to host a Fulbright Scholar, Theresa Devine (Arizona State University)
- **Industry Visitors:** Patryk Grzeszcuk, Marketing Director, 11 Bit Studios (Poland), Maciej Binkowsky, Lead Game Designer, Techland (Poland), Emily Short, IF Writer (UK), Alexis Kennedy, CEO and Designer, Failbetter Games (UK), Kasia Resiuk, Art Director, CD Projekt Red (Poland), Meg Jayanth, award-winning games writer (UK), Rob Morgan, Games Writer and Creative Director of Playlines AR (UK), Aksel Kjøie, CEO Step In Books (Denmark), Mink Ette, Escape Room Designer (UK)

The visibility of the Institute's research results in many academics and occasionally industry experts looking to visit the Institute to have face-to-face time with the IDG faculty. Of course, the Institute uses these visits to further the exposure of their students to a vast array of international research. Furthermore, the Institute is working together with James Moffet and Sarah Zammit of the University's communication department to develop a series of one-minute videos where the guests briefly highlight their research and the advantages of their visit to the Institute of Digital Games. This will highlight both the profile of academics and research that interact with the University as well as show prospective students and researchers the reasoning behind their decision to visit the IDG in relation to their particular research. This video series is planned to launch in January 2019 and will be used for recruitment and promotion of the Institute and the University more generally.

## The Institute and the Rest of the University

Although we have been very busy setting up the Institute during the first two years, we have made our best efforts to contribute to other parts of the university. We feel that by now we have built good bridges with several faculties and institutes on both research and teaching fronts. Below we give an account of our members' interactions and intra-University networking, to give a sense of the spread and reach we have managed to cover so far.

## Courses Taught Outside IDG

- Costantino Oliva has been teaching the "Introduction to Digital Game Studies" study unit, 4 ECTS, **MaKS**. Taught in full from 2013 to 2015.
- Costantino Oliva has been teaching the "Game Design and Conceptualisation" study unit, 4 ECTS, **MaKS**. Taught in full in 2015.
- Costantino Oliva has been contributing to the "Communication Overview" and the "Professional Practice" study units, **MaKS**. 7 hours guest lecture each year from 2013 to 2015
- Costantino Oliva has taught a guest lecture on the MA of Fine Arts in Digital Arts and delivers several lectures on the Introduction to Game Design course at the **Faculty of ICT**. Costantino also supervises students from **MaKS**.
- Georgios Yannakakis and Antonios Liapis have been teaching parts of two undergraduate courses on the Artificial Intelligence Department, **Faculty of ICT** throughout the five years of the Institute.
- Antonios Liapis gave a level design seminar in the **Department of Built Environment**, UM (2015).
- Daniel Vella gives 3 undergraduate and graduate courses (*Practical Criticism*, *Synoptic Study-Unit 2* and *Electronic Literature*) in the **Department of English** since 2014.
- The analysis strand of our MSc in Digital Games is also offered as an elective to the **MA in Media and English Programme**.
- The courses *Game Artificial Intelligence* and *Affective Computing* of our MSc in Digital Games are also offered as an elective to the **MSc in Signal Processing and Machine Learning, Faculty of ICT**.
- Several of IDG members have taught and currently teach on **MaKS' "Communication Overview"** course.

## Supervised Theses outside IDG

- Stefano Gualeni has supervised a Master's thesis at the **Faculty of Built Environment**
- Georgios N. Yannakakis has supervised 3 Bachelor Theses and an MSc thesis at the **Faculty of ICT**.
- Gordon Calleja has supervised 3 Bachelor's Theses for the **Department of English**.
- Costantino Oliva has supervised a Bachelor's Theses for **MaKS**
- Hector Martinez supervised a Bachelor's thesis at the **Faculty of ICT**.
- Mirjam Edlahari has supervised an MSc thesis at **MaKS**.

## Other Connections to the University

- Stefano Gualeni is working with the **Department of Physics** and the **Edward de Bono Institute** on the CURIO Project.
- Stefano Gualeni is also working with the **Edward de Bono Institute** on a collaboration for the abstract for the Spheres Journal (volume 6).
- Stefano Gualeni provided the Keynote for the Edward de Bono Institute Erasmus+ CREMO Project Workshop 'Philosophy with (and within) the Digital'.
- Daniel Vella Daniel worked on 2 papers with Krista Rutter Giapone of the Dept. of English. One of the papers was accepted for DiGRA 2018.
- Daniel Vella, Stefano Gualeni, and MSc Student Johnathan Harrington collaborated with **the Department of Theatre Studies** on a paper concerning de-rolling in virtual worlds.

- Costantino Oliva collaborating with Giselle Spiteri Miggiani of the **Department of Translation, Terminology & Interpreting Studies** to pilot a Video Game Localization course under their Master's programme. Also available as elective to MSc. In Digital Games students.
- 3 MSc students assisted the **Faculty of Medicine and Surgery** in the development of an educational game on the BioBank.
- Rilla Khaled has been in contact with the **Faculty of Education**, where she approached the Dean and Vanessa Camilleri and offered to provide structured games-related modules to them.
- Rilla Khaled, Hector Martinez and Georgios Yannakakis have been discussing collaborations with Albert Gatt and Ray Fabri from the **Institute of Linguistics** under the iLearnRW project.
- Georgios Yannakakis, Antonios Liapis and Amy Hoover have been contacted the **Department of Computer Science, Faculty of ICT** (Prof. Pace and his team) to discuss about potential teaching and research collaborations.
- Georgios Yannakakis has given two talks at the **Faculty of Engineering**: one organised by the IEEE Student Branch and one organized by the Department of Mechanical Engineering.
- Antonios Liapis has been discussing with Xu JingYao of the **Department of Built Environment** and Sandra Mifsud of the **Performance Studies in Dance** on collaborating in projects
- Georgios Yannakakis and Antonios Liapis collaborate with Vanessa Camilleri from the **Faculty of ICT** in the context of the **eCrisis Erasmus+ project**.
- Stefano Gualeni is collaborating with the **Cognitive Sciences Department** in the context of a Marie S. Curie H2020 application.
- Stefano Gualeni gave a talk at **MaKS – Communication Department** in Nov 2015
- Gordon Calleja has given talks at the **Department of English** (Narrative and Games) in 2013 and at the **School of Performing Arts** (Presence and Immersion, Alice and Games) in 2014 and 2015.
- Rilla Khaled Co-taught a motion-controlled games workshop: she invited Sandra Mifsud from the **School of Dance** and her dance students to attend a design workshop she organized at the IDG co-taught by Rilla and Nicholas Ward from the University of Limerick on motion-controlled games.
- Rilla Khaled gave a guest lecture for Gorg Mallia's class *Communications: An Overview*.

## The Institute and Malta

The Institute doesn't exist in a vacuum and has consistently been involved in connecting with other relevant organisations even outside of the University and Academia. We feel we have been successful in putting our name out there with the most important stakeholders and crowds, ranging from industry people to other academic institutions, the crowd of creatives, and the general public.

## Events

We have been active with organizing several game events, all of which drew a very positive response. We have run the **Malta Global Game Jam five times** (2014-2018) and also organised the **Mediterranean Game Jam** for the first time in Malta in 2015. In both events participants meet and form teams to make a game in 48 hours. All events were very successful bringing

further (local and international) attention to our educational program and our research agendas. Game Jam events also resulted in the presence and praise of designers and directors of AAA video game properties, such as Techland and Projekt CD Red.



