iGGi CONFERENCE 2025

10–11 SEPTEMBER

iGGi

The EPSRC Centre for Doctoral Training
in Intelligent Games and Game Intelligence

www.iggi-phd.org
@iggiphd

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WELCOME TO iGGi Con 2025!

Welcome to the 2025 iGGi Conference – a chance for games researchers and game developers to meet and share ideas about the future of games.

The annual iGGi conference brings together PhD researchers (PGRs), supervisors and staff from the EPSRC Centre for Doctoral Training in Intelligent Games and Game Intelligence (iGGi) with practitioners from industry and the third sector. We will share our latest work and forge new connections for research collaborations and placements.

With over 120 recruited PhDs, iGGi is the world's largest doctoral programme in games research. iGGi advances game development across two fronts:

Intelligent Games (iG): Using research advances in areas such as AI, analytics, user experience design, and responsible innovation to seed the creation of a new generation of more intelligent and engaging games and thus boost the UK games industry.

Game Intelligence (Gi): Using game design and data obtained from game play to advance games as a tool for understanding and influencing human behaviour, for wellbeing, positive societal, cultural and scientific impact.

Now in its twelfth year, and having completed our final round of postgraduate researcher recruitment in 2023, iGGi continues to thrive. We have a steady stream of researchers graduating and going on to research and industry positions. The research they have produced is making a real difference to the field of games research and to our industry partners. If you are from the games industry, rest assured we still have many PGRs seeking placement opportunities – to transfer their research knowledge so that you can make novel, engaging and diverse games, and understand gamers.

To find out more about how you might work with us, read on, or do get in touch with any of the iGGi team (especially Susanne Binder, the iGGi Manager charged with industry liaison, iggi-admin@york.ac.uk).

We hope you really enjoy the conference and we are very much looking forward to talking about life, the universe and games research with you.

The iGGi Management Team:
Professor Paul Cairns, iGGi Chair; David Hull, iGGi Manager, University of York

Professor Peter Cowling, iGGi Director; Susanne Binder, iGGi Manager, Queen Mary University of London

WHAT IS iGGi?

The EPSRC Centre for Doctoral Training in Intelligent Games and Game Intelligence (iGGi) was granted £25 million from research councils and partners to train 120 PhDs working in games research. With 12 years experience so far iGGi researchers bring great experience in developing cutting-edge research to transform the way the games industry works with the academic community, resulting in novel games. iGGi is a collaboration between the University of York, and Queen Mary, University of London and has strong associations with the University of Essex and Goldsmiths, University of London, as well as more than 80 games industry partners including most of the large UK and international games developers and many smaller games studios across the UK.

iGGi enables industry partners to access and influence research, associated with games, in analytics, artificial intelligence (AI), audio, computational creativity, design, engagement, gamification, human-computer interaction, psychology, and software development. iGGi postgraduate researchers are already working with game studios, startups and Fortune 500 companies including AI Factory, Bossa Studios, BT, Creative Assembly, Google Deepmind, Media Molecule, MindArk, Microsoft, Prowler, Splash Damage, Square Enix, Sony and Visteon to develop more engaging, human-like AI, create radically faster ways of balancing games or use machine learning to produce new forms of art and heritage experiences. We also work closely with games sector organisations such as UKIE and Game Republic, allowing us to reach a broad range of games studios, large and small.

HOW TO GET INVOLVED

The main way to engage with us is through our postgraduate researchers (PGRs). iGGi is a highly competitive PhD programme, attracting top creative and technical talent from around the world and a wide range of backgrounds. Working with our PGRs, you can conduct, access and embed cutting edge research in your organisation, kick-start collaboration with our researchers more broadly, and build relationships with potential future recruits.

While we are always open to find an arrangement that fits you, here are some of the usual ways that partners have become involved:

Placements: These can last from 2 weeks to 6 months and are negotiated to suit your company needs.

Sponsorships: Partly or fully sponsor a research project that aligns with your interests to make it happen and enjoy a preferential working relationship or IP agreement.

Industry days: Half- or full-day sessions with our PGRs, for example at mini-conferences, networking events, workshops, design jams or hackathons around particular themes of your interest, hosted at one of our sites or on your premises.

Coaching and mentoring: Even something as minimal as occasional emails is a great way to build relationships with iGGi PGRs and to share your valuable knowledge and experience.

Access to your data, software or facilities: Access to game data is essential to our research, while our analyses can provide deep insight into your players and design challenges. Access to industry software also means our research is exposed to the acid test of industry work environments – and its results are far easier to integrate for you. And while universities have excellent resources, there is always equipment to which we would like to have access.

PGR offers: Introduce PGRs to your organisation or products through discounted memberships or subscriptions during their PhD.

Interested?
We always welcome new partners. If you are interested, please contact, Susanne Binder, the iGGi Manager for External Relationships on iggi-admin@york.ac.uk

THE iGGi MANAGEMENT TEAM AND iGGi STAFF

Professor Paul Cairns, iGGi Chair (UoY)

Professor Peter Cowling, iGGi Director (QMUL)

David Hull, iGGi Manager (UoY)

Susanne Binder, iGGi Manager (QMUL)

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Dr Laurissa Tokarchuk, iGGi Research Collaboration Coordinator (QMUL)

Dr Debbie Maxwell, iGGi Research Collaboration Coordinator (UoY)

Professor Simon Lucas, iGGi Co-Investigator (QMUL)

Professor Simon Colton, iGGi Co-Investigator (QMUL)

Helen Tilbrook, iGGi Administrator (UoY)

Oliver Roughton, iGGi Administrator (UoY)

Shopna Begum, iGGi Administrator (QMUL)

Professor William Latham, iGGi Co-Investigator (Goldsmiths)

Professor Sebastian Deterding, iGGi Co-Investigator (Imperial)

Professor Catherine Flick, iGGi Responsible Innovation Lead (Staffordshire)

IGGI PARTNERS AND COLLABORATORS

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AI and Games
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Fusebox Games
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Goodfire
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Horniman Museum & Gardens, London
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Inhalation
InstaDeep Ltd
ITU Copenhagen
Keywords Studios
King
Laika
Larian Studios
Lucid Games
Lumirithmic
Meaning Machine
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Neurocracy
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Splash Damage
Square Enix
Sumo Digital
Teach First
The Chinese Room
TIGA
UKIE
Unity Technologies
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Women in Games
Worldly Counsel

iGGi RESEARCHERS

ALEX FLINT

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Skills: Games User Research, Research Operations

BIOGRAPHY

Alex has an academic background in Psychology and Human-Computer Interaction. Their Master's dissertation comparing measures of perceived challenge and demand in video games was published at CHI 2023. Alex has previously worked on the Research Operations team at PlaytestCloud and as a freelance Games User Researcher. They are also a Student Video Games Ambassador for UKIE, and regularly volunteer at conferences such as CHI Play and the GamesUR Summit. When they aren't at their desk, you can find Alex figure skating, playing roller derby, or DJing 80's rock.

LEVELLING UP THE NARRATIVE PLAYTESTING PRACTICES OF INDIE VIDEO GAME DEVELOPERS

Alex's research focuses on levelling up the narrative testing practices of indie video game developers. Narrative testing is a specialised games user research (GUR) practice that requires resources and knowledge not easily accessible to indie developers, meaning they are often disadvantaged compared to their larger AAA counterparts. Thus, Alex's work proposes the direct study of indie developers to level the playing field by democratising narrative testing best practices and empowering non-research team members to conduct GUR activities. Alex aims to achieve this goal by:

1. Defining narrative testing best practices.
2. Identifying key challenges indie developers face when evaluating narrative.
3. Co-designing and evaluating narrative testing prototype(s).
4. Assessing methods for disseminating GUR knowledge.

The successful completion of this work will impact how indie studios conduct narrative testing, ultimately leading to the creation of better games.

AMY SMITH

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Skills: User research, prompt engineering, text-to-image generative deep learning, computational creativity

BIOGRAPHY

After completing a BA in Fine Art, at Bath School of Art and Design, Amy spent some years as a tattoo artist travelling and creating artworks. An interest in learning to code then led her to complete a conversion Masters degree in Computer Science at the University of Birmingham. Keen to preserve her interests in both a creative practice as well as a new interest in generative deep learning, Amy joined the IGGI program to explore these interests further under the guidance of Dr Mike Cook, Dr James Walker and Professor Simon Colton.

Amy's research is currently focused on the intersection between 'imaginative play', computational creativity and text-to-image generative deep learning. This project explores whether the kind of novel image media produced by generative deep learning algorithms can be used to provoke and stimulate the imaginative, ideation and visualisation capabilities of the user as they interact with this cutting-edge technology. To date, her work has been accepted to several conferences, including SIGGRAPH Asia, the International Conference on Computational Social Science, AAAI, the International Conference on Computational Creativity, and EvoMusArt.

QUANTIFYING USER INTERACTIONS WITH TEXT-TO-IMAGE GENERATIVE DEEP LEARNING: A METRIC'

The goal of the thesis is to gain a deeper understanding of how users interact with text-to-image generative deep learning technology and to provide insights into the categorisation of user prompting chains that result in generated images.

The challenge is that while text-to-image synthesis is gaining popularity, there is limited knowledge about user interactions, their uses, and the technology's impact on users. Researching user interactions can provide valuable behavioral insights, reveal patterns in creative approaches, and demonstrate how users adapt to AI tools.

BOBBY KHALEQUE

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BIOGRAPHY

Bobby Khaleque is a fifth-year PhD student at Queen Mary University of London, specializing in Artificial Intelligence with a focus on Computational Creativity and AI agents. He holds an MSc in Artificial Intelligence and a BSc in Computer Science, both from Queen Mary University. Bobby has extensive experience in Unity game development, and Python.

GENERATING EXPLORATORY ENVIRONMENTS

Bobby's research primarily centers on AI-assisted environment design for exploratory experiences, such as those found in Proteus and No Man's Sky. His PhD research explores how AI can be utilized to create dynamic and immersive game environments, for exploration, providing unique and engaging experiences. His research also delves into how AI agents can be designed to model player motivation and engagement for an exploration standpoint. This research contributes to the understanding of how AI can be leveraged to create more interactive and responsive gaming environments.

CAM JOHNSTON

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Skills: C++, Python, Unreal Engine, real-time physics simulation

BIOGRAPHY

Cam holds an MPhys in Theoretical Physics from the University of Edinburgh, wherein he combined infectious disease models with fluid dynamics to examine the validity of wastewater-based epidemiology as a method of passively monitoring the prevalence of COVID-19 in an urban population.

During his studies, Cam began to learn game development as a way of improving his programming skills, using C++ and the Unreal Engine to develop a number of small projects and compete in game jams.

After completing his MPhys, Cam was eager to take his experience developing physics simulations even further, which lead him to joining the iGGi programme.

