

INSTANT REPLAY

GAMES INSTITUTE FALL '18 TERM IN REVIEW

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UNIVERSITY OF
WATERLOO



**THE GAMES
INSTITUTE**

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NEIL RANDALL
EXECUTIVE DIRECTOR
GAMES INSTITUTE

A NOTE FROM THE EXECUTIVE DIRECTOR

As a richly interdisciplinary research centre at the University of Waterloo, the Games Institute supports and experiences a broad range of activities and initiatives. But conveying all of this is anything but straightforward. Our website helps, our social media helps, our events help, but each captures only part, and only in a limited way. What we needed, we realized, was something that collected together, in one place, everything that goes on in the GI semester by semester – a journal, perhaps a diary, of a centre comprised of active, engaged students, faculty, and staff.

Instant Replay is the result. In these pages you'll see the GI unfold throughout the Fall 2018 semester. Over 50 students work in our space in East Campus 1, along with faculty members from various UW faculties, and all of them contribute to the GI's culture in various ways. All of them conduct research, but research means different things to different disciplines, and in our space that means different ways of working. The GI exists to value all of these different approaches and to facilitate communication and collaboration among the students, the faculty members, and the research partners. This is a space that strongly supports and proudly strives for day-to-day interdisciplinarity, where the windows between the disciplines are opened wide, because the world of games and interactive media refuses to let them stay closed.

The Games Institute is about games, but also about more than games. Far more. Virtual reality, player experience, user research, human-computer interaction,

augmented reality, immersive media and technology, interactive narrative, cultural understanding, knowledge mobilization, social media – all of these along with games themselves. And games themselves mean more than just games – serious games, empathy games, training games, board games, game adaptations, gamification – you get the point. The Games Institute is about rich, compelling interactive user engagement, in many forms and for many purposes.

Highlights from Fall 2018, which you'll read about here, include the extremely well attended GI Jam, the VR Storytelling Workshop, the Human-Computer Interaction (HCI) Industry Panel, and the Multidisciplinary Panel about Horizon Zero Dawn. And more. We welcomed numerous speakers, including Lewis Chuang and John Munoz who traveled internationally to get here, and we saw our students and faculty travel around the world, sharing their research at such high profile conferences as BlizzCon 2018, CHI Play 2018, Interactive Surfaces and Spaces (ISS), and the Canadian Game Studies Association (CGSA) at Congress (Canada's largest academic trade show organized by the Federation for the Humanities and Social Sciences and hosted). Collectively, they spread the word about the GI, its culture, and its interdisciplinary core.

As Executive Director, I am deeply proud of them all, and I welcome you to recapture a busy, productive semester in a constantly changing field.





NEWS

SEPTEMBER

These are a sampling of the news items from
September 2018. For a full list please visit

uwaterloo.ca/games-institute/news

SHAWN DOREY AND SARAH STANG: PLAY-BY-POST-ROLEPLAYING AND QUEER IDENTITY

WEDNESDAY, SEPTEMBER 12, 2018

Play-By-Post Roleplaying: Ludic Structures, Creative Play, and Queer Identity

Shawn Dorey, alumnus of the Games Institute, and **Sarah Stang**, PhD candidate in the Communication and Culture joint program at York University and Ryerson University, will be presenting their co-authored research at the Queerness and Games Conference in Montreal, September 29-30, 2018. The two plan to explore the connections between play and queer identity development through play-by-post-roleplaying (PBPRP).

Dorey published their article, “Play by post roleplay: Where player becomes designer and designer becomes player”, in *First Person Scholar*, May 2017. They began by defining PBPRP as “the act of taking the role of a character, and implanting them into an imaginary world that may or may not be based on some greater metafiction” and “using the power of prose to bring these worlds to life through lush description and carefully implemented dialogue” (Dorey, 2017). Through experiences of their own and observations of other play experiences with PBPRP, Dorey argued that PBPRP has recognizable ludic structures, thus it should be classified as a “game” and should be studied as one in game studies.

Before Dorey’s article, PBPRP had been considered to be collaborative writing by other game studies scholars. Dorey’s new take on the phenomenon caught Sarah Stang’s attention. She responded in the comments section to reflect on her own experiences, further demonstrating the ludic structures governing PBPRP. But also, Stang remarked that her queer identity developed in part through PBPRP with friends.

October 2017, Stang published her own article in *First Person Scholar* entitled, “Friendship, intimacy, and play-by-post-roleplaying”, in which she expanded on her ideas about queer development. She argued that when it comes to queer identity development, PBPRP does not happen in a magic circle because, “With my writing, I was literally changing the game world, but I was also changing my physical world. For me, there really was no “magic circle”: roleplay was as important to me as any other type of social interaction, perhaps more so” (Stang, 2017).

One year later, September 2018, Dorey and Stang will present the next steps of their research. The two will present their personal anecdotes about participating in PBPRP communities in order to connect their experiences with theoretical paradigms of identity, play, queerness, and social hierarchies. They have

two missions: to create a meaningful and rich conversation that will advance PBPRP, and other creative roleplay, as a topic of interest in game studies and other academia; and to empower queer identity and agency by investigating how they emerge and take shape in PBPRP.

“Overall, the purpose of this presentation is to discuss an under-researched form of gameplay and encourage our audience to build on, respond to, and continue to explore the topic” (Dorey and Stang, 2018).

WORKS CITED

- Dorey, S. (2017). **Play by post roleplay**: Where player becomes designer and designer becomes player. *First Person Scholar*. <http://www.firstpersonscholar.com/play-by-post-roleplay>
- Dorey, S., & Stang, S. (2018). **Play-by-post-roleplaying**: Ludic structures, creative play, and queer identity. Queerness and Games Conference. <https://qgcon.com/qgcon-2018/talks/play-by-post-roleplaying-ludic-structures-creative-play-and-queer-identity>
- Stang, S. (2017). **Friendship, intimacy, and play-by-post-roleplaying**. *First Person Scholar*. <http://www.firstpersonscholar.com/friendship-intimacy-and-play-by-post-roleplaying>

IMMERSE FUNDED PROJECT “PLAY THE KNAVE” FEATURED IN SHAKESPEARE QUARTERLY

WEDNESDAY, SEPTEMBER 12, 2018

Play the Knave allows players to become an actor in a Shakespearian play without having to worry about trivial things like experience, skill, or preparation. The game was developed by faculty and students in the **ModLab at the University of California, Davis, in partnership with the Games Institute through IMMERSE**. In this essay “A whole theater of others: Amateur Acting and Immersive Spectatorship in the Digital Shakespeare Game Play the Knave” published in *Shakespeare Quarterly*, Gina Bloom, Sawyer Kemp, Nicholas Toothman, and Evan Buswell provide in-depth analysis of what happened when an installation of *Play the Knave* took up a three-month residency in the Festival Hall at the Stratford festival in Ontario.