FIGURE 7 - PROMOTIONAL POSTER FOR GAME JAM 2018

The Institute has participated in **all five Science in The City events** since its establishment. In 2013, the Institute had a small participatory role. The iLearnRW project disseminated results at both the **Notte Bianca** and the **Science in the City** events during 2014. That year several games were also exhibited at the central library in Valletta giving IDG significant outreach in Malta. The Institute participated at the EU corner of the **Science in the City 2015, 2016, and 2017**, in which latest results from the *AutoGameDesign* project were presented to the general public. In 2018 the Institute showcased the MAZING game used in PhD student David Melhart's research on affective computing.



FIGURE 8 - RESEARCHERS EXPLAINING WORK DONE UNDER AUTOGAMEDESIGN PROJECT AT SCIENCE IN THE CITY

Furthermore, we had a presence at the **Malta Comic Con**, the more game-specific **Pixiecon** organised by Pixie Software and helped organise an indie game night at Blitz art gallery, which attracted a lot of attention from the public. Gordon Calleja was involved in running an exhibition based on the *Love will tear us apart* game at St James Cavalier during **Notte Bianca** and **Science in the City**, where the Institute and University were promoted. The Institute was also present as Science at the Citadel in Gozo in 2018. This alone put our name out there to thousands of people in the general populace that had never heard of our existence.

## Digital Games Scene

The Institute is engaged with the local digital game scene, participating as a partner in the Creative Industries Platform currently run by the Malta Video Game Studio Association (MVGSA) and International Game Developers Association Malta Chapter (IGDA Malta). This Platform supports the export of video games developed in Malta and is an aspect of putting Malta on the map as a place of excellence in video game design and development. Institute of Digital Games was also happy to welcome the Trojan Horse was a Unicorn event in Malta as it will help develop the necessary expertise to draw more video game studios to Malta as they can be assured of the quality of the local resources.

## Public lectures

In spring 2014 we initiated a regular **series of game lectures** from international experts in academia and industry which have helped with our reputation as an international hub in games.

More importantly, the game lecture series provide an added value to local institutions and industry as well as researchers and students. Due to the multi-disciplinary nature of the game

lectures, they will be split into academic and industry talks, so that the interested stakeholders can participate more effectively.

### Academic Seminars

The Academic Seminars make sure we get the most out of the many researchers and academics that visit the Institute from around the world. Academics from every field that touches upon games and come to visit the Institute to get inspired and exchange ideas also are requested to provide some insight into their current research. The Seminars are open to the public, but targeted mainly at University students and academics interested in enhancing their knowledge in that particular area of research. Since the Institute is multidisciplinary this can range from philosophical to technical, but always with the focus on games.



FIGURE 9 - DR JAROSLAV SVELCH (UNIVERSITY OF BERGEN) PRESENTS HIS RESEARCH ON MONSTERS IN GAMES

Dr. Daniel Vella also organises a reading group which can complement the academic seminars. The reading group is a monthly get-together for discussing any and all critical or academic texts with a special relevance to game studies. For each meeting, a member of the reading group will suggest a text for everyone to read before the session, and then moderate and lead the discussion for that session. The reading group is a useful venue for discussing published or in-progress work, for discussing a text you're reading, or for keeping up with new publications in the field.



FIGURE 10 - READING GROUP

## Industry Talks

Industry talks are also open to the public, but are targeted to professionals in the industry in addition to students and staff in the field of game design. These talks are in the evening to make it more convenient for professionals to attend and cover the more practical aspects of game design that would appear to the professional community and public in general. This would include presentations by game studios and post-mortems on the development of games.

## Popular Science Talks/Press/Articles

- Davis A., 'Rise of the Ancients' by David Chircop (M.Sc. student), **Think** magazine, Issue 9, 2014
- Davis A., 'Why So Serious?', **Think** magazine, Issue 9, 2014
- Calleja, G., 'Through the Looking Glass', Dr. Sedeer El-Showk, **Think** magazine, Issue 6, 2013
- Galleja G., 'FundMalta', 100 word ideas to change Malta by Prof. Gordon Calleja, **Think** magazine, Issue 9, June 2014
- Gualeni's S. His work on game design as a self-transformative practice will appear in the upcoming (Winter 2015) issue of **Think** magazine
- Gualeni, S. 'ONTOLOGIE AUMENTATE: Ovvero, come fare filosofia con un martello digitale', an article in Italian that appeared on the 4th number of *!Nsight*, a periodical publication of the Accademia di Belle Arti di Roma (Oct-2014).
- Gualeni, S. Articles and blogposts are often published on **Gamasutra.com**, one of the leading websites concerning game design and game development in general.
- Khaled R. Dyslexia, Thinking outside the box, **Malta Today**, 2014
- Khaled, R. *Dyslexia and Games: Learn Better?* Talk at the **Café Scientifique Event** in Valletta about her game design work at the *Words Matter* game (funded under the iLearnRW project). 2015.
- Oliva C. Regular digital games column on **Think** magazine since 2014.

- Reljic, Teodor. "Game On! The 48-hour University challenge that takes digital games seriously." **Malta Today**. 26 January 2018.
- Schellekens, J. "Transcendence Through Play." **Think** magazine, Issue 23. 2018.
- Schellekens, J. "You Don't Know What Soup Is" **Think** magazine, Issue 20. 2017.
- Schellekens, J. "Game Against the Machine" **Think** magazine, Issue 22. 2017.
- Schellekens, J. "Maltese video Game Draws International Attention" **Times of Malta**, 29 October 2017.
- Yannakakis G. "Is there really an app for that?" **Think** magazine, September 2015.
- Yannakakis, G. "I Compute, I Create, I Am. Magazine Feature Article" **Think** magazine, March 2015.
- Yannakakis G. "Education through digital games" **Times of Malta**, 24 August 2014.
- Yannakakis G and Khaled R. "What's in a Game" **Malta Today**, 08 July 2014.
- Yannakakis, G. "Game recognises emotional reactions of players" **Times of Malta**, 28 June 2013.
- Yannakakis, G. "DeepMind dojo will train AI to beat human StarCraft players" **New Scientist**, Daily News, 9 August 2017.
- Yannakakis, G. "AI will be able to beat us at everything by 2060, say experts" **New Scientist**, Daily News, 31 May 2017.
- Yannakakis, G. "AI just won a poker tournament against professional players", **New Scientist**, Daily News, 31 January 2017.
- Yannakakis, G. "TV reimagining the future of video games?" **Malta Business Weekly**, **Malta Independent**, November 3, 2016.
- Yannakakis, G. "Has a Black Mirror episode predicted the future of video games?" **The Guardian**, October 26, 2016.
- Yannakakis, G. "Europe's quiet revolution by way of digital games?" **Times of Malta**, 21 October 2016.
- Yannakakis, G. "A virtual experience with real exercise" **The Boston Globe**, January 3, 2016

## Consultancy – Advisory Roles

Gordon Calleja has been a board member of the **National Audiovisual Strategy** and advisor at the **Contemporary Art Museum**, the **Malta Arts Council** and the **Malta Game fund**. He has also been the curator and co-organiser of **the Indie Games Exhibition** at the Science in the City and Notte Bianca events.

Stefano Gualeni was hired by the **Malta Arts Council** over summer 2015 to analyse and reform its Digital Game Fund grant, how it is awarded, and how its output in terms of quality and visibility can be maximized and validated.

Antonios Liapis will provide mentoring and consultancy to the finalists of the Malta Digital Games Fund. The consultancy will be provided on an ad hoc basis as requested by the finalists and will allow the studios to benefit from impartial feedback on their process and ideas as well as insight and troubleshooting.

The Institute of Digital Games assisted in identifying high-profile, quality judges to judge the award of the **Malta Arts Council Digital Game Fund**. Winners were announced in January 2016 during an event organised by the IDG.