IMPOSSIBLE PHYSICAL MODELS

Impossible physical models' refer to digital models of any physics that differs from what would be experienced in everyday life. This covers 'incorrect' physics (disagreeing with observation but mathematically valid), and unfamiliar physics (that which is physically correct but irrelevant on a human scale). By creating interactive, virtual environments around these models, it becomes possible to experience the impossible.

This research aims to explore the potential of 'impossible physical models' in the context of video games from the perspectives of game design and education. The project explores what work has already been done into this topic, expands on this work, and finds new areas to explore.

The goal of this research is to introduce new relationships between physics and video games, and to engender developers to explore physics as a tool for design.

DANIEL COOKE

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Skills: Data Science, Forensic Accounting, Finance

BIOGRAPHY

Dan has a keen interest in the world of finance and how traditional finance interacts with the games industry. He is interested in how criminals use videogame ecosystems for crime and money laundering purposes. He has a background in Accounting and Finance and graduated with a MA in Applied Accounting from De Montfort University in 2019.

Outside of his professional life he has an interest in E-Sports and competitive gaming. His research interests include money laundering in secondary video game markets, video game monetisation and how users experience with monetisation and secondary markets.

DETECTING AND PREVENTING MONEY LAUNDERING IN VIDEO GAME SECONDARY MARKETPLACES

The focus of Dan's research is on detecting money laundering and other contributing factors within available public market data. His research aims to identify methods of discovery for money laundering activities within secondary marketplaces and to identify which areas are more at risk of being exploited by potential criminals looking to clean money through these marketplaces.

His current research is looking at using an outlier detection method called Isolation Forest Testing to identify suspicious transactions from a large data set (~170m transactions). This will then be used to identify areas of prevalence for suspicious transactions within the data.

DIEN NGUYEN

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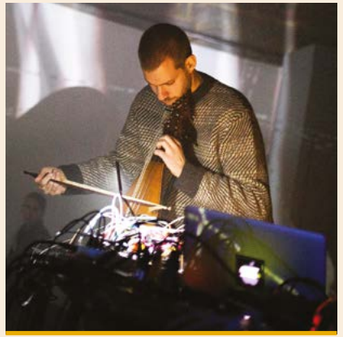
BIOGRAPHY

I graduated from the University of California, Irvine with a BSc in Computer Game Science where I became interested in the intersection of games and artificial intelligence – applying probabilistic methods, reinforcement learning, and knowledge representation to game playing and game design. My long-term goal is to work on the problem of formalizing game elements, representing game systems in a way that allows for automatic reasoning and inference. I also enjoy playing games where I can customize and theorycraft my playstyle to satisfy certain gameplay fantasies while beating the game.

EFFICIENT AUTOMATED PLAYTESTING OF TABLETOP GAMES

The current strategy of automated playtesting is to play out the full game in thousands of iterations, which can be impractical for complex games with large state space and computationally expensive forward models. My research will focus on applying Go-Explore – a recent exploration paradigm that outperforms many state-of-the-arts – to improve the efficiency of automated playtesting of tabletop games by using an archive of interesting game states to reduce the time needed for self-play. The research will be primarily conducted within the TAG framework and aim to be game-agnostic. On successful completion, this research will improve game development cycles, resulting in higher-quality games, and potentially give unique insights into the game design process.



DIMITRIS MENEXOPOULOS

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Skills: Music Composition, Sound Design, Procedural Audio

BIOGRAPHY

Dimitris Menexopoulos is a versatile music composer, sound designer, audio technologist and multi-instrumentalist from Thessaloniki, Greece. Having an academic background in Geoscience, Electronic Production and Information Experience Design, he draws elements from a wide knowledge spectrum in the fields of Art, Science and Technology to carry out his work.

He has two solo albums under his name (Perpetuum Mobile – 2017, Phenomena – 2014), two EPs (Modern Catwalk Music – 2022, 40 EP – 2020), two published soundtracks (Iolas Wonderland – 2021, The Village – 2019) and various performances internationally. His collaborations include electronic musician Robert Rich (Vestiges – 2016), director Shekhar Kapur (Brides of the Well – 2018) and film composer George Kallis (The Last warrior: Root of Evil – 2021, Cliffs of Freedom – 2019) among others. As a designer, he has presented work at sites including the Barbican Centre (Nesta FutureFest – 2019, with Akvile Terminaite), the Somerset House (24 Hours in Uchronia with Helga Schmid – 2020) and Christie's London (Christie's Lates – 2023, with Scarlett Yang).

His current research is on exploiting game graphics rendering for sound generation. His original devices have been displayed at prestigious venues in the UK (Iklectik – 2020), France (IRCAM – 2020, 2019) and the USA (Mass MoCA – 2019). He recently published two scientific papers through the Audio Engineering Society titled The State of the Art in Procedural Audio, co-written with Professor Joshua Reiss and Dr Pedro Pestana, and Using Texture Maps to Procedurally Generate Sound in Virtual Environments. These papers were presented at the AES 156th Audio Engineering Convention (Madrid, Spain – 2024) and AES 6th International Conference on Audio for Games (Tokyo, Japan – 2024) respectively.

EXPLOITING GAME GRAPHICS RENDERING FOR SOUND GENERATION

Procedural content generation supports the creation of rich and varied games, but audio design has not kept pace with such innovation. Often the visual aspects of every asset in the scene may be procedurally rendered, yet audio developers still rely mostly on pre-recorded samples in order to carry out their tasks. However, much of the information required to determine smooth audiovisual interactions is already there. For example, the size, shape, material and movement of assets offer potential types of data that can drive audio algorithms directly. This topic explores how available animation information in the game engine can be used to generate the sound effects produced when objects interact in real-time.

DOMINIK JEURISSEN

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Skills: Game AI, Large Language Models, Reinforcement Learning, Unsupervised Learning

BIOGRAPHY

Hey, I'm Dominik Jeurissen, and I'm passionate about both software engineering and machine learning, with a particular interest in fully autonomous agents that do not rely on absurd amounts of data. My focus areas include reinforcement learning, unsupervised learning, and the emerging capabilities of large language models.

I earned my MSc in Artificial Intelligence from Maastricht University and my BSc in Computer Science with a focus on Applied Mathematics from RWTH Aachen. During my undergraduate studies, I worked as a software engineer at INFORM GmbH, contributing to their supply management software, add*ONE.

PLAYING STRATEGY GAMES WITH LARGE LANGUAGE MODELS

My PhD is a collaboration with Creative Assembly, focusing on researching AI for complex strategy games, such as Total War. With the recent emergence of Large Language Models (LLMs), I'm exploring their potential to enhance game-playing agents. LLMs can instantly recall knowledge on almost any topic (though not without occasional errors), perform basic reasoning, and are easily configured for a wide range of text-based tasks. These abilities make them especially promising for game development, where machine learning agents often struggle due to constantly changing game environments.

DORUK BALCI

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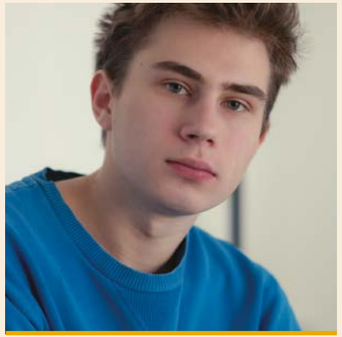
Skills: Game Design and Development, Qualitative Research

BIOGRAPHY

I am a third-year PhD student at the University of York, and a game maker interested in the relationship between player creativity and game design. My work is centered around the transformative capabilities of players to invent their own metagames and play-practices, and how to support this through game design. My other interests include: drawing, literature, making zines and browser games, and playing with tools I don't really understand.

DESIGNING FOR APPROPRIATIVE PLAY

How do we make games which we want to be messed with, changed fundamentally beyond our expectations in play? How do we make up rules that are intended to be bent, changed or broken? Why would we want that? Play practices that transform structures, subvert expectations and re-define their contexts are celebrated in many aspects of culture and can lead to personal and meaningful experiences. Yet research on this topic from a game design perspective has been scarce. In my project, I am exploring how we can design game systems that invite players to assume ownership of their play-practices through exploring alternative paradigms of game design.



FILIP SROKA

Queen Mary University of London

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Skills: Game AI, DDA, VR

BIOGRAPHY

Filip is a Computer Science researcher specialising in Game AI. He acquired an Integrated Masters in Computer Science from Queen Mary University of London and is pursuing a PhD in Game AI with iGGi. With a passion for algorithms and problem-solving, he constantly seeks new challenges to enhance his skills. As an avid LEGO collector and investor, he brings a unique blend of technical and creative abilities. He is excited about the potential of the Metaverse and is driven by the role of technology in shaping its future.

ENHANCING SKILL ACQUISITION IN VR RHYTHM GAMES: LEVERAGING DDA FOR EFFECTIVE LEARNING MAP GENERATION

His research explores the integration of Dynamic Difficulty Adjustment (DDA) into VR rhythm games such as Beat Saber, with the goal of enhancing player skill development and motivation through the application of learning theories. By addressing difficulty spikes, the project creates personalised learning experiences using human-made maps designed to accelerate the learning process. Key components include player evaluation, map segmentation, and procedural generation. The broader aim is to extend these findings to other rhythm games, offering benefits to players, game developers, and the health and fitness industry.

FLORENCE SMITH NICHOLLS

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Game design, narrative design, HCI research

BIOGRAPHY

Prior to their doctoral research, Florence worked for 7 years in the heritage sector as a field archaeologist and heritage consultant for companies such as Museum of London Archaeology and Land Use Consultants. They are also a freelance games writer and worked as a Story Tech in the writers' room for the adventure game Saltsea Chronicles, made by the indie studio Die Gute Fabrik. They have worked with the British Library, Now Play This and Chester Heritage Festival. They were a member of the 2022 Game Awards Future Class cohort.

GAMES ARCHAEOLOGY AS GAMES PRESERVATION

Florence's research is primarily based around developing novel methodologies for archaeologically recording video games. Their doctoral project has focused on three main projects. The first of these was an archaeological survey of player messages in Elden Ring, using plans and screenshots to record their context and infer patterns in player behaviour. The second was a study of how players implicitly use archaeological theory to interpret environmental storytelling in games, using the exploration game Nothing Beside Remains as a case study. Florence and their supervisor Mike Cook collaborated on NBR, which procedurally generates a ruined village. Having control over the simulation and material culture in the game meant they could experiment with methods for archaeological storytelling. The third main project was a series of go-along interviews in the MMO Wurm Online, in which interviews took place during walks within the game world itself, as a qualitative research method geared towards capturing personal reflections on the history of the game.

Overall, these case studies demonstrate how archaeological approaches can be adapted to suit the unique affordances of individual games, with applications in narrative design and game preservation.