Play the Knave is a cross between karaoke and machinima: players’ voices and actions are projected onto an avatar using recording devices and motion-capture cameras. Bloom, Kemp, Toothman, and Buswell present their findings about player engagement with the game at the Stratford Festival installation. In this essay, you’ll learn about how the game’s digital form and Shakespearian content interacted with one another to generate important insights into the ancient rhetorical style of declamatory actions as well as contemporary perceptions of Shakespearian performance. This research represents the intersection of digital humanities and theatre studies. It will inspire you to think differently about the way we study Shakespeare, making something we studied in high school seem fresh and new.

IN CASE YOU STILL NEED MORE CONVINCING...

It wasn’t only the players who engaged with *Play the Knave*; some onlookers that resisted stepping into the role of “player” inevitably found themselves participating in the game. This essay discusses how *Play the Knave* led to unique, unexpected insights into how people behave in the roles of actor and audience.

DR. LENNART NACKE GIVES A BROWN BAG TALK AT THE COMMUNITECH HUB

WEDNESDAY, SEPTEMBER 19, 2018

Dr. Lennart Nacke, the director of the (HCI) Games Group at the Games Institute, is giving a Brown Bag talk at the Communitech hub in Kitchener, Wednesday, September 19. Dr. Nacke will be talking about the concept of game thinking and how this method can be incorporated to improve user-experience: “game thinking is a problem-solving process that uses strategies from game design and gamification to help drive the design of user experiences in digital and non-digital applications”.

Those in attendance will learn how incorporating game thinking into the UX process can:

- 1) Foster users’ intrinsic and extrinsic motivations to engage with the application
- 2) Engage users in a learning and mastery process, in which they develop the abilities needed to accomplish their goals throughout their user journey

IN CASE YOU NEED MORE CONVINCING...

Dr. Nacke is using concepts from game studies to help start-ups and tech designers improve user-experiences. His work is an impactful example of a real-world application of game studies theory, bridging games discourses to the business world.

EMMA VOSSEN PRESENTS NEW RESEARCH AT QGCON

WEDNESDAY, SEPTEMBER 19, 2018

Emma Vossen will be speaking at the **Queerness and Games Conference in Montreal** (QGCon will take place September 29 and 30). Her talk entitled “Queering the Links Between Sexual Orientation and the Female Gamer Identity” explores how sexuality interacts with female gamer identity formation.

For the past six years, Emma’s work has focused on investigating the nuances of gender discrimination and gate keeping that make games culture less accessible to women and non-binary people (download her PhD dissertation here) (Vossen, 2018a). Now she is shifting gears to present new research on a complex, understudied aspect of games culture: how does sexuality interact with the formation of the gamer identity?

Emma explains that her motivation for the new research came from questions she has been grappling with for some time but hasn’t had the opportunity to explore academically: “why are so many of the female gamers I know (especially within the field of game studies) queer? And, is my attraction to women somehow connected to my gamer identity?” (Vossen, 2018b).

Emma’s preliminary research into this question asks how the experiences of queer women and

heterosexual women differ when experiencing the hyper-sexualized female characters and ever-present damsel-in-distress tropes within games. In this presentation, Emma will argue that her attraction to women could have actually made consuming games comparatively more accessible to herself (and potentially other women and non-binary people who are attracted to women) as opposed to heterosexual women.

Her research approach integrates interviews with hetero and queer people and analysis of her own autoethnographic experience. “Because this is very new research I don’t expect to answer these questions in my talk, but I do hope to open up avenues of investigation to pursue in future work” (Vossen, 2018b).

WORKS CITED

Vossen, E. (2018a). “**On the cultural inaccessibility of gaming: Invading, creating, and reclaiming the cultural clubhouse**”. Available on UWSpace. <https://uwspace.uwaterloo.ca/handle/10012/13649>

Vossen, E. (2018b). “**Queering the links between sexual orientation and the female gamer identity**”. QGCon. <https://qgcon.com/qgcon-2018/talks/queering-the-links-between-sexual-orientation-and-the-female-gamer-identity/>

ROBERT GAUTHIER GIVES A GRADTALK ON SOCIAL NETWORKS

WEDNESDAY, SEPTEMBER 19, 2018

GI resident **Robert Gauthier** will be giving a **GRADtalk about social networks on September 27** in Needles Hall. Robert is a PhD candidate for Public Health and Health Systems. His research contributes to the fields of HCI and public health because he investigates how online communities support sensitive issues such as addiction

For this upcoming GRADtalk, Robert will be sharing his research on how Reddit is used as a platform for online communities to provide support for recovery from addiction. There are well known social programs in place to support individuals suffering from addiction, such as needle exchanges and 12-step programs, and yet these online communities have formed on Reddit with rules and structures in place separate from the gaze of medical professionals.

GAMES INSTITUTE HCI RESEARCHERS REDEFINING “GAMEFULNESS” IN THE INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES

THURSDAY, SEPTEMBER 27, 2018

Robert has been studying these communities in order to get a better understanding of how and why they work. In this talk he will be presenting the results of a thematic analysis he conducted on two subreddits. Using that thematic analysis, Robert is exploring the context of pseudonymity (protecting identities without complete anonymity) to theorize about why Reddit is a valuable tool for addiction recovery.

JUST A LITTLE TEASER...

One of Robert’s findings is that these online communities are used to support individuals who are struggling with the 12-step program. This suggests that these communities might not be replacing publicly funded programs, but are in addition to traditional methods.

The term “gamefulness” is used often in business, healthcare, and government as the goal of gamification but do we really know what it means? In fact, many disciplines have been using the term “gamefulness” interchangeably with “gamification” and “game thinking”. We get away with it because there is no precise or consistent definition of “gamefulness” in the game studies literature.

HCI researchers from the Games Institute, Lennart Nacke and Gustavo Tondello, published a paper with Richard N. Landers, Dennis L. Kappen, Andrew B. Collmus, and Elisa D. Mekler to address our need to more precisely describe what happens when someone interacts with a gameful system. The paper, entitled “Defining Gameful Experience as a Psychological State Caused by Gameplay: Replacing the Term ‘Gamefulness’ with Three Distinct Constructs,” was recently published in the International Journal of Human-Computer Studies.