## Lectures outside UM

Over the course of the three years we have given lectures at several educational institutions in Malta. We have given several lectures at Giovanni Curmi Higher Secondary, MCAST ICT, Junior College, MCast Art and Design Institute, MCast Engineering, and MCast Technology. These talks are given on a **yearly basis** since 2013. We have also participated through Pippin Barr in judging St Martins' game development challenge. We will be soon making appearances at several private schools such as the Chiswick House School.

## The Institute and the World

The Institute staff have a great reputation abroad individually. Most of us are invited to several keynotes per year and between us we review for every major conference and journal related to game research across disciplines. This has been very helpful in our transition to Malta, bringing to the University serious visibility in both game academia and, to a lesser degree, industry. Our challenge over the years was to translate our individual profile and reputation to the Institute, University and country as a whole. The following moves have been part of this strategy.

## Notable Game releases

In 2013, we got major exposure in popular media across the globe through the incredible success of Pippin Barr's art games, particularly his being signed up by Marina Abramovic to make a series of games for her soon to be open art institute. Abramovic is one of the most famous and respected artists of our time. Pippin Barr's fame has also been very positive for us, with his inclusion of the Institute and University's name in the interviews and articles he's been part of over the year. Pippin Barr was nominated by Harpers magazine as **one of the top ten upcoming artists in the world**.

*Will Love Tear Us Apart* (Calleja, Oliva) was **covered by over 300 sites all over the world** including major art, music and cultural magazines like Rolling Stone, NME, Fact, Kotaku, Polygon and many others. Gordon Calleja also gave interviews on podcasts and radio stations worldwide. This obviously created a lot of fame that translated to Institute's and UM's fame.

*Posthuman* (Calleja) was another major success internationally. It is one of the hottest board games out there at the moment in the thematic game genre. Aside from having **pre-sold 8500 copies before it has actually hit the shops**, it is being reviewed by all major board game outlets giving a lot of prominence to Gordon Calleja as a boardgame designer and the Institute and UM by association.

In 2017 *Something Something Soup Something* (PC, MAC, Unix). was developed at the IDG with the support of MaltCo Lotteries in collaboration with Isabelle Kniedsted, Marcello Gómez Maureira, Johnathan Harrington, Riccardo Fassone, and Jasper Schellekens. The game received a large amount of press coverage, including a feature on one of the largest game-related websites: *Kotaku*.

The game *What We Did* co-designed by Rilla Khaled and Pippin Barr got significant exposure through several write ups of the game in "top-tier" online game sites, including: KillScreen and Rock Paper Shotgun.

## Alumni – What happens after the MSc.

The Institute was founded in 2013 and as a two-year programme has had its first graduating class in 2015. Therefore, we are very proud of the work completed by our alumni after graduating from the M.Sc. in Digital Games or after completion of the PhD with the Institute.

As a multi-disciplinary programme our alumni roles vary greatly, but we pride ourselves in the way they are able to adapt readily in a competitive work environment and offer more than their role and pursue their own initiatives as well as contribute to large scale triple A projects.

Our records indicate that 93% of our graduates are currently employed, we have not managed to track the remaining 7% whose employment we cannot confirm. Approximately 50% of the graduates are employed in the game industry. Although we would like this number to be higher we must also consider that should the graduates decide to stay in Malta their opportunities may be limited and that furthermore as a multi-disciplinary Master's they may return to the expertise acquired during the undergraduate years and not necessarily need to continue in the games industry.

Notable Companies that have hired our students: CD Projekt Red, Creative Assembly, Sony Interactive, Dorado Games, University of Geneva, University of Malta

Some of the most notable achievements by our alumni include:

- “... and then we held hands” - 2014 Golden Geek Best Print & Play Board Game Winner – David Chircop (Class of 2015)
- Principal Designer for Rome 2, Attila and Total War: Warhammer – Stylianos Avramidis (Class of 2015)
- “Ariana’s Magical Journal” – top five of projects selected by Malta Information Technology Agency for full development funding – Isabelle Kniestedt (Class of 2017)
- “Lil’ Arena” – Greenlit on Steam - Konstantinos Vasileiadis and Tall Guy Productions (Class of 2019)

## International Traineeships

The International Office of the University and the Institute are also working closely to provide Erasmus+ traineeships to our students. A key part of this is for the institute to network with industry partners and encourage them to take on interns. Although, this would mean that the internships would happen abroad, the fact that the interns are paid via Erasmus will open up doors of opportunities, allowing students to make the trip abroad with some expenses covered and also allowing companies to take on an intern without the additional paperwork and expenses. These traineeships are available to our students up to one year after graduation.

## External Events and Conferences

Part of our international outreach strategy was to hold international workshops and conferences on a regular basis. In 2013 we (Gordon Calleja and Daniel Vella) started a new conference series that was very well received called *Games and Literary Theory*, together with the Department of English and ITU Copenhagen. The conference went very well and attracted over 50 participants.

During the first 5 years, members of IDG have been involved in the organizing committees of the top-tier conferences in games research and have been editors of top-tier scientific

journals. Prof. Georgios Yannakakis became Associate Editor, IEEE Transactions on Games in 2018 and continues as Executive Board Member of the Association for the Advancement of Affective Computing (AAAC). He is also Program Chair of the 2019 IEEE Conference on Games, London.

The IDG has been making key partnerships in Japan. Japan, arguably pioneered console gaming and have a dynamic games industry that is mostly unknown to most Western game scholars. Therefore, the IDG Director Prof. Yannakakis is co-organizer: **NII Shonan Meeting** (Dagstuhl Seminars in Japan), *Artificial General Intelligence in Games: Where Play Meets Design and User Experience*, 2019.

Industry is a clear partner in the research conducted by the IDG and this has been recognized by Prof. Yannakakis's involvement as co-organizer: **AI and Games Summer School**, in partnership with DeepMind, Ubisoft, Unity, Spriti.ai, and Yokozuna Data, Chania, Greece 2018.

Prof. Georgios Yannakakis and Dr. Antonios Liapis are, respectively, the Program Chair and the Local Chair of the *IEEE Conference on Computational Intelligence and Games* (2016). Liapis has also been the organizer of the second AIIDE workshop on Experimental AI in Games (2015) and the fifth FDG workshop on Procedural Content Generation in games (2015). Rilla Khaled co-organised a CHI PLAY 2014 Workshop: Participatory Design for Serious Game Design: Truth and Lies. In May 2013 we organised (Georgios Yannakakis was the general chair; Rilla Khaled was the game design track chair) one of the largest conferences in game research, the *Foundations of Digital Games Conference*, part run and sponsored by Microsoft. The University of Malta had the largest number of accepted papers from any university worldwide. Our great showing there included delivering several papers, running workshops and seminars, demonstrating a game (Love will Tear us Apart) and playing a major role in the event's organization and in its reviewing. As a result Microsoft Research have approached us to potentially become one of the institutions they use to service their various game development studios. Another result of the organizational success of FDG (by far the higher number of submissions and participation in the history of the conference) is the invitation from Microsoft and the FDG board to hold the 2015 edition of the conference in Malta.

IDG members Daniel Vella and Stefano Gualeni have successfully submitted an application to host the 10<sup>th</sup> edition of the International *Philosophy of Computer Games Conference*, that was held on Malta in 2016. This is a long-running and world-leading international conference series that is being brought to Malta for the first time, attracting leading scholarship in this exciting field.

## Educational activities outside Malta

Pippin Barr has been lecturing at the Department of Design and Computation Arts, of Concordia University both at 2013 and 2015. He has so far organized and completed the courses *Game Studio I*, *Networks & Navigation* and *Curious Games Studio*.