FRANCESCA FOFFANO

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Skills: UX Research, Player Experience, Emotions in games, Qualitative methods

BIOGRAPHY

Francesca Foffano is PhD UX researcher and soon to be lecturer at the University of York. She specializes in player research, in particular understanding what part of game design enhances or diminishes the emotional player experience. Her work has focused more generally on player difficulty, in particular, what causes players to get stuck in games. Previously, she collaborated with AbleGamers in understanding the use of video games in occupational therapy and working on player perception of adaptive game managers (AI directors) for the University of Reykjavik.

EMOTIONAL DESIGN

When it comes to emotions in video games, the player should feel the experience, not just be a spectator. Being able to create a game that makes you deeply mesmerized, bittersweet, or sentimental is every creator's dream, but the danger is that you end up forcing the player to feel something. Sometimes this can actually ruin the experience for the player, or worse, hurt them if the experience is too overwhelming. My PhD aims to understand how emotions are processed in games to inform how to better emotional design games and effective solutions to facilitate accessibility that do not consist in excluding the players.

GEORGE LONG

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Skills: Game AI, Game Data, Design and Development

BIOGRAPHY

George is an IGGI PhD student interested in AI assisted game design, particularly in how it can be used to assist in the creation and balancing of game mechanics. After graduating with a BSc in Computer Science at the University of Essex, he joined IGGI in 2021 to be able to research how Artificial Intelligence can be applied specifically to reduce the prevalence of Min-Maxing in Role-Playing Games.

METAGAME BALANCING IN ROLE-PLAYING GAMES

My research focuses on the concepts of Min-Maxing and Meta in Role-Playing Games, and how we can use AI assisted game design to reduce their prevalence. Min-Maxing in Role-Playing Game refers to the idea of building a character in a Role-Playing Game by maximising their positive traits while minimising negative ones, often through exploiting game mechanics. This can cause optimal strategies to emerge which not only have the potential to upset the game balance, but when these strategies become prominent enough in the community to form a Meta, it can have wider consequences such as the shunning of players deemed not to be using optimal strategies, and loss of creative choice when building characters. There are two methods I am looking into to reduce the effectiveness of Min-Maxing. The first is using AI to discover these Min-Maxed strategies. Secondly, how AI can be used in the game balancing process to identify and modify the mechanics which enable these strategies. Currently, I am focusing on the first method, with my research looking into how we can measure the effectiveness of units in combat scenarios to identify which units could be considered unbalanced.

GORM LAI

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Skills: C++, Python, Generative AI, Procedural Content Generation, Computer Graphics, Character Animation and Modelling

BIOGRAPHY

Gorm is currently a mature part-time PhD candidate at Goldsmiths, focusing on mixed-initiative co-creative artificial intelligence and evolutionary techniques.

He is an experienced senior graphics and game engine programmer, with a swiss army knife certificate in cross-platform development and experimental game development. He has worked on 17 commercial games since 2004; among them several BAFTA winners..

Besides video games, his portfolio includes virtual reality, and a couple of interactive installations and non-game applications. He is a cross-platform specialist, and has just in the last couple of years, helped bring games to Windows, OS X, Linux, iOS, Android, Oculus Rift and more. Going back, He has worked on most modern platforms (Xbox 360/PS2/embedded devices/ etc).

Gorm has co-founded the Nordic Game Jam as well as the Global Game Jam.

ENHANCING ARTISTS EXISTING WORKFLOWS USING MIXED-INITIATIVE METHODS

As a veteran with near 20 years of games industry experience, Gorm is aware of the challenges that developers face when producing assets for games. Using this background, Gorm is working on integrating mixed-initiative methods into Blender, the open source 3D content creation package.

Gorm is specifically working on enhancing the workflow for modelling and animating characters, using evolutionary algorithms and machine learning for background processing while presenting the results using mixed-initiative methods that focus on enhancing artists' existing pipelines.

JAMES GARDNER

University of York

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Skills: Deep Learning, Computer Vision, Neural Fields, Generative Models, Inverse Rendering

BIOGRAPHY

I am a fourth-year PhD student at The University of York, specialising in computer vision and machine learning for 3D scene understanding. Supervised by Dr William Smith, my research focuses on neural-based vision and language priors in inverse rendering and scene representation learning. I'm particularly interested in neural fields, generative models, 3D computer vision, differentiable rendering, geometric deep learning, multi-modal models, and 3D scene understanding in general. My research has been recognised with publications at prestigious conferences including NeurIPS and ECCV.

Currently, I am working as a research fellow on the ALL.VP project, funded by BridgeAI and Dock10, developing relightable green screen performance capture using deep learning and inverse rendering techniques. This work aims to provide greater creative control to film and TV productions without requiring expensive LED volumes or post-production.

I hold an MEng in Electronic Engineering from The University of York, for which I was awarded the IET Prize for outstanding performance and the Malden Owen Award for the best-graduating student on an MEng programme.

SELF-SUPERVISED 3D SCENE UNDERSTANDING AND RELIGHTING

My research lies at the intersection of computer vision, machine learning, and 3D scene understanding, with a particular focus on neural-based approaches and the integration of vision and language priors. My work spans a range of topics including neural fields, generative models, differentiable rendering, and geometric deep learning. A key theme in my research is the use of 3D inductive biases for inverse rendering, addressing challenges such as illumination estimation, albedo/geometry disentanglement, and shadow handling in complex outdoor scenes. I've made contributions in creating a rotation-equivariant neural illumination model and spherical neural models for sky visibility estimation in outdoor inverse rendering. Additionally, my work extends to learning rotation-equivariant latent representations of the world from 360-degree videos, aimed at advancing the field of 3D scene understanding and developing models with an understanding of core physical principles such as object permanence. Through my research, I aim to build computer systems capable of deeply comprehending the 3D world, utilising self-supervised, generative, and non-generative approaches to push the boundaries of what's possible in computer vision and scene representation learning.

JOSHUA KRITZ

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BIOGRAPHY

Aritifical Inteligence for Tabletop games Graduated in Applied Mathematics in computer science, however my love for games pushed me to dedicate myself for studying them. This led me to brave many areas of knowledge, such as: psychology, design, education, production and entrepreneurship. My work as a teacher let me develop many of these skills in practice, besides invoking a new perspective about the world.

On a personal level, I love new experiences that can teach me new knowledge and, most important, I am very open minded and easy to talk to! I believe discussion leads to enlightenment

USING SYNERGY TO ENHANCE AND ACELERATE CARD GAMES AUTOMATED PLAYTESTING

Card games, in particular Trading Card Games(TCGs) thrive on using the synergy between the cards to create emergent and interesting gameplay. However, these games usually have hundreds of different cards to create such rich experience, with some older TCGs featuring thousands of different cards.

With such a huge amount of different cards playtesting these games present a big challenge. For example a new set of Magic the Gathering takes over 3 years of development to be fully designed. But even considering simpler exemplars like Dominion or Assencion can be difficult to balance, and both games are known to need a few expansions of experience to indeed provide a well balanced experience.

One way to make this task faster and easier is to use automated agents to playtest the game exhaustively and provide much needed data. Whilst this would assist card game development, it is not used in practice, the playtesting of card games is still completely done by players. Even with systematic playtesting there is a limit of how much of the possibilities humans can test. However, implementing playtesting of card games have two big challenges, which are the main reason it has not been implemented in practice yet.

First: Automated agents are not great when playing a game with too many variables (different cards)

Second: The possible combinations of cards used in a deck or set of a single game is huge.

My research aim to address the second issue by using a theory of synergy between cards to reduce the search space necessary to properly evaluate a card game.

KARL CLARKE

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Skills: Environment Design, Immersive Technologies, SocialVR

BIOGRAPHY

Karl Clarke is a PhD researcher focused on how virtual environments influence social interaction. He was born in England, grew up in the Middle East, and returned to the UK for university. He holds a Bachelor's and a Master's degree in Audio Technology. During the COVID-19 lockdown, he began exploring virtual reality after getting access to a headset, which led to a shift in focus toward social VR.

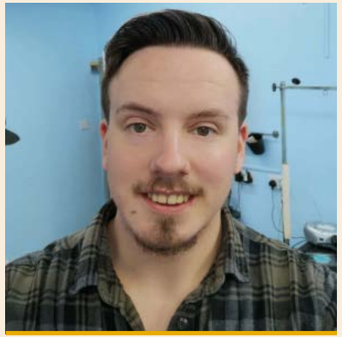
He is now part of the Intelligent Games and Game Intelligence (iGGi) doctoral programme, where his research looks at how spatial layouts and group behavior are shaped by virtual environments in free-standing social settings.

Outside of his research, Karl runs SONAR, a music group hosted in VRChat that uses social VR for live performance and shared listening experiences. Through this project, he has independently learned game development skills in 3D modelling, scripting, and a small amount of graphics programming.

He is currently looking to collaborate with VR studios or social platforms working on immersive and social experiences.

WHERE WE STAND: DESIGNING FOR SPATIAL INTERACTION IN SOCIAL VR

I investigate how people physically orient themselves in free-standing, performance-based social interactions in virtual reality. Combining ethnographic observation and experimental methods, I study how spatial behaviours such as body orientation, proximity, and gaze are used to negotiate presence, attention, and participation. My goal is to uncover the embodied dynamics of social interaction and translate these insights into principles for the design of social VR platform environments that support natural, intuitive, and inclusive modes of communication.



KYLE WORRALL

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Skills: Machine Learning Engineering, Research, Audio Programming, Audio Implementation, Music Design.

BIOGRAPHY

Kyle is a final-year PhD researcher at the Centre for Doctoral Training in Intelligent Games and Game Intelligence (IGGI) at the University of York, where his work centers on pioneering deep learning-driven music tools for video game composers. In addition to his research, Kyle is a Lecturer in Games Programming at Edge Hill University, where he encourages the next generation of game developers to appreciate the critical role of audio in interactive experiences.

Beyond academia, Kyle is the Founder of Cocreative Technology, an ethical AI music startup on a mission to empower musicians with cutting-edge, AI-driven tools that amplify creative expression, combat burnout, and elevate the emotional depth of game soundtracks.

GENERATING EXPRESSIVE VARIATION FOR REDUCED FATIGUE IN GAME MUSIC

Kyle's research explores how deep learning and generative AI can enhance the creative workflow of video game composers, and improve the experience of players by reducing musical repetition. His work spans symbolic music generation, and real-time adaptive music systems, aiming to improve the emotional expressiveness and of game audio.

His recent publications focus on deep learning models for interactive music authoring, expressive performance modelling, the ethical considerations in AI-assisted creativity, and the integration of neural networks with procedural music generation in games. By combining symbolic AI and audio signal processing, Kyle develops tools that support composers in ideation, iteration, and adaptive composition, while remaining transparent and musically intuitive.