Not having a specific and theoretically grounded definition of “gamefulness” leads to many problems in the gamification process. What is the ultimate goal? What processes can and should be employed? In the paper, the researchers suggest replacing the term “gamefulness” with “gameful experience”. According to Tondello, “having a precise definition of ‘gameful experience’ will allow us to develop a way

of measuring it in the future. Then, we will be able to clearly tell if a system or intervention made to be gameful is fostering the desired user experience, which is something that we cannot reliably do yet”.

Nacke, Tondello, and their colleagues draw from literature on HCI and psychology, as well as other related fields, to define “gameful experience” with three specific constructs. Then they outline the effects of those constructs in process models.

“Most critically, we argue that gameful experience is the core focal construct of this theory and define it as an interactive state occurring when a person perceives non-trivial achievable goals created externally, is motivated to pursue them under an arbitrary set of behavioral rules, and evaluates that motivation as voluntary” (Landers, Tondello, Kappen, Collmus, Mekler, & Nacke, 2018).

WORKS CITED

Landers, N. R., Tondello, G. F., Kappen, D. L., Collmus, A. B., Mekler, E. D., & Nacke, L. E. (2018). “Defining gameful experience as a psychological state caused by gameplay: Replacing the term ‘gamefulness’ with three distinct constructs”. *International Journal of Human-Computer Science*. <https://doi.org/10.1016/j.ijhcs.2018.08.003>





NEWS OCTOBER

These are a sampling of the news items from
October 2018. For a full list please visit

uwaterloo.ca/games-institute/news

JUSTIN CARPENTER AT THE SOCIETY FOR LITERATURE, SCIENCE, AND THE ARTS (SLSA) CONFERENCE

FRIDAY, OCTOBER 5, 2018

Justin Carpenter, GI resident and First Person Scholar Editor, will be presenting a paper at this year's Society for Literature, Science, and the Arts (SLSA) conference in Toronto, November 15-18. His paper looks at how the games *Mountain* (2014) and *Everything* (2017) by Irish artist David O'Reilly challenge players to reconsider notions of consciousness, things, and nature.

Carpenter argues that both games are "meditations on games as a medium":

"O'Reilly uses simplistic graphics and absurd design choices to dissect the qualities typically associated with video games, namely player agency, immersion, and identity. Through this self-reflexive approach O'Reilly's games are able to represent matter as mindful, challenge anthropocentrism, and reconsider the problems of hyperobjectivity and nature."

This talk is a spectacular fit for the SLSA conference theme "Out of Mind". Carpenter will explore how O'Reilly's design choices in *Mountain* and *Everything* emulate the philosophy of panpsychism - the idea that all matter has some form of mind.

For game studies and game science scholars, this talk is of particular interest because Carpenter will present ways that *Mountain* and *Everything*'s disruption of conventional video game tropes leads to deep and engaging philosophical criticism.

How does the parody subvert player expectations? And, furthermore, how does the violation of player expectations force them to engage with unfamiliar philosophical ideas?

JOHN YOON AT THE UNIVERSITY OF CALIFORNIA ESPORTS CONFERENCE (UCIESC)

MONDAY, OCTOBER 22, 2018

John Yoon, GI resident and English PhD student, presented a poster at this year's University of California Esports Conference (UCIESC) that took place Oct. 11-12, 2018. His poster examined the cultural practice of sports writing in esports.

Yoon's work examines and analyzes narratives in esports writing. He argues that esports writing is a mode of technical communication that accommodates non-expert audiences through narratives.

His analysis is based on Jeanne Fahnestock's model of genre shifts in scientific writing. When scientific knowledge is translated into digestible information for public audiences, Fahnestock calls that process "accommodation":

"My paper argues that this generic transformation is paralleled in esports writing when highly technical games analyses geared towards knowledgeable fan bases are decoded into much broader terms for the public unfamiliar with the game, or even esports as a whole."

Yoon proposes that esports writing utilizes narrative as its rhetorical mode because relatable story-building fosters emotional investment in the audience toward the highly technical esports competition.

"With a new model for approaching cultural production surrounding esports, we can better understand, guide, and communicate the culture of competitive play [...] allowing the industry to more effectively present itself not only to its fans but also the world at large."

- John Yoon

STEVE WILCOX AT MEANINGFUL PLAY 2018

MONDAY, OCTOBER 22, 2018

Steve Wilcox, GI alum and Assistant Professor of Game Design and Development at Laurier, presented a paper at the International Academic Conference on Meaningful Play in East Lansing, Michigan on Oct. 11.

Wilcox's paper entitled "(Re)Thinking Empathy Games" looks at empathy games through the perspectives of feminist epistemology, phenomenology, psychology, disability studies, and rhetorical theory. This research comes from Wilcox's recognition of our need for a new understanding how empathy functions in games:

"Empathy games have recently and deservedly been criticized as facile attempts to reproduce fundamentally inimitable experiences. As a result empathy games have increasingly been viewed with skepticism at best and derision at their worst."

- Steve Wilcox

By analyzing empathy in games through different paradigms and theoretical frameworks, Wilcox argues that we can chart a new path forward for designing more effective tools for honing empathy in gameful systems.

CITY AS PLATFORM LAB IN WATERLOO NEWS FOR "RIGHT TO THE SMART CITY" WHITEPAPER

TUESDAY, OCTOBER 23, 2018

The **City as Platform** lab (cityasplatform.com), an associate lab of the Games Institute, published a Whitepaper to present their findings from their "Right to the Smart City" symposium that took place March, 2018 at Harvard University. Their work aims to help municipalities, experts, and community members plan smart cities together.

An announcement about the Whitepaper and toolkit was featured on Waterloo News this morning. The toolkit is a crucial step forward for developing a paradigm for "smart" cities.

According to the Whitepaper, the toolkit is "a template for municipalities to reproduce our process on a local level in order to ground-truth our general findings and provide local texture to the definition of smart".

The toolkit provides five major actions, what the City as Platform Lab calls "plays" that should be taken by any organization or municipality looking to engage the public with plans for integrating technology in city decisions.