Stefano Gualeni has been visiting professor at the Laguna College of Art and Design (LCAD) summer course Game Design Theory Methods since 2016. He was joined this year with a guest lecture from another IDG professor, Gordon Calleja. LCAD is also ranked among the top 25 programmes in game design.

Furthermore Prof. Gualeni is also a visiting Scholar at the University of Gothenburg in Sweden.

Note that most IDG members have given several guest lectures/talks **outside Malta** promoting the Institute of Digital Games and UM (see Appendix B for further details).

Costantino Oliva has had a departmental meeting with Aalborg University, Department of Communication and Psychology in order to explore the possibilities of an Erasmus+ agreement in between the two institutions. An Erasmus + agreement under consideration is with Ritsumeikan University in Japan, as the gap between digital games in the East and the West particularly as concerns research is quite substantial. In order to bridge this gap, the IDG is already participating in a number of conferences in Japan this summer. The UM already had a PhD student from Ritsumeikan visit and follow a number of study units during their time here.

The Institute of Digital Games has set up a number of Erasmus agreements outlined below:

Student and Staff exchanges with:

- University of Koln, Germany
- University of Trnava, Slovakia
- University of Applied Sciences, Vienna, Austria
- Bahcesehir University Istanbul, Turkey

Staff exchanges with

- Universitat Jaume I, Spain
- Lille University, France

In order to increase the amount of researches available and strengthen or international reputation and connections the Institute is exploring a joint PhD programme with NorthEastern University in the USA. This is a more complex procedure than a simple Erasmus agreement and is at the early stages of exploration as both institutions review their respective requirements.

## Summary and the Future

Overall we aim to further strengthen the reputation of the Institute internationally through our professional service, publications, collaborative projects and conference appearances and continued activities in the organization of prominent conferences, such as the conference on the *Philosophy of Computer Games* in November 2016 which was brought to Malta for the first time. Needless to say, because we operate in several fields not just one, the above requires a lot of effort from everyone in the Institute. Keeping up the level of publications and conference participation that we have this year, while coping with lecturing and other duties locally, has tried the limits of the staff during the first year of operations. Starting up a new world-class Institute is challenging and although we are a year further we are still transitioning from start-up to world-class institute and in this we majorly appreciate the University's support. Becoming a world-class institute is not something that can happen overnight and it is not something that can happen without the University's continued support.

The constant requests for visits and collaboration in the academic sphere indicate that the Institute is on the right track. However, we believe an extra push must be made on the awareness to the general public. In order to kick-start this process Jasper Schellekens has received marketing and promotion coaching and is working on a number of projects with the

Communications Office that aim to raise the profile of the Institute and the University as a whole.

Therefore, we will continue to plan in the long term anticipating the development of the education, research and games and ensuring that we remain on the cutting edge and that the University of Malta and the IDG are synonymous with excellence in education and research.

## Future Directions

The first years of operation have been quite hectic, as expected, and complicated by several logistical delays, the most major of which were out of our or anyone at the University's control. In the following years we managed to focus more on consolidating work processes, the quality and structure of the education we offer and working hard on ways in which we can attract more and better students, especially foreigners, to the University. A main goal we had set was to attract a considerable number of top-quality PhD students from Malta and abroad, an area where we have indeed garnered serious success.

Long-term priority areas remain:

### Quality and quantity of MSc students

The top item on our priorities list is increasing the amount of quality Masters level game students. Toward that end we have invested in the marketing through the Princeton Review top 25 ranking. We have also invested in targeted advertising through StudyPortals, which after follow up has resulted in a large increase in visibility and confirmed registration of at least one student. We will continue this investment until we are confident that the quality and programme have enough renown to draw students on reputation alone.

When it comes to attracting more foreign students we decided to tackle this in a direct manner. Each of us was committed to going to at least one university, ideally two, per year in regions we identify as potential recruitment sources, and deliver lectures to 3<sup>rd</sup> year Bachelors students in their field. We feel this is the best way to build a good flow of students from various cities that do not have game education. We have started with targeting the Mediterranean region. We have been invited to speak at the Institut Supérieur des Arts Multimédia de la Manouba in Tunisia. Tunisia is a large market for students and has a special agreement with University of Malta so makes an ideal starting point to reach a larger Mediterranean student body. The game design-related talent in Tunisia is significant and worth drawing into Malta.

Our methods have been successful in increasing the amount of students, however as we have plateaued around the 10-15 mark, we are expanding our outreach to new Universities. We are approaching the career advisory services and the international office of Universities. The career advisory services will be able to guide interested students to our programme and provide information at the universities themselves for the students to peruse at their leisure while they are at University. The international offices will be able to coordinate studying abroad, both for students who are looking for a short stint abroad as well as those students that are particularly interested in continuing their education abroad. The IDGs is also working on strengthening communication with the University of Malta's international office to ensure we are providing them with enough information and to ensure that we can assist them reach out to international students in the most effective way. The International Office has supported the Institute in setting up new Erasmus agreements, which will also help to bring students in from abroad. They have also assisted our MSc students with Visa complications for internships

abroad at AAA studios. This type of support is critical as the strength of our alumni should be cultivated and experience at AAA studios can raise our student profile.

The Institute has started building links with the career counselling office of Vesalius College in Belgium, which is ideal as it offers an exclusively undergraduate programme and many of its students will be looking to continue their studies throughout Europe. The various alma matter of the lecturers and staff will be approached throughout the year to build a further referral network through the international offices and career services of the various universities.

Jasper Schellekens has also represented the University of Malta, Institute of Digital Games at a stand at the Athens Game Festival in October 2017 and 2018. Leading to the generation of many leads for possible projects and student prospects. Post-event the IDG was invited to contribute on a number of projects and invited to provide information on its MSc programme to universities and colleges in Athens.

Furthermore, IDG has strengthened collaboration within the University of Malta between the Institute and the Student Advisory Services to assist in the streaming of students through the University of Malta programmes into the M.Sc. in Digital Games. Part of this involves targeting the parents of new students and removing some of the stigma still attached to a career in digital games and the idea that this is only a domain for technology students. To this end, Mr Albert Debono, Head of SAS has invited the IDG to participate in an event to meet with students and parents scheduled to take place somewhere in March-June 2017. Communications internally have already led a number of interested students to join the 2017 MSc intake and have thus been confirmed effective. The IDG plans on continuing this intense communication and collaboration internally to ensure students are aware of the quality education that is available to them locally.

This year the IDG was able to attract **a record number of applications**, however the students that actually chose to come to Malta was only a fraction of the applications. This shows the increase in visibility resulting from the Institute's work, but also shows us that we need to be on top of the application process to ensure that foreign students – a large part of our applicants- need to be informed even faster of the University's decision.

## Quality and quantity of PhD students

The second area of emphasis has traditionally been a campaign to create and strengthen our PhD programme. We have been head-hunting candidates we felt are going to be future stars in their field both locally and abroad and find ways to help fund their studies with us. Since a number of other countries (indeed most) offer much healthier scholarships than Malta offers we will need to source funding for this and/or create some sort of internal scholarship provided by the University. Funded projects are one potential source of income that we are already tapping into, but these are so far covering technology positions. It is far more difficult to come by in Humanities and Design areas. We would, however, like to keep a balance in our disciplinary roots, so some legwork has to be done to find potential funding sources for these areas.

Note that our very first PhD graduate, Phil Lopes, has started a post as a **postdoctoral fellow at the University of Geneva** a few months before he defended his thesis. Dr Lopes' career development is indicative of the emphasis we put on graduate education and the supervision quality we offer as an Institute.