An experienced speaker, Kyle has presented at leading industry events, including Airwiggle's AirCon 2025, Game Sound Con 2024, Audio Dev Con 2024, the Global Arts and Psychology Symposium 2023, the Play Again Symposium 2024, and the Digital Creativity, Industry and Culture Conference 2022. He is also a regular contributor to the IGGI Conference (2020–2024), and has been featured in TechCrunch, Dazed, The Story of the Sound, and The Audio Programmer podcast, as well as featured on a panel with leaders in game audio from Meta and Sony.

LAURA HELSBY

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Skills: Qualitative Research, Mental Health, Games and Wellbeing, Player Experience

BIOGRAPHY

Laura has been gaming since she was five years old and got her first Gameboy Colour. She achieved a BSc in Psychology from the University of York and a MSc in Foundations in Clinical Psychology from Newcastle University. Currently she is employed as a Lecturer in Psychology at LJMU and is looking for part-time RA work.

Her research interests include the impact of digital technologies on wellbeing, games as a psychological tool and research focused on evaluating and improving research or services. She has a particular interest in qualitative research.

EXPLORING THE PLAYER EXPERIENCE OF PEOPLE WITH PERSISTENT LOW MOOD

This project focuses on how people with persistent low mood play and experience games, and what this might mean for their wellbeing. This includes gaming preferences, habits and how gaming might help or hinder someone in terms of their mental health and wellbeing. Three studies have been conducted, including a survey investigating gaming experiences during the Covid-19 pandemic, an interview study asking people with low mood what they play and why, and a diary study investigating the 'in the moment' motivations for gaming and effects of gaming on mood. This research has applications in game design and mental health research, as well as player experience more widely.

LAUREN WINTER

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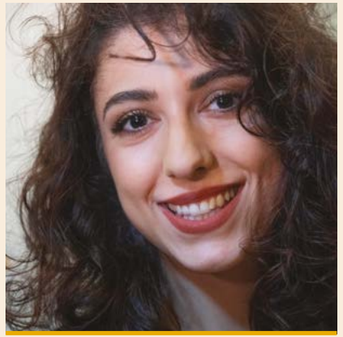
BIOGRAPHY

Lauren was introduced to gaming from an early age when they received a PlayStation One as a gift. From there, video games became a huge part of their life, exploring new worlds through the eyes of a vast array of characters. Following their undergraduate degree in Psychology with Sociology, they completed their MSc in Psychology Research Methods at the University of Nottingham. A fascination with looking for trends in data and creating complex spreadsheets in Excel led them to a job analysing student information in a school, where they also ran four Esports teams competing across three games. Their research interests primarily focus on player research in team-based PVP games and looking at players' awareness of each other in these environments.

NON-GAMEPLAY DESIGN FACTORS AFFECTING COOPERATIVE AND COMPETITIVE PRESENCE

Lauren's project will investigate the interaction between competitive and cooperative play, such as is found in team-based PVP environments. Simultaneous combinations of competitive and cooperative play are found in many high grossing games, such as Call of Duty and League of Legends. These games provide environments for players to play with and against teams of both friends and strangers, and illicit social presence, a term used to indicate the awareness of others in the digital environment. Lauren's research will focus on two types of social presence: cooperative presence and competitive presence. Despite the popularity of these games, little is known about the juncture between the two and the effects they have on player experience, or what game design factors can be used to manipulate them.

Lauren's work will focus on identifying non-gameplay design factors that influence cooperative and competitive presence. Through the development of a bespoke game, created in Unity, Lauren will investigate how people work together and against each other. Does better cooperation lead to better competition and does better competition lead to better cooperation?



LUIZA GOSSIAN

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Skills: Applied/Serious Game Design, Technical design, Rapid prototyping, Unity, Visual and Graphic design

BIOGRAPHY

Luiza is a multidisciplinary researcher, game designer and developer interested in translating real world concepts into engaging game mechanics. She is passionate about creating games that can encourage an understanding of ourselves and the socially connected world we live in.

Luiza is also an experienced painter, graphic designer and photographer and uses her visual skills and psychology background to prototype experimental game designs, design game documentation and craft atmospheric experiences.

SERIOUSLY CASUAL GAMES: ALTERNATIVE APPROACHES TO DESIGNING GENOCIDE GAMES

How can a subject as serious as genocide be successfully and respectfully translated into a casual game?

Difficult subjects are often implemented with polar opposite approaches in games: either they are made to be highly emotional, socially conscious games that portray the gravity of a situation, yet are only played by those already informed and aware; or they are pure entertainment games that turn these subjects into wild amusement parks that appeal to broader gamer audiences yet do nothing to appropriately address the themes they glorify.

Within this polarity there exists the potential to create games that tackle more serious subjects yet do so in a way that is more lighthearted and entertaining, and therefore more likely to reach the audiences who stand to gain the most.

In her research, Luiza is exploring how to design games about genocide that break away from traditional approaches and embrace the ludic potential of games. Drawing on theories of intergroup and cultural psychology, as well as her own experiences, she is exploring how these difficult themes can be explored in engaging, effective and informative ways.

Currently, she is developing a hypercasual game that abstracts the ten stages of genocide to be used as an educational primer, a Tetris-esq game that uses social media and government sources to present the realities of refugees fleeing their homes, and a cosy mystery-adventure game which enables players to uncover historical crimes in a far away land.

MARKO TOT

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Skills: Reinforcement Learning, Model Based Learning, Planning

BIOGRAPHY

I started my journey in video games when I got my first PC at the age of six, and at that point it was decided that I'm going to make a career out of it. So here I am, ~20 years later, a PhD student at Queen Mary University of London, trying to make AI agents that can play games, and regularly spending too much time playing games under the excuse that it's all for 'research purpose'.

SAMPLE EFFICIENT EXPLORATION WITH MONTE CARLO GRAPH SEARCH

Statistical Forward Planning methods have proven to be effective in some simpler domains and, without requiring any prior learning, they provide a good out of the box AI algorithm. However, while these algorithms shine in certain games, they struggle to perform well in cases where the reward received from the game is sparse. In games where it takes a series of optimal actions to reach the goal, without any significant feedback from the environment in between, their performance drops significantly.

My research is centered on solving this problem through automatic sub-goal generation and utilisation of local learned forward models. Creation of the sub-goals could be used to simulate the feedback from the environment and give regular rewards to the agent even in sparse and complex environments.

MICHAEL JOHN SAIGER

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Skills: User Research, Game Design, Design Based Research

BIOGRAPHY

Michael is a game design researcher investigating how we engage players (particularly young people) in the design and development of applied games. He has facilitated co-design workshops across health and education research, designing solutions to research problems. Most recently, he was employed as a game design researcher on an ESRC funded project to design and evaluate a game for teacher recruitment.

DESIGNING APPLIED GAMES WITH AND FOR YOUNG PEOPLE: FACTORS FOR CO-DESIGN

Michael's research involves the facilitation and involvement of children and young people in the design of mental health games. Through their research, they have co-designed mental health prototypes and explored the factors to impact participation and engagement. Their research has highlighted how there are facilitation barriers and shifts in participant preferences towards how young people want to interact during co-design.

MICHELANGELO CONSERVA

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Skills: Machine Learning

BIOGRAPHY

Michelangelo Conserva is a PhD candidate studying reinforcement learning from a practical and theoretical perspective. He has interned at Google where he developed a graph neural network methodology to identify food flows in Sub Saharan Africa.

REINFORCEMENT LEARNING THEORY AND PRACTICE

We explored the hardness of reinforcing learning tasks and developed Bayesian methods to solve them.

NATHAN JOHN

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BIOGRAPHY

After graduating with a MEng in Computer Science from the University of Bristol, Nathan joined the games industry as a programmer, working for Climax Studios, Gaming Corps and Freejam, before moving to a career as a general software engineer, while still developing indie games on the side. His experiences across a range of industries sparked a passion for testing, and left him wondering if there were was to improve the automated testing in game development.

DEBUGGING GAME AI USING ADVERSARIAL AGENTS

Borne from an experiment Nathan had performed training AIs to play his indie game WarpBall, in which he found the agents solved for exploits in the authored AI rather than playing the game well, his research project proposes a novel method for improving the quality of behaviour of human authored agents by pitting them against trained agents and observing what bad behaviours/exploits the trained agents reveal. Authored agents refer to AI agents whose actions are explicitly designed by programmers using traditional techniques such as Utility functions, Behaviour Trees and state machines; trained agents refer to agents whose behaviour is learned by playing many games against the authored agents.

NICOLE LEVERMORE

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Skills: Neuroimaging, Electrophysiology.

BIOGRAPHY

My academic background is within Neuroscience, having achieved BSc Neuroscience and Psychology, MSc Translational Neuroscience and an MPhil in Auditory Neuroscience. Outside of my research interests, I enjoy playing video games, hiking and playing the cello.

STUDYING COGNITION AND MENTAL HEALTH USING VIDEO GAMES

Video games have enormous potential for research on cognition and mental health. In my project, I will use video games to perform basic research into a common psychiatric disorder (ADHD), paving the way for improved diagnosis, monitoring and therapy. ADHD is typically diagnosed in childhood and is characterised by failures of attentional state maintenance. This project involves using cutting-edge neuroimaging techniques to investigate how subjects with and without ADHD switch between attentional state (for example, 'engagement' and 'flow') while playing a cognitively engaging video game. The ultimate goal is to use video games to understand how mental health impacts people's ability to focus on cognitively demanding tasks and, potentially, to develop therapeutic intervention.

NIRIT BINYAMINI BEN-MEIR

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BIOGRAPHY

Nirit Binyamini Ben-Meir is a designer/artist based in London. Her work explores the interconnection between society, technology and ecology.

She is an Associate Lecturer at the Royal College of Art London, where she gained her MA in Information Experience Design.

She has a professional background in visual communication and interaction design. She uses participatory installations, digital tools and responsive plants to design interventions and create experiences for humans to interact with their biosphere. She combines ecological systems with technology to challenge human perception and attitude towards plants and provoke discussion about humans' relationship with the environment.

THE BIO-DIGITAL GARDEN

Nirit's main research interests are around More-Than-Human Interactions and the coupling of living plants and organisms with computational interactions. She investigates how these hybrid interactions may help mediate relatable, sensory experiences with plants and influence people's attitudes towards ecological stewardship. She is developing the Bio-Digital Garden concept, which combines computational elements and living moss, a responsive plant that gives qualitative visual feedback to changes in its environment in real-time. Her research focuses on utilising human-computer-plant interactions to identify weaknesses in ecological stewardship and care for non-human entities. Additionally, she aims to highlight the benefits of interacting with plants through playful experiences, bridging time-scale gaps, and addressing plant blindness.