These five "plays" were identified by stakeholders from academia, government, and private sectors from across North America who attended the "Right to the Smart City" symposium:

- 1. Embracing smart cities**
- 2. Cultivating local innovation ecosystems**
- 3. Inviting public influence**
- 4. Questioning data**
5. Designing for play and civic imagination

Read the Whitepaper that accompanies the toolkit to learn more about how these "plays" were developed and why they are essential for building "smart" cities.

To learn more about the "Right to the Smart City" symposium, check out their website.

The City as Platform lab is directed by Beth Coleman, an Associate Professor of Experimental Digital Media at the University of Waterloo. She is quoted in the press release, saying:

"Civic engagement must be part of a smart city if it is to be a city of innovation, generosity, play, and opportunity."

MILAD SOROUSH AT CHI PLAY 2018 ON GAMES FOR SELF-CONTROL IMPROVEMENT

THURSDAY, OCTOBER 25, 2018

Milad Soroush, GI Resident and PhD student in the department of Management Sciences, will be presenting his paper entitled “Investigating game mechanics that target players’ self-control while maintaining engagement” at CHI Play 2018.

Soroush researches how games can be used as interventions for self-control improvement. In this study, he ran participants through a game he created called “Save the Garden” and then asked them to complete a questionnaire.

“**Save the Garden**” was designed to test how participants perform in interactive, long-term game tasks that challenge their self-control. Performances were then compared with the subsequent questionnaire that looked at self-reports on perceived competence, enjoyment, and trait self-control.

Soroush will discuss his findings on game performance and player experience with the audience at CHI Play 2018 in Melbourne, Australia. This study is a part of Soroush’s ongoing research.

JASON HAWRELIAK’S NEW BOOK “MULTIMODAL SEMIOTICS AND RHETORIC IN VIDEOGAMES”

FRIDAY, OCTOBER 26, 2018

Jason Hawreliak, co-founder of FPS and Assistant Professor of Game Studies at Brock University, authored “Multimodal Semiotics and Rhetoric in Videogames,” published Oct 10, 2018. The book is available in hardcopy and as an eBook.

“Multimodal Semiotics and Rhetoric in Videogames” explores how different videogame forms convey meaning, and how that meaning is interpreted by game designers and players. This text is of particular interest to students and researchers in multimodal studies, game studies, rhetoric, semiotics, and discourse analysis.

Read the full summary from the publishers, CRC Press:

“This book merges recent trends in game studies and multimodal studies to explore the relationship between the interaction between video games’ different modes and the ways in which they inform meaning for both players and designers. The volume begins by laying the foundation for integrating the two disciplines, drawing upon social semiotic and discourse analytic traditions to examine their relationship with meaning in videogames. The book uses a wide range of games as examples to demonstrate the medium’s various forms of expression at work, including audio, visual, textual, haptic, and procedural modes, with a particular focus on the procedural form, which emphasizes processes and causal relationships, to better showcase its link with meaning-making. The second half of the book engages in a discussion of different multimodal configurations and user generated content to show how they contribute to the negotiation of meaning in the player experience, including their role in constructing and perpetuating persuasive messages and in driving interesting and unique player decisions in gameplay. Making the case for the benefits of multimodal approaches to game studies, this volume is key reading for students and researchers in multimodal studies, game studies, rhetoric, semiotics, and discourse analysis.”

“This volume is key reading for students and researchers in multimodal studies, game studies, rhetoric, semiotics, and discourse analysis.”

- CRC Press

DIGITAL ORAL HISTORIES FOR RECONCILIATION (DOHR) AT THE CANADIAN HISTORY OF EDUCATION ASSOCIATION CONFERENCE

MONDAY, OCTOBER 29, 2018

Tony Smith and Kristina Llewellyn represented the Digital Oral Histories for Reconciliation (DOHR) project at the Canadian History of Education Association (CHEA) conference in New Brunswick, October 18-21, 2018. Their co-presentation was entitled “Building Just Relations: Oral History and Virtual Reality in History Education”.

Tony Smith is a survivor of the Nova Scotia Home for Colored Children, a segregated welfare institution for black children. Kristina Llewellyn, faculty member of the Games Institute and Social Development Studies professor at UWaterloo, founded the DOHR project with support from Smith and other survivors in partnership with the NSHCC Restorative Inquiry and the organization Victims of Infant and Child Exploitation Services (VOICES):

“DOHR is a project that creates and assesses virtual reality oral histories for students to address the historical harms of racism. The Nova Scotia Home for Colored Children (NSHCC) opened in 1921 as a welfare institution for black children who were segregated from white-only welfare institutions. Residents suffered the effects of institutionalized racism and abuse during the 70 years of its operation.”

- DOHR

The first project of DOHR is a Virtual Reality experience that brings students into a digitally rendered representation of the Nova Scotia Home for Colored Children. They explore the home and listen to stories from Smith, and survivors Gerry Morrison and Tracey Dorrington-Skinner.

Smith and Llewellyn co-presented on the importance of oral storytelling for a restorative approach to history learning in schools. They shared a demo of DOHR and explained the goals of the project with teachers who were attending CHEA.

The DOHR project is funded in part by the IMMERSe partnership grant. Follow @projectDOHR on twitter for more updates.





NEWS

NOVEMBER

These are a sampling of the news items from
November 2018. For a full list please visit

uwaterloo.ca/games-institute/news

DUALPANTO FEATURED ON THE ARDUINO BLOG

TUESDAY, NOVEMBER 6, 2018

DualPanto, a non-visual haptic device for the blind, was featured on the Arduino blog, October 22. The device allows visually impaired users to engage with video games that would otherwise be inaccessible to them:

“The device features two handles. Users interact with DualPanto by actively moving the ‘me’ handle with one hand and passively holding on to the ‘it’ handle with the other. DualPanto applications generally use the ‘me’ handle to represent the user’s avatar in the virtual world and the ‘it’ handle to represent some other moving entity, such as the opponent in a soccer game.”

- Arduino Team

DualPanto allows visually impaired users to gain an awareness of a virtual field, track moving objects, and control an avatar simultaneously. Arduino featured DualPanto on their blog because the gaming system uses an Arduino Due to interface the physical hardware with the setup of the software.

DualPanto was developed by Oliver Schneider, a faculty member of the Games Institute and Assistant Professor of Human-Computer Interaction, with his team from the Hasso Plattner Institute (University of Potsdam, Germany): Prof. Patrick Baudisch, Jotaro Shigeyama, Robert Kovacs, Thijs Jan Roumen, Sebastian Marwecki, Nico Boeckhoff, Daniel Amadeus Gloeckner, and Jonas Bounama.