## Premises

The IDG is scheduled to move to new premises by the start of the next semester. Meetings have been held with the architects, IT-services, procurement, and the University administration to ensure coordination on the necessary fronts. All necessary information has been submitted, however we are waiting on the confirmation to proceed from the Planning Authority.

The move is a much-needed change as Malta hopes to increase its visibility as a hub from digital games as the Institute will have a more visible presence on campus. Furthermore, the current building has issues regarding accessibility and leaks during heavy rainfall in the winter, putting equipment at risk and reducing the effectiveness of the location as a study environment.

## Summary

In summary we feel that we have been extremely productive in terms of research, teaching and public service, as well as one of the most prominent game centres worldwide. We have grown Malta's reputation in both academic circles and the industry, as we have heard from leading figures in both areas in every event we participate.

Having been ranked in the top 25 of post-graduate Game Design Programmes by the Princeton Review for two years in a row has put the Institute on the map as one of the best game design programmes in Europe and is helping us penetrate the consciousness of undergraduates in Europe and elsewhere that might be interested in our MSc. This is evident from the increase in interest and applications. We still are, however, having a hard time penetrating the consciousness of undergraduates in Europe and elsewhere that would be well placed in applying for our MSc programme. As a notable example ITU's programme has been shrunk, with a number of courses removed and students accepted reduced from 75 to 50 per year. They still receive over 150 applicants a year and a considerable number of those hail from the Mediterranean and Eastern Europe, which we could be attracting if we had more marketing reach. We clearly have a programme that is solid and it is a matter of continuing to communicate this and this is one of our major concerns and what we are focusing most of our efforts on currently.

## Appendix A: Publications for 2013-2018

### Books (2)

1. Yannakakis, G. N., & Togelius, J. (2018). *Artificial Intelligence and Games*. New York: Springer Nature.
2. Gualeni, S. 2015. *Virtual Worlds as Philosophical Tools: How to Philosophize with a Digital Hammer*. London (UK): Palgrave MacMillan

### Edited Volumes/Special Issues (4)

1. Bjorn W. Schuller, Lucas Paletta, Peter Robinson, Nicolas Sabouret, and Georgios N. Yannakakis, *Intelligence in Serious Games, Special Issue at the IEEE Transactions on Computational Intelligence and AI in Games journal*, 2017.
2. Antonios Liapis, Georgios N. Yannakakis, Michael Cook, and Simon Colton, *AI-based and AI-assisted Game Design, Special Issue at the IEEE Transactions on Computational Intelligence and AI in Games journal*, 2017.
3. K. Karpouzis and G. N. Yannakakis, *Emotion in Games: Theory and Praxis*, Springer, Fall 2015.
4. G. N. Yannakakis, A. Paiva, K. Isbister and K. Karpouzis, *Emotion in Games*, Special Issue at the IEEE Transactions on Affective Computing journal, 2014.

### Book Chapters (25)

1. Calleja, G., "Game Narrative: An Alternate Genealogy" in *Digital Interfaces in Situation of Mobility*, edited by Bernard Guelton, Common Ground Press (2017).
2. Calleja, G., L. Herrewijn and K. Poels, "Affective Involvement in Digital Games", in *Emotion in Games: Theory and Praxis*, Edited by Georgios Yannakakis and Kostas Karpouzis, Springer (Forthcoming in 2016).
3. Calleja, G. "The End: Aesthetic and Ludic Topoi in Digital Entertainment", in *The End: Terminus in Literature, Media and Culture*, Edited by Brian Russell Graham and Robert W. Rix (with Alessandro Canossa), Aalborg University Press (2013).
4. Calleja, G., "Incorporation: A Renewed Understanding of Virtual Environment Habitation", *Oxford Handbook of Virtualities: History and Heritage in Virtual Worlds*, Edited by Mark Grimshaw, Oxford University Press, USA (2013).
5. Calleja, G., "Ludic Identities and the Magic Circle" in *Homo Ludens 2.0: Play, Media and Identity*, Edited by Valerie Frissen, Sybille Lammes, Jos de Mul and Joost Raessens, Amsterdam University Press, Netherlands (2013).
6. Liapis A., Gillian Smith and Noor Shaker "Mixed-initiative Content Creation" in Noor Shaker, Julian Togelius, and Mark J. Nelson (2016). *Procedural Content Generation in Games: A Textbook and an Overview of Current Research*. Springer. ISBN 978-3-319-42714-0
7. Cheong, Y.-G., R. Khaled, C. Holmgard and G. N. Yannakakis, "Serious Games for Teaching Conflict Resolution: Modeling Conflict Dynamics," in Poggi et al., (Eds.), *Conflict and negotiation: Social research and machine intelligence*, 2014.
8. Drachen, A., C. Thureau, J. Togelius, G. N. Yannakakis, C. Bauckhage, "Game Data Mining," in Seif El-Nasr et al., (Eds.), *Game Analytics --- Maximizing the Value of Player Data*, pp. 205-253, 2013. Springer London.

9. Gualeni, S. (2018) 'A Philosophy of 'DOING' in the digital'. In Romele, A. and Terrone, E. (eds.), *Towards a Philosophy of Digital Media*, pp. 225-255. Basingstoke (UK): Palgrave Macmillan, Cham
10. Gualeni, S. (2017). "VIRTUAL WELTSCHMERZ - things to keep in mind while building experience machines and other tragic technologies". In Silcox, M. (ed.), *Experience Machines: The Philosophy of Virtual Worlds*. London (UK): Rowman and Littlefield International.
11. Gualeni, S. 2015. Playing with Puzzling Philosophical Problems. Book chapter in Zagalo, N. and Branco, P. (eds.) 2015. *Creativity in the Digital Age*. Part of the Springer Series on Cultural Computing. XIV. 59-74. London (UK): Springer-Verlag.
12. Gualeni, S. 2014. Augmented Ontologies; or, How to Philosophize with a Digital Hammer. In Springer's *Philosophy of Technology*. 2014. Edited by Luciano Floridi, Vol. 27, N. 2, 177-199. ISSN 2210-5433, Philos. Technol., DOI 10.1007/s13347-013-0123-x
13. Khaled, R. Culture and Gamification. In *The Gameful World*, MIT Press, 2014.
14. Khaled, R. Questions over Answers: Reflective Game Design. In *Playful Subversion of Technoculture*, Springer, 2015.
15. Khaled, R., Vasalou, A., and Joiner, R. Understanding and Designing for Conflict Learning Through Games. Accepted and forthcoming chapter in *Emotion in Games: Theory and Praxis*, Springer 2015.
16. Karpouzis K. and G. N. Yannakakis, "Introduction to Emotion in Games," in Karpouzis and Yannakakis, (Eds.) *Emotion in Games: Theory and Praxis*, Springer, (to appear in fall 2015).
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94. Vasalou, A., Khaled, R., Gooch, D., and Benton, L. Problematizing Cultural Appropriation. Proceedings of the first ACM SIGCHI annual symposium on Computer-human interaction in play, CHI PLAY 2014, New York, NY, USA, 267-276.
95. Vella, D. (2018). "Play and Ecstase." Paper presented at the 12<sup>th</sup> International Conference in the Philosophy of Computer Games, Copenhagen, Denmark, August 13-15.
96. Vella, D., and Bonello Rutter Giappone, K. (2018). "The City in Singleplayer Fantasy Roleplaying Games." *DiGRA '18: Proceedings of the DiGRA 2018 Conference: The Game is the Message*, Turin, Italy, July 25-28. Available at <http://www.digra.org/digital-library/publications/the-city-in-singleplayer-fantasy-role-playing-games/>
97. Vella, D. (2017). "Action as the Basis for an Aesthetics of Ludic Subjectivity." Proceedings of the 11<sup>th</sup> International Conference in the Philosophy of Computer Games, Kraków, Poland, November 29-December 1. Available at <https://gamephilosophy2017.files.wordpress.com/2017/11/daniel-vella-action-as-the-basis-for-an-aesthetics-of-ludic-subjectivity.pdf>
98. Vella, D. "Who am 'I' in the Game?: A Typology of Modes of Ludic Subjectivity." Paper presented at the *1st Joint DiGRA and FDG International Conference*, Dundee, Scotland, 1-6 August 2016.
99. Vella, D., "The Character of the Ludic Muse," presented at the *Philosophy of Computer Games Conference 2015*, BTK University of Art and Design, Berlin, October 2015. Vella, D., Participation in "Game Hermeneutics," panel presented as part of the Philosophy of Computer Games Conference 2015.
100. Vella, Daniel (2017). "Re-opening Doors, Re-framing Perceptions: Fiction, Worldness and Play." Paper presented at the 5th International Conference in Games and Literary Theory, Université de Montréal, Montréal, Canada, October 20-22, 2017.
101. Westerlaken, Michelle; Gualeni, Stefano. 2016. 'Becoming with: Towards the inclusion of animals as participants in design processes'. *Proceedings of ACI '16* November 16-17, 2016, Milton Keynes, United Kingdom, ACM Press.
102. Westerlaken, Michelle; Gualeni, Stefano. 2016. 'Situated Knowledges through Game Design: A Transformative Exercise with Ants. *Proceedings of the Philosophy of Computer Games Conference*. Valletta, Malta, November 1-4, 2016.
103. Westerlaken, M.; Gualeni, S. 2014. 'Grounded Zoomorphism: an evaluation methodology for ACI design'. Paper presented at the *ACE '14 Workshops* in Funchal, Portugal, November 11 – 14, 2014.
104. Westerlaken, M.; Gualeni, S. 2014. "Felino: The Philosophical Practice of Making an Interspecies Video Game" at the 2014 *Philosophy of Computer Games conference*, Bilgi University of Istanbul, Turkey, November 13-16, 2014
105. G. N. Yannakakis, R. Cowie, and C. Busso, "The Ordinal Nature of Emotions," in *Proceedings of the Seventh International Conference on Affective Computing and Intelligent Interaction (ACII)*, 2017. **(Best Paper Award)**