OCÉANE LISSILLOUR

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Skills: UX Research, Psychology, Human Computer Interaction

BIOGRAPHY

I started my journey as an undergrad in psychology specialising in ergonomics. It was then that I realised that I could study video games for a living. This led me to relocate myself to the south of France to, mostly enjoy the sun, but also undertake my dream MSc in Technological Innovation and Cognitive Psychology. As part of my master's internship I had the pleasure to work in collaboration with researchers from the CLLE, a laboratory branch of the national research centre. This helped me develop my knowledge and awareness of video games and motivational processes and convinced me that if I could survive the bureaucracy of the French Government I could probably do a PhD. Afterwards, I moved on to work in Aeronautics for a brief time but landed back to academia in 2024 to join the wonderful iGGI community as a postgraduate researcher.

ASSESSING THE EFFECTIVENESS OF GAMIFIED SYSTEMS FOR SERIOUS APPLICATIONS

My research focuses on the act of taking a regular activity and 'gamifying' it by applying mechanics commonly found inside video games (such as points). This technique has been widely applied within research but its psychological aspects have seldom been studied. The aim of this thesis is to assess the efficacy and applicability of this technique, particularly the score element mechanic. It focuses on understanding the functionalisation of numerical values in games as this has not been studied previously in the literature.

This research hopes to contribute to the better understanding of the impact of the design of points on motivation and behaviour. It has been proposed in precedent literature that the use of gamification will provide a partial solution to the critical decline in learners' motivation and engagement the schooling system faces today.

OLIVER WITHINGTON

Queen Mary, University of London

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Personal Website: owithington.co.uk

Skills: Software Engineering; Algorithm Design; Game Development; 3D Modelling

BIOGRAPHY

Hey there! I am an AI researcher and software engineer based in London. When I'm not developing algorithms or writing papers, during the day you'll likely find me chasing my children around the playground, and during the evening either making, writing about or playing video games (my mum used to insist I'd grow out of this hobby. She could not have been more wrong)

NOVEL METHODS FOR EVALUATING LEVEL GENERATION SYSTEMS

My research focuses on new methods and systems for evaluating and comparing content generation systems in games. Robust methods in this area are vitally important, both for researchers looking to identify the state-of-the-art, and for game designers looking to select the right systems for their projects. However, it is a significant challenge, due to the diversity, subjectivity and complexity of game content. During my PhD I have developed a roster of alternative methods and algorithms which I've published at a range of the main conferences in my area, including, CoG, AIIDE and FDG. These all represent progress towards my final goal: a robust toolbox of evaluation techniques for generative systems, something that feels increasingly important as generative systems continue to find wider purchase within society.

PEYMAN HOSSEINI

Queen Mary, University of London

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Skills: Natural Language Processing, Deep Learning Architectures, Computer Vision

BIOGRAPHY

Peyman is interested in using his computer science knowledge to support society's well-being. Raised in a family where almost everyone's work is somehow related to mathematics and its applications, he became passionate about algorithms and combinatorics from an early age. This prompted him to pursue an undergraduate degree in computer engineering with a focus on IT and AI. This background led him to start his PhD at IGGI on building more powerful yet efficient Natural Language Processing models for analysing textual data, a rich and abundant source of gaming feedback.

IMPROVING EFFICIENCY AND EFFICACY OF NATURAL LANGUAGE PROCESSING MODELS IN THE LLM ERA

Peyman's research focuses on advancing deep learning architectures for natural language processing and building tools on top of state-of-the-art models. To contribute to the fundamental understanding and practical application of deep learning in natural language processing, focusing on efficiency and effectiveness, he pursues two main objectives:

1- Designing more efficient models that match or surpass state-of-the-art performance with fewer parameters.

2- Systematically analyzing language models to develop solutions that enhance their effectiveness for end-users, such as game studios.

His recent accomplishments towards these goals include:

1. Developing novel attention mechanisms:

1.1 Optimized Attention: 25% parameter reduction

1.2 Efficient Attention: 50% parameter reduction

1.3 Super Attention: 25% parameter reduction with significant performance improvements in language and vision tasks

1.4 All mechanisms demonstrate comparable or superior performance to standard attention across various inputs.

2. Designing and training Hummingbird, a proof-of-concept small language model using Efficient Attention, available on HuggingFace.

3. Conducting a study on large language models' limitations in analyzing lengthy reviews for basic NLP tasks. Proposed solutions offer substantial performance improvements while reducing API costs by more than 90%.

PHILIP SMITH

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BIOGRAPHY

I was born and raised in Bermuda, a small island in the Atlantic Ocean with an approximate population of 65,000 people. I finished my undergraduate degree in Computer Science with a Specialist in Game Design at University of Toronto. For my Master's degree, I studied Computer Games Technology at City, University of London. My goal is to help expand the use of video games from purely recreational activities to viable avenues for aiding in real world problems.

CONSTRUCTING A FRAMEWORK FOR ENGAGING CITIZEN SCIENCE GAME DESIGN

My research will be focusing on maximizing player engagement in gamified citizen science as a continuation of my Master's thesis. 'Citizen science' is the practice of employing volunteers from the general public for the collection and/or processing of data with respect to a scientific project. Gamified citizen science projects have relied upon prolonged engagement from volunteers, but the number of long-term participants have been unsatisfactory in current projects. This project attempts to address the lack of sufficient volunteer engagement in gamified citizen science projects. The aim is to build a framework meant to guide game designers in creating an engaging citizen science video game based on the values set by Self-Determination Theory (SDT). These values adhere to the theory's concept of intrinsic and extrinsic motivators of engagement. Intrinsic motivation relies on the factors of player autonomy, competence, and relatedness during gameplay. Extrinsic motivation relies on external incentives to core gameplay such as in-game rewards.

As part of my research, I am evaluating multiple game design frameworks focused on Applied Games and identifying the merits and flaws each have when applied to a citizen science context. The information I gather will formulate a prototype of the Framework that will be iterated upon through design workshops, development, and playtesting.

PRAKRITI NAYAK

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Skills: Player Experience, Applied Games, Neuroscience, Scientific Editing

BIOGRAPHY

Prakriti is a neuroscientist passionate about pushing boundaries at the intersection of technology and biological research. Her journey began with a deep dive into neuroscience during her master's program, where she explored large-scale imaging data and mastered statistical modelling techniques. Afterward, she pursued a career in scientific editing. She views gaming as an excellent platform to connect different fields, such as computational modelling and behaviour. Prakriti plans to develop a model of player uncertainty to enhance the gaming experience by setting difficulty levels that are enjoyable for each player, making games more accessible for people with limited cognitive capabilities. Additionally, her work has diagnostic applications.

PLAYER UNCERTAINTY IN NAVIGATION

Navigation and spatial memory are essential cognitive processes that enable individuals to orient themselves in complex environments. Amid the inherent uncertainty of environmental noise and cognitive variability, the brain employs sophisticated strategies to make navigational decisions. This project aims to elucidate the cognitive underpinnings of spatial navigation performance by leveraging gaming data to understand how individuals manage spatial uncertainty. The plan is to adapt a Bayesian ideal-observer model based on visual simultaneous localization and mapping. The model will fit and predict the player's moment-by-moment movement decisions, given the first-person view and the map of the game environment. Fitting the model to the players' gameplay trajectories will yield parameters indicating each individual's levels of visual, motor, and memory noise. The combination of parameters that best differentiate between players will then be examined. This research has the potential to enhance our understanding of spatial navigation and its underlying mechanisms, as well as improve spatial navigation in games, offering an adaptive gaming experience tailored to individual spatial uncertainty levels.

PRASAD SANDBHOR

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Personal Website: linktr.ee/prasadsandbhor

Skills: Serious Game Design, Design Research, Qualitative Research, Design Management

BIOGRAPHY

Prasad Sandbhor is a serious game designer and researcher who specialises in creating digital, tabletop, and hybrid games for various fields, including education, healthcare, social safety, sustainability, and science outreach. He is the co-founder of the 'Play in Nature' initiative that crafts playful experiences to connect people with nature around them. Currently, Prasad is completing a PhD in Intelligent Games and Games Intelligence where he is developing a framework for designing role-playing games that help individuals understand climate actions. Alongside his game design and research practice, Prasad teaches game design and enjoys writing short stories in the Marathi language.

THINKING THROUGH: DESIGNING ROLE-PLAYING GAMES THAT HELP PLAYERS IN THINKING THROUGH CLIMATE ACTIONS

He began with 'Climate Club', a tabletop role-playing game that focuses on decision-making challenges related to climate action within everyday constraints. Evaluations of 'Climate Club' showed that using a curated group setup, relatable contexts, problem-solving mechanics, and an explicit focus on climate issues enhance participants' understanding, while group dynamics and asymmetric role-playing can sometimes hinder progress. Drawing from this and other literature, Prasad developed 'Climate Club 2.0', a mini live-action role-playing game (LARP) that centers on planning a climate-friendly holiday. In this version, allowing players to adopt distinct approaches to climate actions through role-playing, exploring various alternative actions, and incorporating a variety of resources and post-play activities significantly improved the game's outcomes.

In addition to his PhD work at iGGi, Prasad has collaborated with the Advanced Manufacturing Research Centre (AMRC) and the York Environmental Sustainability Institute (YESI), where he designed and evaluated serious games aimed at envisioning sustainable manufacturing and developing diverse urban treescapes, respectively.

REMO SASSO

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Skills: Reinforcement Learning, Large Language Models, Machine Learning

BIOGRAPHY

I hold a BSc and MSc in Artificial Intelligence at the University of Groningen (NL) and am currently a PhD student at the Queen Mary University of London under the supervision of Paulo Rauber. In addition to my academic work, I have worked as a Machine Learning engineer, and am currently the Head of AI at xDNA, an AI/Cybersecurity-based start-up from the Netherlands. Here I'm leading the initiative Project Aletheia, where we develop AI-driven tools to optimize the workflow of professional fact-checkers, with the overarching goal of ensuring information integrity in the world.

FOUNDATION WORLD MODELS AND FOUNDATION AGENTS FOR REINFORCEMENT LEARNING

My research focuses on developing reinforcement learning algorithms that are both scalable and sample-efficient through Bayesian methods and model-based approaches, recently with a particular emphasis on Large Language Models (LLMs). My previous research focused on principled, efficient and scalable exploration algorithms for reinforcement learning, e.g. Poster Sampling for Deep Reinforcement Learning (ICML 2023), where we developed a reinforcement learning algorithm that can be considered state-of-the-art in Atari games. Currently I'm particularly interested in the integration of LLMs in the reinforcement learning framework, both as decision-making agents and simulators. My current research, called Foundation World Models and Foundation Agents for Reinforcement Learning investigates this integration in-depth and shows that large models show significant potential in various reinforcement learning tasks, ranging from decision-making in stochastic environments to serving as world models.