TOBEN RACICOT AT THE MID-ATLANTIC POPULAR & AMERICAN CULTURE ASSOCIATION (MAPACA) CONFERENCE

TUESDAY, NOVEMBER 6, 2018

Toben Racicot, GI resident and English PhD student, will be attending the Mid-Atlantic Popular & American Culture Association conference in Baltimore, November 8-10. His paper, “Trauma and Demogorgons: Analyzing Dungeons & Dragons in Stranger Things”, examines the impact that roleplaying games have in strengthening psychic protections in anticipation of future traumas.

“When I first saw Stranger Things I was struck by the parallels between their D&D campaign and how they later negotiated the real-world traumas in their storylines. I started researching the connection between roleplaying and trauma, considering how Stranger Things models Freudian psychoanalytic theories.”

- Toben Racicot

Drawing from the psychoanalytic theories of repetition-compulsion, pre-traumatic stress syndrome, and the Fort-Da! game, Racicot examines the impact roleplaying has on the younger characters in Stranger things in their preparation and execution of coping with trauma.

In this paper, Racicot highlights how imagination, storytelling, and play for children helps to bolster their confidence and mental armatures. This paper is part of Racicot’s ongoing research on the benefits of roleplaying games.

GAMES INSTITUTE MEMBERS PRESENT A PANEL DISCUSSION AT ENTHUSIAST GAMING LIVE EXPO (EGLX)

FRIDAY, NOVEMBER 9, 2018

John Yoon, GI resident and English PhD student, chaired a panel at the Enthusiast Gaming Live Expo (EGLX) in Toronto, October 26-28. His co-panelists were Campbell Macrae, Executive at the UW Smash club, Andre Paradis, Founder of the UW LoL club, Alexandra Orlando, Games Institute alumnus and Games studies researcher and streamer, and Charlie Watson, CEO and founder of SetToDestroyX.

The purpose of the EGLX panel was to generate conversations and ideas about important considerations for eSports, particularly as it becomes a more established fixture in popular culture. According to Yoon:

“It’s time we move past the clichéd discussions of the legitimacy of eSports as bona fide competition. We have to shift our attention from what eSports is to what eSports can accomplish.”

eSports is more nuanced than competitive gaming: it is a cooperative society. The panel considered the state and role of eSports in our communities, examining how the industry can contribute to community building online and offline.

“Various levels of community have blossomed ranging from grassroots competitions, collegiate level play, and professional organized play. What should these strata of our industry do to further their growth and foster meaningful community engagement for the future?”

A recurring question the panel addressed was “who is responsible for shaping how the industry develops?” How do players shape eSports? What about fans, organization, or administrators?

As eSports grows, there are increasing concerns about fostering inclusivity and representation in the scene. The panelists considered who should have the responsibility and authority over these sensitive decisions.

eSports is currently an inchoate industry so the panelists argued that it’s crucial to pose these questions now while we have time to determine the course of development. This was a dedicated dialogue for honing the questions and considerations, bringing them to the fore of eSports discourse, and examining how the industry should pursue the answers.

MARCO MORAN-LEDESMA ON 3D PRINTING IN VR AT THE INTER-UNIVERSITY WORKSHOP (IUW)

THURSDAY, NOVEMBER 15, 2018

Marco Moran-Ledesma, a System Design Engineering Master’s student, will be presenting a poster at the Inter-University Workshop (IUW) at the University of Toronto, Nov. 17. In this poster, he outlines his preliminary research on a system he proposes to improve the VR experience.

Virtual Reality (VR) represents the potential for stepping into realistic, computer-generated three-dimensional virtual worlds, but the most recent technology provides haptic input through hand-held controllers. This means that users do not have realistic interactions with virtual objects: if you can’t touch or hold objects with your hands and fingers, how realistic is the overall VR experience?

Moran-Ledesma explores how integrating 3D printed models with low-priced micro-electromechanical sensors and affordable single-board computers enables more physical-like interaction with virtual objects in VR. He proposes that the integration of these three technologies into a system will enhance the realism of VR experiences:

“In the short-term, I will explore the design space of 3D printed objects in VR by incorporating sensors into 3D printed models and testing their viability as controllers. In the long-term, I intend to provide a design vocabulary of 3D-printed widgets for use in VR so that designers and researchers can build systems that leverage hand and finger interaction in virtual worlds.”

- Marco Moran-Ledesma

CAROLINE WONG AT THE INTER-UNIVERSITY WORKSHOP (IUW): INTERACTING WITH DATA THROUGH TOUCH-ENABLED SYSTEMS

FRIDAY, NOVEMBER 16, 2018

Caroline Wong will be presenting a poster at IUW, 2018 at the University of Toronto. Wong is a Master's student of Management Sciences studying the benefits of touch-enabled systems that improve our interaction with large datasets.

Wong argues that making data visualization tools touch-enabled can make personal data more meaningful and accessible to non-experts rather than technologies that only allow for point-and-click.

“The underlying assumption is that touch/mobile provides easier access; however, the benefits of multi-touch interaction to gaining insight about data are not well understood.”

- Caroline Wong

Wong's poster at IUW investigates how multi-touch interaction with data improves immersion, engagement, and competency in data interpretation: To evaluate interaction experiences, Wong uses data visualization tools to conduct a series of tests that measure people's engagement with data.

This preliminary research is a part of Wong's ongoing research in her Master's program:

“The progress of this research [so far] has been a literature review along with a touch and mouse version of a visualization tool that is ready to test. The findings from this research will be used to iteratively make appropriate design recommendations, implement, and evaluate future touch visualizations.”

- Caroline Wong

TINA CHAN PRESENTS A PAPER ON GAMIFICATION AND MENTAL HEALTH AT THE INTER-UNIVERSITY WORKSHOP (IUW)

MONDAY, NOVEMBER 19, 2018

Tina Chan, Masters of Science candidate in the School of Public Health and Health Systems, is presenting a paper at IUW entitled “Designing for Engagement in Peer to Peer Support Using Cognitive Behavioural Therapy with Gamification and the Proteus Effect”.

Chan's research draws from crowdsourcing studies that combine online peer to peer (P2P) support with cognitive behavioural therapy (CBT), as well as the Proteus Effect.

In P2P support with CBT, researchers have found there is therapeutic value for mood disorders when strangers are asked to cognitively appraise each other's negative thoughts. Chan's work investigates how gamification can improve how users engage with this niche therapeutic practice.