106. Yannakakis, G. N. and Khaled, R. Village Voices: A Personalised and Adaptive Game for Conflict Resolution. In *Proceedings of FDG 2013*, 2013.
107. G. N. Yannakakis and A. Liapis, "Searching for Surprise," in *Proceedings of the Seventh International Conference on Computational Creativity*, 2016.
108. Yannakakis, G. N., A. Liapis, C. Alexopoulos, "Mixed-Initiative Co-Creativity," in *Proceedings of the 9th International Conference on Foundations of Digital Games*, 2014.
109. Yannakakis, G. N. and J. Togelius, "Experience-driven Procedural Content generation (Extended Abstract)", in *Proceedings of the Sixth International Conference on Affective Computing and Intelligent Interaction (ACII 2013)*, 2015. (**Invited paper**)
110. Yannakakis, G. N., and H. P. Martinez, "Grounding Truth via Ordinal Annotation", in *Proceedings of the Sixth International Conference on Affective Computing and Intelligent Interaction (ACII 2013)*, 2015. (**Invited paper**)
111. Zhang, J., R. Taarnby, A. Liapis, S. Risi: "DrawCompileEvolve: Sparking Interactive Evolutionary Art with Human Creations," in *Evolutionary and Biologically Inspired Music, Sound, Art and Design (EvoMusArt)*, vol. 9027, LNCS. Springer, 2015.
112. Westerlaken, M.; Gualeni, S. (2017). "A dialogue concerning 'doing philosophy' with and within computer games". *Proceedings of the Philosophy of Computer Games Conference*. Krakow, Poland, 2017.
113. Westerlaken, M.; Gualeni, S. (2016). "Becoming with: Towards the inclusion of animals as participants in design processes". *Proceedings of ACI '16 November 16-17, 2016*, Milton Keynes, United Kingdom, ACM Press.
114. Westerlaken, M.; Gualeni, S. (2016). "Situated Knowledges through Game Design: A Transformative Exercise with Ants". *Proceedings of the Philosophy of Computer Games Conference*. Valletta, Malta, November 1-4, 2016.

## Games Published

Pippin Barr

- *BREAKSOUT*, 2015, online
- *Best Chess*, 2015, online
- *REAL BAKU 2015* with Agence Babel, Fédération Internationale des Droits de l'Homme (FIDH), 2015, online
- *The Stolen Art Gallery*, 2015, online
- *Let's Play: The Shining*, 2015, online
- *Jostle Parent*, 2015, online
- *Sound System II*, 2015, online
- *What We Did* with Rilla Khaled, 2015, online
- *Let's Play: Let's Play: Ancient Greek Punishment: Art Edition Edition*, 2015, online
- *Sound System I*, 2015, online
- *MANIFEST*, 2014, online
- *Abramovic Method Games* with Marina Abramovic, 2014, online
- *Get X Avoid Y*, 2014, online
- *The Junior Mint* with @seinfeld2000, 2014, online
- *Leaderboarder*, 2014, online
- *Don't Drown*, 2014, online
- *Durations*, 2014, online
- *Lo-Fi Dick Fight*, 2014, online

- *Drosophilia* with Gordon Calleja, and Sidsel Hermansen, 2014, online
- *Jostle Bastard*, 2013, online
- *The Digital Marina Abramovic Institute (dMAI)* with the Marina Abramovic Institute, 2013, online
- *Snek.*, 2013, online
- *The Mumble Indie Bungle*, 2013, online
- *Art Game*, 2013, online

#### Gordon Calleja and Constantino Oliva

- “Will Love Tear Us Apart” – [www.willlovetearusapart.com](http://www.willlovetearusapart.com) (2013). Mighty Box Games. Presented at Ars Electronica 2013 and nominated for awards at SXSW Interactive and at the Festival du Nouveau Cinéma of Montreal. Featured on Rolling Stone US, Repubblica, Fact Mag. Funded by the Malta Arts Fund.

#### Gordon Calleja

- “Vengeance” – (2016) - <https://www.kickstarter.com/projects/mightyboards/vengeance-2>
- “Posthuman” – (2015) - <https://www.kickstarter.com/projects/532062403/posthuman>

#### Stefano Gualeni

- “Something Something Soup Something” – <http://soup.gua-le-ni.com/> (2017). Funded by Maltco research grant the game is a philosophical thought experiment on the subjectivity of words. The game has been featured in numerous publications including Kotaku, PC Canard, New York Times Food and Wine, Atlas Obscura, among many others.

#### Antonios Liapis

“New Born World” – <http://thenewbornworld.antoniosliapis.com/index.html> (2018). Funded by Maltco research grant the game is a storytelling game, played in a social setting and facilitated by a single mobile device. “DATA Agent” - <https://champchampchamp.itch.io/data-agent> (2018). A game by Dr. Liapis that uses Wikipedia content to make murder mysteries.