RORY DAVIDSON

University of York

Supervisor(s): Professor Paul Cairns

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iGGi Webpage: iggi-phd.org/people/rory-davidson

Skills: Qualitative research methods, cognitive psychology, Unity design

BIOGRAPHY

As the joke goes, there are 10 types of people in the world; those who understand binary, and those who do not. When I first came to York to study Computer Science, it was with the intention of being one of the former. But as I completed my undergraduate studies, I came to realize a more useful split is perhaps between those who understand *people* and those who do not, moving towards a Masters in psychology research and an interest in HCI, especially relating to games and motivation.

LEARNING AND STRATEGY ACQUISITION IN DIGITAL GAMES

The intuition that games may be potent educational tools has been around since the dawn of the industry, but putting that intuition into practise has proven easier said than done. In particular, while numerous examples of successful integrations of games and education exist, the core problem of *reliably* imparting useful educational goals without jeopardizing the motivation properties that make games appealing tools in the first place remains without clear answers, whether through modern methods like gamification or older approaches like edutainment gaming.

This study aims to ground these problems by first examining that initial underlying intuition – what makes learning within games different from learning in other contexts in the first place? Before we can reliably learn FROM games, we need to understand the precise mechanisms of learning IN them, by examining existing theories of learning, strategy, and motivation, and identifying how they might best be adapted for games specifically.

ROSS FIFIELD

University of York

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Bluesky: /rossfifield.bsky.social

Skills: Games Design, User Research, Speculative Design

BIOGRAPHY

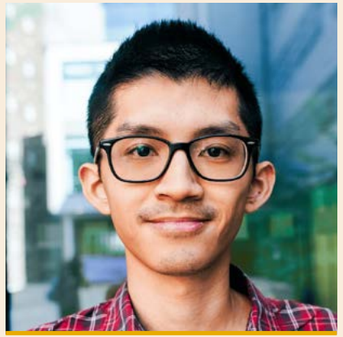
I am a user-centred games designer and researcher with a background in both practical and theoretical dimensions of play. My work sits at the intersection of design innovation, player psychology, and emerging technology, with a particular focus on how people find, engage with, and sustain play in social and multiplayer contexts.

My practice draws from speculative and disruptive design methodologies, with a commitment to developing future-proof solutions that benefit academic, educational, and commercial communities alike.

I am looking for placement and knowledge exchange with studios and organisations that are open to collaboration on live, data-driven projects focused on social play, player engagement, and game discovery. My goal is to contribute meaningfully to real-world game development while refining methodologies that support more empathetic, dynamic, and sustainable player experiences.

WHAT ARE THE INSTRUMENTAL FACTORS IN INITIATING PLAY WITH OTHERS

Have you ever been invited to play a game with someone else? We all have, I'm sure. But what is less certain, is whether play actually commences when someone asks What shall we play? When considering an invitation to play, a complex negotiation often takes place in almost all cases and I am interested in the factors which are important to successfully facilitating this negotiation. As a designer, I care as much about the players who disengage as the ones who engage and by answering this question, we can start to inform not only design practices and decisions in digital games, but potentially matchmaking, product discovery, publication and a whole other range of factors relevant to commercial development. I would particularly like to apply my research with a large platform provider who is interested in curating bespoke social game experiences on their platform for users and would welcome discussion from external partners in this regard.



RUIZHE JAY YU XIA

Queen Mary University of London

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GitHub: priwinn.github.io

Skills: Game-Playing Agents, Game Data Analytics, Play Style, Player Research, Deep Learning

BIOGRAPHY

Ruizhe has bachelor degrees in Mathematics and Physics and a master's degree in Artificial Intelligence. After a short time as a consultant he decided to pursue research into what got him into AI in the first place: game agents. He enjoys games of all kinds, but strategy and RPG games occupy a sizeable portion of his collection.

DEVELOPING GAME AGENTS WITH DIVERSE STYLE AND SKILL

AI agents that perform with superhuman skill in increasingly complex games have appeared in recent years, but these agents are not always useful to game developers. Players within a game exhibit significant variance in their skill levels and play styles. Therefore, game agents with similar variance would better represent the player base. The research Ruizhe proposes will focus on three areas: measuring skill and play styles, developing game agents that mimic a range of human play styles and skill levels, and making these agents human-like. Upon successful completion, this research will improve the game development process via automated playtesting and will enable the development of AI agents that are more engaging and interactive.

SAHAR MIRHADI

University of York

Supervisor(s): Dr Jo Iacovides, Dr Alena Denisova

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Personal Website: linktr.ee/saharmirhadi

Skills: Games User Research, Player Experience, Qualitative Research, Games and Wellbeing, Game Design

BIOGRAPHY

Sahar Mirhadi is a final-year PhD researcher investigating how video games support during challenging times. Her contributions have been published in the Proceedings of the ACM Conference on Human-Computer Interaction, and she has presented at Devcom on transforming the complexity of turn-based games into a strategic advantage.

She is also a passionate Magic: The Gathering player, collaborating with competitive Magic team Worldly Counsel to convert tournament insights into a deeper understanding of player motivations and team dynamics.

Sahar is also a Safe In Our World Ambassador, a recipient of the Magic: The Gathering New Perspectives Grant for Marginalised Players, and a member of the Birds of Paradise collective.

HOW DO VIDEO GAMES SUPPORT COPING DURING DIFFICULT LIFE EXPERIENCES?

Sahar's PhD research project investigates the specific aspects of games that facilitate coping for players during difficult life experiences.

Building on earlier work that mapped broad links between game aspects and coping strategies, Sahar's first study showed that games can support a variety of coping strategies, including emotion-focused, avoidance, and meaning-focused coping. However, questions remained about how these effects occur across different gaming contexts.

To address this, her second study employed in-depth interviews and a grounded theory approach with players of Disco Elysium, Darkest Dungeon and Stardew Valley. The findings led to the development of the Games as Dynamic Coping Systems theory, which posits that specific aspects of video games scaffold a diverse range of coping strategies for players facing personal difficulties. The model highlights the dynamic interplay between what the player brings (e.g., prior experiences, needs, skills) and what the game provides (such as Narrative, Game Environment and Character Interactions). Through this interaction, players develop coping strategies, and the outcomes from coping feed back into their ongoing gaming and life experiences.

While the grounded theory offered a deeper understanding of how specific game aspects support various coping strategies, it also revealed a gap: the temporal dynamics of coping. Sahar's ongoing work aims to explore how players transition between coping strategies over time and what factors shape these transitions.

Her overall aim is to provide a deeper understanding of specific aspects within games that support coping, shedding light on the potential benefits and limitations of video games during times of difficulty.

SARAH MASTERS

University of York

Supervisor(s): Professor Paul Cairns

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Personal Website: sarah.games

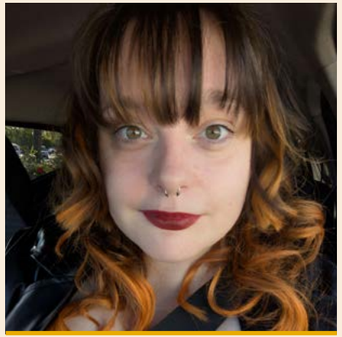
Skills: Design and Development

BIOGRAPHY

Sarah is an artist, game developer and researcher. They have an MA in Indie Game Development from Falmouth University (Distinction), where they created the city-building card game Eudaimonia. They are an active part of the games community taking part in game jams and running their own commercially focused game studio.

MAKING MEANINGFUL ECOGAMES

Sarah's work takes a research through design approach making and exploring games as an art form for change, collaborative design, speculative futures including 'ecopunk' and how we design games to meaningfully engage and entertain. Alongside a portfolio of games, their previous work includes running a workshop on Solarpunk vs Grimdark concepts. Their work also explores sustainable design and development practices to create emotional, engaging and meaningful experiences that can be a part of a greener industry and engage in climate change conversation.



STEPH CARTER

University of York

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Skills: UX Research, Game Design and Development, Data Analytics, Inclusive Design

BIOGRAPHY

Steph is a psycholinguistics graduate from the University of York with a background in language teaching and SEND teaching. Their research focuses on second language acquisition, human-computer interaction, and gamification. Their research interests also include accessibility in games, disability representation, and games with a purpose. Outside of research, they have worked as a freelance accessibility consultant and occasionally take part in game jams with their colleagues.

GAMIFYING EXPERIMENTS FOR SECOND LANGUAGE ACQUISITION RESEARCH

Steph's project explores how game design can improve participants' experiences in second language learning experiments while still enabling the collection of high-quality, controlled data. Although games and gamification are increasingly used in educational contexts, particularly for language learning, their potential in experimental design for second language acquisition research remains underexplored. This project investigates how incorporating game elements into psycholinguistic tasks can impact the participant experience and maintain data quality. The findings aim to inform the design and development of gamified data collection tools for both language learning and cognitive research, while also providing some practical guidance for researchers interested in gamifying their experimental methods.

SUNNY THAICHAROEN

Queen Mary, University of London

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Skills: Game data analytics, Esports strategy, Player research

BIOGRAPHY

Sunny is a passionate esports enthusiast, with a love of MOBA games. His background is in engineering and entrepreneurship, with a Master of Technology Entrepreneurship degree from University College London. He is the creator of YGOscope, a statistical game data platform for a competitive card game, Yu-Gi-Oh. Sunny is an avid player of competitive Dota in his spare time, and is also a keen theme park enthusiast. He is interested in modelling metagames of MOBAs through game data and player research, particularly how players adopt the most effective strategies when changes to the stable gameplay state occurs.

MODELLING OF ESPORT METAGAMES TO SUPPORT GAMEPLAY BALANCING AND DESIGN

The project focuses on how the META – most effective tactics available – of MOBA games shift during disruption (usually through gameplay updates) between states of ignorance and stability within the player space of these games, to deepen our understanding of how players adapt to the changes that these gameplay updates cause, and why. There is a large degree of variability of how new METAs develops, and currently there is little research on the meta and metagame front. Available research so far has been based on defining the phenomena and resulting effects of gameplay updates, but little modelling has been done to attempt bring these fragmented pieces of knowledge together and attempt to structure them. The study and structuring of this phenomena can be an ideal starting point in understanding how effective strategies develop not only in MOBAs or video games, but any other competitive games such as chess, trading card games or sports.

TAMSIN ISAAC

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Skills: Qualitative Research, Psychology, Game Design, Player Behaviour, UX Research

BIOGRAPHY

Tamsin Isaac is a PhD researcher with the iGGi Centre for Doctoral Training, exploring player experience in digital games. A lifelong gamer, her interest in games began with her first Game Boy and grew into a passion for understanding how people engage with and are affected by games.

She holds a BSc and MSc in Psychology from the University of Plymouth, where she developed a strong foundation in behavioural science and research methods. Alongside her academic work, she has taught herself coding and game design, applying a multidisciplinary lens to game systems and player behaviour.