She proposes that the Proteus Effect, a phenomenon where players perform stereotyped behaviours of their avatars, represents a promising theoretical background for developing a gamified version of P2P support using CBT:

“[My objective is] to understand if the Proteus Effect can persuade increased helpful contributions in a gamified P2P CBT platform, if avatars with stereotypical supportive qualities are used.”

- Tina Chan from her abstract

QUANTUM CATS AT THE ONTARIO SCIENCE CENTRE

MONDAY, NOVEMBER 19, 2018

Chan's method involves designing and developing a computer game and then measuring how study participants interact with their avatars. This project is a part of Chan's ongoing research:

“The developed game is currently undergoing pilot testing with lab members, and the study is to run with participants from November to December 2018.”

- Tina Chan
from her abstract

Quantum Cats (2015), a game that allows players to learn and engage with concepts from quantum physics, is currently featured at the Ontario Science Centre exhibit “Quantum: The Exhibition,” an exhibit created by the Institute for Quantum Computing (IQC).

Quantum Cats was created by a team of researchers from the IQC and the Games Institute. James Wallace and Victor Cheung are credited for the conceptualization and design, Mike Brown and Jagger Nast are credited for the programming, and Keith McLean is credited for the art.

Quantum Cats asks players to rescue kittens by sending cats to their rescue, but the catch is that the cats are affected by different properties from quantum physics: quantum mechanics, superposition, the uncertainty principle, and quantum tunnelling.

“The Quantum Cats are on a mission to rescue the kittens. But we need your help! Using the weird and spooky laws of quantum mechanics, help the Quantum Cats save the kittens.”

- Quantum Cats team, from “What’s Happened to the World’s Kittens?!”

Through observing and adapting to how the cats behave under different quantum principles, players gain an understanding of complex quantum principles:

“Quantum technologies are emerging from research labs faster and faster. From highly secure communications to ultra-sensitive devices to powerful quantum computers, these technologies are going to transform how we live, work and play. We here at The Institute for Quantum Computing (IQC) want to help people become familiar with the science behind these quantum technologies.”

- Quantum Cats team, from “The Story Behind Quantum Cats”

Visit Quantum Cats at “Quantum: The Exhibition” until January 6, or play Quantum Cats by downloading on Google Play or the App Store.

SARAH STANG AT REFIG 2018

THURSDAY, NOVEMBER 22, 2018

Sarah Stang, Essays Editor for First Person Scholar and PhD student in the Communication and Culture program at York University, delivered a co-presentation with Dr. Aaron Trammel at ReFig 2018.

Their presentation, entitled “The Misogynist Ludic Bestiary: How Women are Made Monstrous in Dungeons & Dragons (D&D)” was a condensed version of a longer article the two co-authored:

“In our article we discuss the Monster Manual - the bestiary for D&D - as a text which draws on the (sexist) conventions of the Medieval Bestiary which often labelled women monstrous and evil. Gygax was also influenced by Tolkienesque fantasy and mythology, so many of the female monsters in the Monster Manual are drawn from mythology, like the Medusa, Sirens, Harpies, Banshees, etc.”

- Sarah Stang

Stang does visual and textual analysis of monsters in games, while Trammel’s expertise is in the history of D&D and its material culture and circuits of distribution. Their article combines these efforts to look at how really horrific female monsters drawn

from mythology are categorized and classified in the Monster Manual.

The scope of the presentation included a discussion of D&D, its history, and its connection to the bestiary. Stang focused specifically on a case study of the abject monstrous feminine – the figure of the Hag:

“The Hag is a particularly troubling example because not only are Hag monsters at the intersection of sexism and ageism, the Monster Manual also describes them as reproducing in a monstrous way, as sexually dangerous, as well as being hideous, grotesque, evil, etc.”

- Sarah Stang

The presentation and article are connected to Stang’s dissertation work which looks at monsters as symbolic representations of marginalized identities in digital games. Stang’s research employs textual and visual analysis and the concepts of the Abject, the Monstrous-Feminine, and the Grotesque.

Slides from the presentation, “The Misogynist Ludic Bestiary: How Women are Made Monstrous in Dungeons & Dragons (D&D)”

LENNART NACKE WEIGHING IN ON VIOLENCE IN VIDEOGAMES ON KITCHENER TODAY

MONDAY, NOVEMBER 26, 2018

Dr. Lennart Nacke joined reporter Brian Bourke from Kitchener Today to weigh in on the societal value of games. Nacke was invited to join Bourke because interest in the negative effects of violent videogames is re-emerging in the media following the publication of a meta-study showing the results of 24 studies looking at heightened physical aggression post-gameplay in youths from 9-19.

Nacke’s work involves studying motivations in games. Why do people play? What do they gain by playing? How can designers better develop gameful systems to actualize their intent?

Nacke’s research is not specifically focused on the effect of violence in video games; rather, he looks at motivational and behavioural outcomes from playing games. In this conversation, Nacke gave Bourke the example of how the game as a medium can be a powerful educational tool.

“We learn and comprehend much better in an interactive context [...] Games can be much more powerful than traditional [media] so the question becomes how can we design those games so that there is an effect that the students can actually learn?”

- Lennart Nacke,
on Kitchener Today

Nacke also reminded listeners that the evidence can be misleading if we don't understand how the researchers quantified violence:

“... we have to be careful about what we classify as a violent video game. In the study, sometimes they look at challenge, and competitive play in aggression ... so we have to think about how they measure aggression.”

How do these studies conceptualize and measure violence in videogames? How do they measure instances of aggression following gameplay – are they using self-reports or physical acts?

Nacke challenges us to consider the positive experiences that come from playing videogames. Aggression, conflict, and competition are common human experiences:

“You have to think about healthy ways of expressing violence and aggressive emotions. It helps [young players] reflect on what they're currently experiencing. There's a lot of positive power.”

ELISE VIST AT THE FAN STUDIES NETWORK NORTH AMERICA (FSNNA) CONFERENCE

WEDNESDAY, NOVEMBER 28, 2019

Elise Vist presented a paper at the Fan Studies Network North America (FSNNA) 2018 Conference at DePaul University in Chicago, October 25-27, 2018. Vist is an English PhD candidate studying fans, immersion, and queerness at the Games Institute, as well as the producer for First Person Podcast.