## Appendix B: Invited Talks for 2013-2018

### Keynotes

1. Barr, P. Got Curious? Keynote at Interface 2013, Carleton University, Ottawa, Canada. April 2013. <http://interface2013.wordpress.com/>
2. Calleja G., "Games and the Reconceptualisation of Narrative", *Digital Interfaces in Situations of Mobility: Cognitive, Artistic, Game Devices*, Sorbonne, Paris, France. 2014.
3. Calleja, G., Invited Speaker: "The Making of Will Love Tear Us Apart", Ars Electronica Festival 2013, Linz, Austria.
4. Eladhari, M. P., AI and Game Prototyping, Guest talk at course Artificial Intelligence (EPGY2013), Stanford University, July 2013.
5. Gualeni, S. (2018) April the 20th: CREMO Project Workshop (Waterfront Hotel, Sliema, Malta). 'Philosophy with (and within) the Digital'
6. Gualeni S. Codemotion Milan 2015 conference: 'Transforming Oneself Through the Practice of Game Design' – Nov 2015.
7. Khaled, R. What We Talk About When We Talk About Procedural Content Generation. IEEE Conference on Computational Intelligence and Games, Dortmund, Germany, 2014.
8. Khaled, R. Games and Learning. Annual Conference of the Association of MultiMediaDesign Teachers in Denmark, Middelfart, Denmark, 2013.
9. Liapis A., Designing CAD tools for novices: can algorithms enhance productivity or foster creativity?" at the nucl.ai: Artificial Intelligence in Creative Industries conference (2015)
10. Vella, D. (2018). "The Wanderer in the Virtual Ruin: Digital Games and the Ruin-Situation." Keynote paper presented at the Death and Macabre Aesthetics in Games Conference, Moscow, Russia, April 12-13.
11. Yannakakis, G. N., Keynote:GaLA conference, Palermo, December 2018.
12. Yannakakis, G. N., Keynote: International Conference on Physiological Computing Systems, Seville, September 2018.
13. Yannakakis, G. N., Keynote:Artificial Intelligence and Intelligent Applications Conference, Rhodes, May 2018.
14. Yannakakis, G. N. Keynote: 3rd Workshop on Emotion and Sentiment in Social and Expressive Media: User Engagement and Interaction, ACII, October 2017
15. Yannakakis, G. N. Keynote: 6th EAI International Conference: ArtsIT, Interactivity & Game Creation, October, 2017
16. Yannakakis G. N., International Summer School on Deep Learning (DeepLearn 2017), Bilbao, July 2017.
17. Yannakakis, G. N. Keynote: Bootcamp on Heart Rate and Galvanic Skin Response as Measures for Assessing Human Experience, Aarhus University, May 2017.
18. Yannakakis, G. N. Keynote: Prometheus Game Jam Athens, June, 2017.
19. Yannakakis, G. N. Keynote: Global Game Jam Athens, January, 2017.
20. Yannakakis, G. N. Keynote: International GameOn Conference, Amsterdam, December 2015.
21. Yannakakis, G. N. Keynote: 15th Conference of Hellenic Psychological Society, Cyprus, May 2015.

22. Yannakakis, G. N. Keynote: 9th International Workshop on Semantic and Social Media Adaptation and Personalization, Corfu, November 2014
23. Yannakakis, G. N. Keynote: International Research-Centered Summer School in Cognitive Systems and Interactive Robotics, Data and Context Analysis, Athens, July 2014.
24. Yannakakis, G. N. Keynote: Conferencia de Ciencias e Artes dos Videojogos, Portugal, November, 2014. (Invitation declined)
25. Yannakakis, G. N. Keynote: Encontro Nacional de Estudantes de Informatica (ENEI) Conference, Aveiro, Portugal, April, 2014.
26. Yannakakis, G. N. Keynote: First Annual Contact Forum of the PROSECCO network, Madrid (El Escorial), February, 2014
27. Yannakakis, G. N. Keynote: The Tenth International Workshop on Agents and Data Mining Interaction, AAMAS 2014 (Invitation Declined)
28. Yannakakis, G. N. Keynote: International Conference on Affective Computing and Intelligent Interaction (ACII 2013), Geneva, September, 2013.

## Other Invited Talks

1. Barr P. *Less gameplay*, screenshake2015. Antwerp, Belgium. 2015.
2. Barr P. *Minimal Game Design*. Global Game Jam Malta. University of Malta, Msida, Malta. 2015.
3. Barr P. *On Making Digital "Art" "Games"*. Cologne Game Lab. Cologne University of Applied Sciences. Cologne, Germany. 2014.
4. Barr P. *The Code is Present*. A MAZE / Johannesburg. Johannesburg, South Africa. 2014.
5. Barr P. *Game. / Time*. Critical Hit. Concordia University, Montréal, Canada. 2014.
6. Barr P. *Game Time*. Pecha Kucha Mdina. Mdina, Malta. 2014.
7. Barr P. *The Game Designer is Present*. A MAZE / Berlin. Berlin, Germany. 2014.
8. Barr, P. Got Curious? Talk at SKINS 4.0 Workshop on Aboriginal Storytelling in Digital Media, Concordia University, Montréal, Canada. May 2013. <http://skins.abtec.org/>
9. Barr, P. Curious Games. Talk at A MAZE Indie Pop Up at Republika Festival, Rijeka, Croatia. July 2013. <http://www.amaze-festival.de/%5Btermalias-raw%5D/blog/amaze-indie-pop-republika-fest-rijeka-croatia>
10. Barr, P. What is curious games?. Talk at Playful 2013, London, England. October 2013. <http://thisisplayful.com/>
11. Barr, P. Curious games, a fireside chat. Talk at MozFest 2013, London, England. October 2013. <http://mozillafestival.org/>
12. Bonello Rutter Giappone, K., and Vella, D. (2018). "Square, Marketplace, Tavern: Singleplayer Fantasy Roleplaying Game Cities as Contested Spaces." Paper presented at the Games and Literary Theory Conference 2018, Copenhagen, Denmark, August 15-16.
13. Bonello Rutter Giappone, K., Callus, I., Ntelia, R., and Vella, D. (2018). "Games and the Post-Literary." Panel presentation at the 2<sup>nd</sup> Countertext Conference, Valletta, Malta, 6-8 April.
14. Calleja, G., "Understanding Player Experience", BUG Lab, Bahçeşehir University, Istanbul, Turkey, 2014.