Tamsin is also an iGGi Women in Games Ambassador, promoting diversity and inclusivity across the games industry. Outside of research, she enjoys baking, reading, and playing cosy indie games that explore emotional storytelling and creativity.

HOW DO LIMITED-TIME EVENTS (LTES) SHAPE ENGAGEMENT, DISENGAGEMENT, AND RE-ENGAGEMENT IN DIGITAL GAMES?

Tamsin's research investigates how limited-time events (LTEs) influence player engagement patterns in live-service games. Despite their growing use to boost retention and urgency, LTEs remain underexplored in academic research. Her project addresses this gap by developing a conceptual foundation for LTEs and examining their design across platforms and genres. She is creating a taxonomy of LTEs to help researchers and developers understand what makes them effective or problematic. This taxonomy will act as a shared framework for identifying different types of LTEs and comparing how design features vary between genres, platforms, and player communities. It will also support future research by offering a consistent way to discuss LTE formats, timing, and implementation strategies.

In the next stages of her research, Tamsin plans to deepen her focus on how different LTE formats support—or disrupt—long-term player engagement. She is conducting diary-based qualitative studies to examine how players experience and reflect on these events in real time. Her goal is to identify which structural features contribute to sustained interest, and which may lead to burnout or disengagement.

Ultimately, her work aims to contribute to the responsible design of live-service features by equipping developers with evidence-based insights into how LTEs can be made more player-friendly, inclusive, and sustainable. This research offers not only academic value, but practical impact for studios seeking to design inclusive, ethical, and engaging event content for an increasingly time-sensitive and engagement-driven games market.

TANIA DALES

University of York

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LinkedIn: /tania-dales-268912197

Skills: Unreal Engine, Unity, C++, C#, JavaScript, Blender, MetaHumans, Qualitative Research

BIOGRAPHY

Tania is an indie video game designer and developer, working with horror, science fiction and games which are a little strange, bizarre and uncomfortable. They adopt research through design methodology, utilizing game design artistic practices, and game development software in their studies.

DESIGNING IMPACTFUL CHARACTERS FOR HORROR AND EXISTENTIAL GAMEPLAY

My research is situated within character design, specifically in humanoid characters that elicit complicated and nuanced emotional reactions in players. These emotional reactions are those that creep in, linger, and last beyond the moment of play, rather than instantaneous responses like jump scares. We often experience these reactions when engaging with games that explore themes of body, cosmic and existential horror. My research looks at why these reactions occur, how we design our characters with these reactions in mind, and what is the role of bugs and glitches during existential gameplay experiences.

TOBY BEST

Queen Mary University of London

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LinkedIn: /toby-best-776336136

Personal Website: l0rdr0b.github.io

Skills: Game Design, Game AI, C#/Java/Python Programming, Dungeon Master

BIOGRAPHY

Toby has always held video games as an integral part of his livelihood, ever since catching his first Pokémon on the Game Boy Color. The ever-developing evolution of technology, from the humble NES and R.O.B. preventing the video game market crash in 1983, to the Wii's motion controls, to augmented and virtual reality today, has been a key inspiration, and one of the reasons why he studied Mathematical Computation at University College London. He also has a keen interest in tabletop roleplaying games, such as Dungeons and Dragons and Pathfinder. His research interests involve the potential of combining roleplaying games' collective storytelling and interactive narrative with the power of artificial intelligence and deep learning.

GAME MASTER AI FOR TABLETOP GAMES

Artificial Intelligence is the field of creating digital agents capable of decision-making and rational thought to fulfil a core goal or aspect. For tabletop and video games, an implemented AI would attempt to 'solve' the game by finding optimal winning strategies. However, tabletop role-playing games (TTRPGs) are driven by the power of collective storytelling and interactive narrative, as opposed to set rules, and therefore have a more open-ended goal – maximising player enjoyment for all participants.

This involves a Game Master (GM) player as both narrator and referee, controlling the non-playable characters (NPCs) and the campaign behind the screen, whereas players usually control one player character (PC) each to interact with the world. There is no 'failure' state compared to traditional games, as campaigns can continue until players lose interest or the narrative is 'complete'; even all PCs dying (known as a total party kill) can drive the narrative in a new direction.

This project aims to study and piece together the different elements that would go into a Game Master AI, building on current state-of-the-art game-playing AI, such as Director AIs in games such as Valve's 'Left 4 Dead', and studying the implications of such developments for players and game designers alike. For example, whether it could replicate the playing experiences of a human GM as a replacement, or enhance the experience by working with a human GM.

TOM WELLS

University of York

Supervisor(s): Dr Claudio Guarnera

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Skills: Perception, psychophysics and neuroscience

BIOGRAPHY

Tom has an interest in niche alternative and indie games which evoke strong emotions and are narratively immersive. He studied Experimental Psychology as an undergraduate in Oxford, specialising in conscious brightness perception in specific optical pigments. His Masters was in Computational Neuroscience, Cognition and AI from Nottingham, and focused on Computer Vision (specifically facial recognition) and Visual Attention. He enjoys heavy metal, strength sports and literature.

USING MACHINE LEARNING TO ESCAPE THE UNCANNY VALLEY

With the rise of digital art, Uncanny Valley has emerged from an esoteric robotics concept into an infectious memetic phenomenon, with specific memes such as 'Uncanny/Canny Mr. Incredible', or more generally uncanny faces being used as reaction images for humor. Critics and players will now refer to specific media being 'Uncanny' rather than using more general words as 'off-putting', demonstrating uncanniness cementing itself in the public consciousness as examples increasingly abound; ergo digital artists should be aware of evoking the uncanny even with modern rendering technology, as audiences become increasingly discerning of the Uncanny.

This is most pertinent in videogames, where rendering is performed in real-time, meaning rendering constraints must be implemented. This potentially confines characters to the Uncanny Valley, as it may not be possible to increase graphical fidelity, thus artists may be left to either accept the uncanny or demaster their work (both undesirable options).

This project aims to learn about the Uncanny Valley pertaining to modern skin rendering techniques, using artificial intelligence (specifically GANs) to directly map skin rendering parameters onto user assessments of uncanniness and realism. This can then be reverse engineered to provide automated tools for generatively rendering realistic non-uncanny skin, and predicting audience responses to skin realism, expediting QA testing. The primary experimental stage is to generate a face database with photorealistic skin to be assessed using psychometrics by participants. This is additionally one of few studies looking into the novel phenomena of training AI's to generate human-oriented psychologically salient content.

YOUNÈS RABII

Queen Mary, University of London

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Personal web: pyrofoux.itch.io

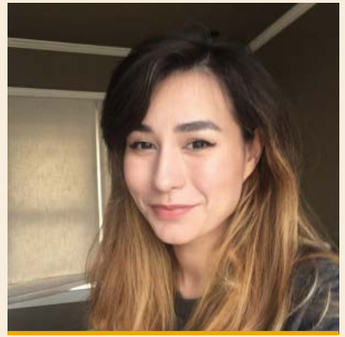
Skills: Game Design, Generative AI

BIOGRAPHY

Younès is an awarded game designer and generative AI researcher. Their current research is concerned with the relationship between a game's rules, its narrative, and how to build AI systems that can understand these relationships, manipulate them, and invent new ones. Younès also has been a game developer for the past 10 years. They specialize in crafting new forms of play and making it accessible for their peers. Younès' work has been previously exposed in the French embassies and international conferences like the Game Developers Conference, the Gamedevs of Color Expo and the A MAZE Festival.

KEEPING PLAYERS ON THEIR TOES: TOWARDS LIVE AUTOMATED GAME DESIGN

Younès' research goal is to bring to video games some of the most interesting properties of roleplaying games: their ability to trust every player with building a part of the game, and their ability to generate both new narrative and gameplay on the fly. Younès is working both on the AI techniques needed to allow that, and how to design the social spaces around those games in a way that won't hurt players or abuse creators. For the end of their PhD, Younès is designing a prototype in that new genre, counting among the first games to contain a form of Live Automated Game Design.



ZOË O'SHEA

Goldsmiths University of London

Supervisor(s): Professor Jonathan Freeman, Professor Sylvia Xueni Pan

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iGGi Webpage: iggi-phd.org/people/zoe-o-shea

Skills: Game Design, Player Psychology, Immersive Technology

BIOGRAPHY

Zoë O'Shea is an Irish freelance games designer and artist, working on her thesis in game design and player psychology. Her previous qualifications include 3D Generalism, and an MA in Digital Game Design and Theory. She is endlessly curious about the meaning and value that technology can bring to the world, exploring the human experience as a core principle of her work. She firmly believes in the importance of creating a more joyful and inclusive world. Zoë has previously worked with a range of clients and companies including A Brave Plan, Surgent Studios, Transport for London (TfL) and LEGO. In 2019, Zoë was awarded a Digital Fellowship from the Royal Shakespeare Company (RSC) in collaboration with Magic Leap. Zoë worked with other creatives for a year to explore the future of theatre and Spatial Computing (Mixed Reality). The programme completed in Feb 2020, through the generous support of Magic Leap, the RSC, their technologists, industry partners, i2 Media Research and the University of Portsmouth. Currently, Zoë is working on completing her thesis while offering consultancy services for games and start-ups looking to expand their knowledge in soft aesthetics, tend and befriend game design and immersive technology.

TEND AND BEFRIEND: A NEW PERSPECTIVE ON PLAYER PSYCHOLOGY IN DIGITAL GAMES

Many are familiar with the term fight-or-flight – a stress response activated when animals come into conflict with a stressor or threat. Less commonly known is tend and befriend, an alternative theory of stress response which suggests that engaging with tending and affiliative behaviours under duress can soothe and protect us. This thesis investigates this phenomenon in digital games, with a focus on empirical data and design. Results demonstrate a consistent niche in the games industry for tend and befriend centric design and the value in synthesising previous design frameworks to create a intentional and polished experience for players.

iGGi ALUMNI

iGGi ALUMNI

Here are our iGGi Alumni. Congratulations to everyone on the list!