Vist's paper, entitled “Hockey RPF and Intimate Fandoms of Hockey”, examined real person fanfiction (RPF) of players in the NHL. She argued that mainstream Hockey fandoms aren't inclusive or accessible to many queer and POC fans. Instead, queer fans of hockey are drawn to Hockey RPF, of which there are several intimate publics of fandom.

Intimate publics are small, relational groups of people who identify with one another in a fandom to the extent that they disidentify with the norm of the public fandoms:

“In my intimate fandom of hockey, I can't simply identify with hockey players, because to take them on as objects of identification would be to let go of the identities that make me, me: queer, anti-racist, anti-capitalist, feminist. The alternative, though, can't be to avoid hockey or its athletes altogether, because – however hypocritical it is – I like hockey.”

- Elise Vist

In this presentation, Vist shared her findings on how these intimate publics help reconcile the tension that queer fans have about being a fan of a sport with a culture that is unwelcoming to queer identities. However, she also acknowledged that Hockey RPF doesn't solve all of the problems of public fandoms:

“P.K. Subban is one of the very few black men in the NHL, [...] the racism that hounds Subban in reality is not absent, even in an intimate fandom that celebrates queerness through Hockey RPF, because not every intimate fandom of hockey prioritizes blackness in the same way it prioritizes queerness.”

Hockey RPF and intimate publics of fandom are parts of Vist's ongoing research for her PhD. She also maintains a blog where she writes about specific findings from her research, such as the term “bromance” and the homosexual paradox of the sport.





NEWS DECEMBER

MARK HANCOCK RECEIVES THE 10-YEAR IMPACT AWARD AT ISS

TUESDAY, DECEMBER 4, 2018

Mark Hancock, Associate Director of the Games Institute and Director of the UW Touchlab, was honoured with the 10-Year Impact Award on Tuesday, Nov. 27 at the ACM International Conference on Interactive Surfaces and Spaces (ISS) in Tokyo.

Every year, the ISS steering committee selects a paper to receive the 10-Year Impact Award based on the how it has impacted the ISS community. They consider the number of times the work was cited, how those citations benefited future work, and how and if the work was cited by researchers from other disciplines.

Hancock and his co-authors, Thomas ten Cate and Sheelagh Carpendale, received the 10-Year Impact Award for their paper “Sticky tools: Full 6DOF force-based interaction for multi-touch tables” because of its significance to the field.

Also at ISS, **Stacey Scott**, Associate Professor of HCI at the University of Guelph and a founding member of the Games Institute, was awarded an honourable mention for her work on “Post-meeting curation of whiteboard content captured with mobile devices” with Danniell Varona-Marin, Jan A. Oberholzer, and Edward Tse. This work was based on a Mitacs-SSHRC joint initiative internship through the IMMERSe SSHRC Partnership Network, managed by the GI.

LENNART NACKE ON THE “KEEPING THE HUMAN IN ARTIFICIAL INTELLIGENCE” PANEL

WEDNESDAY, DECEMBER 12, 2018

Lennart Nacke, faculty member of the Games Institute and director of the HCI Games Group, spoke on a panel, entitled “Keeping the Human in Artificial Intelligence”, on December 3 at the Kitchener Public Library.

The other panelists were Carla Fehr, professor of philosophy and Wolfe Chair in Scientific and Technological Literacy, and Joel Bilt, economics professor. The event asked the panelists to share their ideas about how Artificial Intelligence (AI) can, or will, impact society and the human condition through the lens of their disciplinary backgrounds.

Nacke’s Human-Computer Interaction work looks at player behaviour and motivation in response to gameful systems. During the panel he discussed the implications of the relationship between user engagement and AI and argued that gamification can help support the user-AI relationship.

Waterloo stories covered the event and published an article on the University of Waterloo home page.

EMMA VOSSEN AT REFIG 2018

WEDNESDAY, DECEMBER 19, 2018

Emma Vossen, alum of the Games Institute and former Editor in Chief of First Person Scholar, ran the Refiguring Innovation in Games (ReFiG) conference in Vancouver on October 25, 26, and 27, 2018. Vossen also presented a talk about teaching games related classes.

Vossen is presently a Postdoctoral Research Fellow at York University where she helps to run the ReFiG network and all its associated projects. ReFiG aims to promote diversity and equity in the games industry and culture by intervening in games culture, the games industry, informal learning environments, and formal education.



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SPOTLIGHTS

VR WORKING GROUP PREDICTING MOTION SICKNESS IN VR

MONDAY, OCTOBER 1, 2018

Last week, neurophysiologists and VR researchers at the University of Waterloo started making headlines because of their findings on how to predict which VR users might be more susceptible to cybersickness.

Séamas Weech, Jessy Varghese, and Michael Barnett-Cowan, members of the VR working group at the Games Institute, co-authored a paper entitled “Estimating the sensorimotor components of cybersickness” published in the *Journal of Neurophysiology*.

Their results caught the attention of many, many news outlets who were picking the story up and claiming that UW researchers are on the cusp of curing cybersickness ... What exactly did Weech, Varghese, and Barnett-Cowan publish?

Their paper presents the findings that participant sway patterns during vection stimuli, the sensation of body movement produced by visual motion cues, is a strong predictor for VR motion sickness.

Their study involved conducting tests to measure individual differences in specific neurophysiological traits, and then measuring participants’ experiences of VR motion sickness. In the article, Weech says:

“We found that the sway in response to vection stimuli had the strongest predictive power for [cybersickness] among all measures collected.”

Media outlets have been excited about these findings because of the broad implications for VR research.

For one, this predictive model means researchers now have a way of predicting motion sickness without inducing nausea in participants.

Weech, Varghese and Barnett-Cowan speculate that the more we understand about this correlation between sensitivity to vection stimuli and cybersickness, the more researchers will be able to develop strategies for overcoming VR motion sickness.

NEED MORE CONVINCING?

Weech, Varghese and Barnett-Cowan measured balance control, vection responses, and vestibular sensitivity - in other words, they measured how well participants maintained balance, how their bodies moved in response to visual stimulation, and how prone they were to dizziness. In the article they discuss how sway responses aren’t the only neurophysiological processes affecting cybersickness.