15. Calleja, G. "Attention, Involvement, Immersion", DIGRA Flanders seminar, Antwerp, Belgium, 2013.
16. Calleja, G. "The End: Aesthetic and Ludic Topoi in Digital Entertainment", The End: Terminus in Literature, Media and Culture, Aalborg University, Denmark.
17. Eladhari, M. P., Co-creation, Invited talk at Instituto Superior Tecnico, Lisbon, Portugal, September 2013.
18. Gualeni, S., Jørgensen, I., Möring, S., and Vella, D. (2018). "Existential-Phenomenological Approaches to Game Worlds." Panel presentation at the DiGRA 2018 Conference: The Game is the Message, Turin, Italy, July 25-28.
19. Gualeni, S. (2018) October the 21st: Athens Games Festival (Athens, Greece). 'BIG TROUBLE in Little Cities'
20. Gualeni, S. (2018) October the 5th: University of Lille (Lille, France). 'Philosophy with (and within) the Digital'
21. Gualeni, S. (2018) September the 27th: Centre for Digital Humanities (University of Gothenburg, Sweden). 'BIG TROUBLE in Little Cities'
22. Gualeni, S. (2018) September the 21st: Centre for Digital Humanities (University of Gothenburg, Sweden). 'Philosophy with (and within) the Digital'
23. Gualeni, S. (2018) July the 26th: DiGRA 2018 conference in Turin, Italy 'Projectuality in Digital Gameworlds'
24. Gualeni, S. (2018) June the 9th: The Architectonics of Virtual Space (Bibliothek Werner Oechslin, Einsiedeln, Switzerland). 'BIG TROUBLE in Little Cities'
25. Gualeni, S. (2018) May the 14th: Department of Classics & Archaeology (University of Malta). 'BIG TROUBLE in Little Cities'
26. Gualeni, S. (2017) November the 29th: Philosophy of Computer Games conference (Krakow, Poland). 'A dialogue concerning 'doing philosophy' with and within computer games' Gualeni, S. Philosophy of Computer Games Conference. 'Video games and (as) scientific research' (panel). November 2016.
27. Gualeni, S. 'Virtual Weltschmerz' (invited talk) Coimbra International Conference on the Virtual, University of Coimbra (Portugal). October 2016.
28. Gualeni, S.: 'DOING Philosophy with (and in) Virtual Worlds' (invited talk)
29. University of Porto (Portugal). October 2016.
30. Gualeni, S. 'Giocare sul serio' (panel) FESTIVALETTERATURA, Mantova (Italy). September 2016.
31. Gualeni, S. 'Una Macchina per Esperienze Straordinarie' (invited talk) FESTIVALETTERATURA, Mantova (Italy). September 2016.
32. Gualeni, S., 'Game Design as a Self-Transformative Process' (invited talk) Laguna Beach (CA, U.S.A.). July 2016.
33. Gualeni, S. 'Trasformazione' (interview) Gett1 Podcast series, Ep. 05. June 2016.
34. Gualeni, S. 'University Matters' (radio interview) Campus FM. April 2016.
35. Gualeni S. Guest-lecture at the BTK University of Art and Design of Berlin, Germany 'In-game metaphors: an autumnal reflection'. Oct-2015.
36. Gualeni S. University of Turin, Italy 'ONTO-LOGICAL MACHINES'. Jun-2015
37. Gualeni, S., 2017, November the 29th: Philosophy of Computer Games conference (Krakow, Poland). 'A dialogue concerning 'doing philosophy' with and within computer games' (paper presentation)
38. Gualeni, S., 2017, November the 23rd: University of Gothenburg (Sweden) 'Experience Machines' (invited lecture)

39. Gualeni, S., 2017, November the 23rd: University of Gothenburg (Sweden) 'Toying around with thought experiments' (invited lecture) Gualeni, S., 2017, October the 20th: Radio 2 Malta (PBS). 'Radio Mocha' (radio interview)
40. Gualeni, S., 2017, September the 29th: Science and the City (Malta). 'Chicken and egg: philosophical play with thought experiments' (public talk)
41. Gualeni, S., 2017, September the 18th: Game Studies Seminar 2017 (University of Malta). 'Toying around with thought experiments' (lecture)
42. Gualeni, S., 2017, May the 3rd: IT-University Copenhagen (Denmark). 'Toying around with thought experiments' (guest lecture)
43. Gualeni, S., 2017, March the 1st: Cafe' Scientifique (Malta). 'Chicken and egg: philosophical play with thought experiments' (public talk)
44. Gualeni, S., 2017, February the 15th: University of Skövde (Sweden), MTEC research group. 'DOING philosophy with (and within) Virtual Worlds' (invited talk)
45. Gualeni, S., 2017, February the 17th: IT-University Copenhagen (Denmark). 'DOING philosophy with (and within) Virtual Worlds' (invited talk)
46. Gualeni, S., 2017, January the 30th: Radio 2 Malta (PBS). 'Radio Mocha' (radio interview)
47. Gualeni, S., 2016, November the 30th: University of Malta (Malta), Faculty of Media and Knowledge Sciences. 'How Ideas Go to Market' (invited presentation and seminar)
48. Gualeni, S., 2016, November the 16th: University of Malta (Malta), Game Lecture Series. 'Experience Machines' (invited talk)
49. Khaled, R. Reality Bites, or 10 Things Serious Game Researchers Will Never Admit to Doing but Do Anyway. GDC Education Summit, 2015.
50. Khaled, R. Reflektors. Screenshake Game Festival, Antwerp, Belgium, 2015.
51. Khaled, R. Questions over Answers: Reflective Game Design. Critical Hit, Montreal, 2014.
52. Khaled, R. Questions over Answers: Reflective Game Design. A MAZE Berlin, Germany, 2014.
53. Khaled, R. Reflective Game Design. Pecha Kucha Night, Valletta, Malta, 2014.
54. Khaled, R. Gamification Panel. Creativity Meeting Point 2013, Bilbao, Spain, 2013.
55. Khaled, R. Digital Games in Malta Panel. 5th Workshop in Information and Communication Technology. SmartCity, Malta, 2013.
56. Liapis, A. "Mixed-initiative Design, Designer Modeling and Game Development" at the Sapienza University of Rome (2015)
57. Liapis, A. "AI-assisted Game Design" at the Dagstuhl Seminar 15051: Artificial and Computational Intelligence in Games: Integration (2015)
58. Liapis, A. "Interactive Creativity of Man and Machine" (translated title) at the School of Fine Arts, University of Athens (2015)
59. Liapis, A. "Absurdist Procedural Content Generation" at the Future of PCG symposium, IT University, Copenhagen (2014)
60. Liapis, A., "Computational Game Creativity" at the Computer Science Annual Workshop Malta (2014)
61. Oliva C., Invited to hold a Workshop on Audio for Games and Interactivity. "Soundscape Analysis of Digital Games". Gamification Lab, Leuphana University, Lüneburg, 2015

62. Vella, D. (2018). "Monstrous Ruins in the Team Ico Games." Paper presented at the Central and Eastern European Game Studies Conference, Prague, Czechia, October 11-13.
63. Vella, D., and Gualeni, S. (2018). "Projectuality in Digital Gameworlds." Paper presented at the DiGRA 2018 Conference: The Game is the Message, Turin, Italy, July 25-28.
64. Vella, D. (2018). "The Monstrous and the Monster in the Games of Team Ico." Paper presented at the Society of Cinema and Media Studies Conference 2018, Toronto, Canada, 14-18 March.
65. Yannakakis G. N., Athens Game Festival, Athens, October 2018.
66. Yannakakis G. N., Serious Games Conference, Hannover, CEBIT, June 2018.
67. Yannakakis G. N., Computer Games: Challenges and Opportunities conference (CGCO), Isfahan, February 2018
68. Yannakakis G. N., Dagstuhl seminar on Artificial and Computational Intelligence in Games. Invited Speaker, November 2017
69. Yannakakis G. N., Foundation for Research and Technology Hellas, Greece, March 2017
70. Yannakakis G. N., Technical University of Crete, Greece, March 2017
71. Yannakakis G. N., Affective Computing Group, Media Lab, MIT, Boston, May 2016
72. Yannakakis G. N., Northeastern University, Boston, May 2016
73. Yannakakis G. N., Banff workshop on Computational Modelling in Games, Banff, Canada. Invited Speaker, May 2016.
74. Yannakakis G. N., Imperial College London, December 2015.
75. Yannakakis G. N., University of Concepcion, Concepcion, Chile, November 2015.
76. Yannakakis G. N., Cyprus University of Technology, Limassol, Cyprus, 2015.
77. Yannakakis G. N., Goldsmiths, University of London, UK, 2014.
78. Yannakakis G. N., University College London, UK, 2014
79. Yannakakis G. N., Dagstuhl seminar on Artificial and Computational Intelligence in Games. Invited Speaker, 2015.
80. Yannakakis G. N., Sapienza University, Rome, Italy, 2014
81. Yannakakis G. N., Summer School: Creativity and Games in Education, Crete, 2013.
82. Yannakakis G. N., University of Technology, Sydney, School of Software, 2013.



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