FROM OUR 2014 COHORT

Athansios Kokkinakis	University of York
Christian Guckelsberger	Queen Mary University of London
Daniel Berio	Goldsmiths, University of London
David Gundry	University of York
Joe Cutting	University of York
Joseph Walton-Rivers	University of Essex
Memo Akten	Goldsmiths, University of London
Mihail Morosan	University of Essex
Nasos Kokkinakis	University of York
Piers Williams	University of Essex
Tom Cole	Goldsmiths, University of London

FROM OUR 2015 COHORT

Chris Madge	Queen Mary University of London
Dino Ratcliffe	Queen Mary University of London
Jen Beeston	University of York
Tara Collingwoode-Williams	Goldsmiths, University of London

FROM OUR 2016 COHORT

Carlos Gonzalez Diaz	University of York
Cristina Guerreo Romero	Queen Mary University of London
Henrik Siljebråt	Goldsmiths, University of London
Raluca Gaina	Queen Mary University of London
Shringi Kumari	University of York
Sokol Murturi	Goldsmiths, University of London
Thryn Henderson	University of York

FROM OUR 2017 COHORT

Charles Ringer	University of York
Cristiana Pacheco	Queen Mary University of London
Daniel Hernandez	University of York
Georgiana (Cristina) Dobre	Goldsmiths University of London
Ivan Bravi	Queen Mary University of London
Phoebe Hesketh	University of York
Myat Aung	University of York
Valerio Bonometti	University of York

FROM OUR 2018 COHORT

Adam Katona	University of York
Adrián Barahona Ríos	University of York
Daniel Gomme	University of Essex
Evelyn Tan	University of York
Kevin Denamgani	Univeristy of York
Martin Balla	Queen Mary University of London
Matthew Whitby	University of York
Nathan Hughes	University of York
Nuria Peña Pérez	Queen Mary University of London
Oliver Scholten	University of York
Ozan Vardal	University of York
Ryan Spick	University of York
Terence Broad	University of York
Timea Farkas	Goldsmiths University of London

FROM OUR 2019 COHORT

Charline Foch	University of York
Elena Gordon-Petrovskaya	University of York
James Goodman	Queen Mary University of London
Jozef Kulik	University of York
Nick Ballou	Queen Mary University of London
Sebastian Berns	Queen Mary University of London

FROM OUR 2020 COHORT

Alan Pedrassoli Chitayat	University of York
Madeleine Frister	University of York
Maximilian Croissant	University of York
Yizhao Jin	Queen Mary University of London

iGGi CONFERENCE FOREWORD

This year, the iGGi conference takes place at the University of York, showcasing, as always, the iGGi researchers' exciting work and latest developments in Games Research. The iGGi conference connects researchers in the field and provides a networking platform for the Games Industry and Academia. You can look forward to iGGi researchers presenting their work via talks, posters and workshops, and to many informal conversation opportunities (e.g. poster sessions or over lunch).

iGGi is the world's largest doctoral training programme in Games Research. We sincerely wish that our exciting iGGiCon'25 programme, including our excellent invited Keynote Speakers, will make this a most enjoyable event for you.

The 2025 iGGi Conference Committee

KEYNOTE SPEAKERS

EMILY BROWN

Emily is the Lead Designer on Monument Valley 3, released on Netflix games and soon to be released on PC and Consoles. She has over 20 years experience working on titles for Playstation, Xbox and mobile platforms. In 2022 she was recognised by Bafta as part of their Breakthrough program due to her previous work including the 3 time Bafta nominated Alba: A Wildlife Adventure.

Emily's favourite thing about making games is the magic that happens when a group of people with really different skills and experiences come together to create something from nothing.

MAKING MONUMENT VALLEY 3

Monument Valley 3 is a game following the legacy of its beautiful multi-award winning predecessors. The third in the series needed to innovate while also respecting the lore and legacy of the previous games. Emily will look at the journey of making the third in the series and some of the key work practices, processes and decisions the team made to achieve this balance.

DANIEL HERNANDEZ

Daniel Hernandez is a Research Scientist at Sony AI's game AI team, the makers of GT Sophy, a racing agent for the popular Gran Turismo racing game. Daniel graduated from iGGi in 2022 with a PhD In multi-agent deep reinforcement learning, supervised by James Alfred Walker. With a focus in multiagent systems, Daniel's research and engineering efforts are targeted to making games easier to develop, more engaging to play with and ultimately cooler.

THE JOYS AND WOES OF TRAINING AI AGENTS FOR AAA GAMES

The use of AI for game-playing agents is at a sweet spot at the moment. There are enough crazy people willing to study the arts of machine learning to create such agents and enough large companies to throw money at them until they eventually get it right. This talk is the tale of one such project and one such company. Following the evolution of Sophy, a reinforcement learning based agent for the racing game of Gran Turismo, this talk presents the complexities and advantages of successfully training agents in AAA games. Through the study of these peculiarities, one can gain insight as to how far AI for video games has come and how much more there is still to solve.

KEYNOTE SPEAKERS

STEFANO GUALENI

Stefano Gualeni is a philosopher who studies (and designs) games. He is a Full Professor at the Institute of Digital Games (University of Malta), and among his academic monographs are *Virtual Worlds as Philosophical Tools* (Palgrave, 2015), *Virtual Existentialism* (Palgrave Pivot, 2020 – with Daniel Vella), and *Fictional Games: A Philosophy of Worldbuilding and Imaginary Play* (Bloomsbury, 2023 – with Riccardo Fassone). Stefano also authored two speculative fiction novels that blend philosophical reflection with speculative narrative: The Clouds (Routledge, 2023) and What We Owe the Dead (Set Margins', 2025). More about his books and games can be found on his website: www.gua-le-ni.com.

ON GAMES AS CONCEPTUAL TOOLS

This talk presents how games (both actual and fictional) can serve as platforms for disclosing and challenging theoretical ideas. As epistemic artifacts, games and video games might have a variety of socio-cultural effects such as rhetorical ones and transformative.

On this occasion, the focus of the talk will be on using (and designing) games as conceptual devices and on their potential to contribute to contemporary culture in ways that are intellectually relevant.

CONFERENCE PROGRAMME

DAY 1 – WEDNESDAY 10 SEPTEMBER 2025:

Ron Cooke Hub (RCH), Campus East, University of York

09:00	**Registration and Posters with coffee**	**Atrium**
10:00	**Welcome: iGGi Director Peter Cowling and iGGi Chair Paul Cairns**	**037 Lecture Theatre**
10:15	**Intro: Paul Cairns** **Keynote: Emily Brown** Making Monument Valley 3	**037**
11:00	**Coffee**	**Atrium**
11:45	**Buzz Talks (Chair: Debbie Maxwell)**	**037**
12:00	**Talks - Player Experience (Chair: Prasad Sandbhor)** • 'Idk it's a stupid game so no thoughts': Nine days in the life of a depressed gamer. **Laura Helsby** • Playing Through Difficult Times: A Constructivist Grounded Theory of Games as Dynamic Coping Systems. **Sahar Mirhadi** • Lost in Translation: Language, Emotion and the Player Experience. **Steph Carter** and **Océane Lissilour**	**037**
13:00	**Lunch**	**Atrium**
14:00	**Buzz Talks (Chair: James Walker)**	**037**
14:15	**Talks - Game Design (Chair: Steph Carter)** • Designing for Rule-Making Play: The Responsibility and Freedom of Player Discretion. **Doruk Balcı** • Decoding Urban Labor-a-Tree: Envisioning Urban Treescapes through a Boardgame. **Prasad Sandbhor and Joanne Morris** • Straight to the Point: this is a talk about gamification. **Océane Lissilour**	**037**
15:15	**Buzz Talks (Chair: Debbie Maxwell)**	**037**
15:30	**Coffee**	**Atrium**
16:15	**Talks - Player Behaviour (Chair: Laura Helsby)** • You and Me, We Got This! Investigating the relationship between cooperative and competitive presence.**Lauren Winter** • What Counts as a Limited-Time Event? Understanding Engagement Design in Live-Service Games.**Tamsin Isaac** • Negotiation of play: What factors drive initiation of multiplayer gaming? **Ross Fifield**	**037**
17:15	**Intro: Francesca Foffano** **Keynote: Daniel Hernandez** **The joys and woes of training AI agents for AAA games**	**037**
18:00	**Closing remarks**	**037**
18:15	**Social event/games night and buffet from 18:15 to late**	**Atrium and other rooms to be announced on the day**

DAY 2 – THURSDAY 11 SEPTEMBER 2025:

Ron Cooke Hub (RCH), Campus East, University of York

09:00	**Posters & Coffee**	**Atrium**
10:00	**Workshop** • Citizen Science Game Design Framework Workshop. **Philip Smith**	**Room to be announced on the day**
11:30	**Coffee**	**Atrium**
12:00	**Intro: Laurissa Tokarchuk** **Keynote: Stefano Gualeni** **On games as conceptual tools**	**037 Lecture theatre**
12:45	**Lunch**	**Atrium**
13:45	**Talks - Fandom & Random (Chair: George Long)** • Beyond the Bechdel Test: Towards a measurement of gender representation quality in RPGs.**Lauren Winter** • Objection, Your Honour! Why Court Trials in GTA Roleplay Can't Pass the Bar. **Alex Flint** • Special Relativity in Games. **Cameron Johnston**	**037**
14:45	**Coffee**	**Atrium**
15:15	**Talks - AI (Chair: Kyle Worrall)** • The Importance and the Challenge of Evaluating Content Generator Diversity. **Oliver Withington** • AI vs. the Algorithm: Measuring Success on Twitch. Alan Pedrassoli Chitayat	**037**
16:00	**Panel - Overcoming Obstacles Working in Games(Chairs: WiGGi Members Tamsin Isaac, Nicole Levermore and Susanne Binder)** **Panellists: Ben Breen (RNIB), Toby Best (iGGi PGR), SkyTunley-Stainton (SIOW), Tania Dales (iGGi PGR)**	**037**
16:45	**Closing Remarks: Debbie Maxwell and James Walker**	**037**

ACCESSIBILITY INFORMATION

INCLUSION

The conference has a zero tolerance policy to discrimination and will not allow any forms of racism, sexism, homophobia, Islamophobia, anti-Semitism, ableism, or classism.

Name badges will feature attendees preferred pronouns if they wish. We kindly ask everyone to use people's preferred pronouns.

All gender toilets are available at the venue.

Attendees have the opportunity to state if they do not wish to be included in photographs or videos. Coloured lanyards will indicate attendees' preferences.

ACCESSIBILITY

iGGiCon'25 is held in The Ron Cooke Hub (RCH) on Campus East at the University of York. All the main conference activities are on the ground floor in the atrium, seminar rooms and in the main lecture theatre (RCH/037).

For complete accessibility information for the RCH, please view the AbleAccess Guide www.accessable.co.uk (in the search bar, enter 'RCH – The Ron Cooke Hub'). In brief:-

- The building has step step-free and the main entrance to the building is power assisted. There are lifts to other floors.
- The main lecture theatre has an induction loop hearing system.
- Accessible toilets on all floors. (These toilets are also signed as all gender toilets.)
- A quiet room to decompress and rest from the conference if needed. There is a code of conduct in place for using the room – details are available at the Registration Desk and in the quiet room.
- Prayer room (on the first floor).
- Food provided for the conference is at least 50% vegetarian. Vegan, gluten-free and other specialist diets have been catered for where we are aware of the need.

Conference ambassadors are around during the event to signpost attendees. The accessibility contacts for the conference are Helen Tilbrook, Lauren Winter and Tania Dales. If you need any further information or need any assistance, please talk to them.

THE 2025 IGGI CONFERENCE COMMITTEE

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