WORKS CITED

Weech, S., Varghese, J. S., & Barnett-Cowan, M. (2018) *Journal of Neurophysiology*. <https://www.physiology.org/doi/abs/10.1152/jn.00477.2018>

GI MEMBERS ORGANIZING “GAMING WITH THE SUBALTERN”: WORKSHOP AT CHI PLAY 2018

THURSDAY, OCTOBER 4, 2018

GAMING WITH THE SUBALTERN: A WORKSHOP ON DIVERSITY AND INCLUSION IN GAMES

Cayley MacArthur, Systems Design PhD student, and **Mark Hancock**, Associate Director of the Games Institute, are co-organizing a workshop in collaboration with six other international scholars. The workshop, entitled “Gaming with the subaltern: A workshop on diversity and inclusion in games,” is scheduled for CHI Play 2018 in Melbourne, Australia.

Despite the fact that games are played by a highly diverse group of people, game development teams are comprised of 70% + white men. We have known this for a while, but the problem persists because there is little diversity among the groups of people who are attempting to implement change.

How can we make gaming research, development, and play more diverse if the people in conversations about solutions don’t have lived experiences of the problems?

This workshop is designed and structured to disrupt the patterns of non- and misrepresentation in order to stimulate

DOCU-VIDEO FROM VR WORKSHOP WITH GADA JANE AND SPIDERWEBSHOW PERFORMANCE

WEDNESDAY, OCTOBER 10, 2018

conversations and insights about successful intersectional practices in research, development, and play. Critically, the organizers propose:

“This workshop represents an effort to gather a community of identity, power, and diversity researchers to share our knowledge and practices with one another, collectively understand the intersections of identity-factors (race, gender, sexuality, ability, neuroatypicality, etc.) and cross-cultural issues in games research and game design.”

The workshop is built around these key questions:

- › How do individual differences affect results and methods in games user research, and individuals’ gameplay experiences?
- › What perspectives and experiences are shared by people across gender, ethnicity, age, ability, class, and other social power dynamics?
- › Which of these identity effects are unique and which are shared across dynamics of oppression?
- › What do game researchers and developers need to understand regarding identity dynamics when gathering data, interpreting results, or presenting information?
- › What does intersectionality (i.e., the living combination of multiple identity and power dynamics) look like in gaming, game development and research?

“Gaming with the Subaltern” is not about generating solutions. Rather, the purpose is to serve as a launching point for ongoing discussions:

“The results of our workshop will be published to an online, publicly-available website for comment, critique, and information. This living document will help inform future games research and development.”

September 14 and 15, 2018, four playwrights came to the GI for an intensive workshop on VR filmmaking. The workshop was hosted by Gada Jane, Research Associate at the GI, and Michael Wheeler, Co-Creator and Artistic Director of SpiderWebShow Performance.

The playwrights were Erin Brandenburg, playwright and director, Rosamund Small, playwright and writer, Nicolas Billon, playwright and screenwriter, and Ahmad Meree, playwright and performer.

Gada Jane designed the workshop with the intention of getting the playwrights to focus on how they as artists could express their own ideas through VR. She said:

“So often the technology can become the focus just because it’s new and there’s a lot to process, but we really wanted to focus on storytelling. My goal was to get the playwrights to stay focused on their own interests as artist and how those could be translated to this new medium.”

Jane kicked off the workshop with a discussion on the overarching goals. Ultimately, their purpose was to collaborate with one another and generate strategies for telling immersive stories in VR that leveraged their skills as playwrights with the medium’s ability to evoke and express complex emotions.

The four playwrights spent the first day using VR equipment and testing out a variety of film

and game experiences. The second day, they got back together and formed a creative cluster, discussing what they had learned as well as their perspectives on the advantages and challenges of storytelling in VR.

Their voices come together in this video. Collectively, they express that VR requires a new paradigm for storytelling. Michael Wheeler says:

“The biggest similarity between VR and theatre, is that these are still three dimensional stories. So there is a real connection between the two modes. VR is a really large medium. There are stories you could shoot realistically with 360 video, there’s content that could be rendered in an animated environment, there are pieces where you’re static, pieces where you move, and there’s different ways that interactivity could happen. So in terms what VR is, it’s a multiplicity of things actually.”

How would you write for an audience that is going to be inside the story? The playwrights shared several strategies throughout the workshop, a few of which are offered in the video, for writing in VR and leveraging the potential that Wheeler describes.

TINA CHAN FOR TEDxUW: BANDAIDS FOR MENTAL HEALTH

MONDAY, OCTOBER 15, 2018

Tina Chan, GI resident and Masters of Science candidate in the School of Public Health and Health Systems, was a speaker at this year's TEDxUW conference. She took the stage to share the story of how she came to develop the Panic Anxiety Stress Support (PASS) kit.

Chan developed the PASS kit during her undergrad. In the talk, she disclosed that she was dealing with her own mental health struggles because of the pressures of university life - an experience that is all too common for students. This led to her discovery that resources for those with mental health symptoms were unusable and intimidating.

Students who struggle with depression, anxiety, or stress need helpful, accessible ongoing supports, regardless of whether or not they have a diagnosis:

“I recovered from illness through therapy, medication, and years of practice, but you don’t need a diagnosed disorder to experience symptoms of anxiety or depression, like how you don’t need the flu to have a sore throat.”

After conducting research and receiving advice from counselors, social workers, and mental health educators, Chan developed the PASS kit. It's a

first-aid kit equipped with earplugs, a blindfold, a squeeze-toy, gum, and mindfulness cards. Each item was selected or designed to model evidence-based approaches to treating symptoms. The gum, for example, relieves muscle tension caused by anxiety*.

The University of Waterloo provided a PASS kit to every incoming frosh student in 2018. By doing so, the university equipped students with some tools for easing stress symptoms. It also signaled to the students that the university cares, that they are not alone, and that suffering from mental illness is a rite of passage.

“Groups such as students entering the new world of university [see] insomnia and excessive worry to be a natural part of academia -which isn’t true.”

Chan's purpose for sharing her story about the PASS kit was to inspire the audience to think about how innovation can be used to disrupt the pervasiveness of mental health issues in society. Her PASS kit isn't the be-all, end-all solution. It's a Band-Aid to give to people so that they have a temporary solution until they can get the psychological help they need.

*symptom of anxiety, not necessarily caused by

A FIRSTHAND ACCOUNT OF A NON-PROGRAMMER'S EXPERIENCE AT THE GI JAM

THURSDAY, OCTOBER 18, 2018

We sent AC Atienza to the GI Jam, Fall 2018. This is their firsthand account.

“GI Game Jam as someone who knows absolutely nothing about programming and also went alone”

- AC Atienza

I went to my first game jam this past weekend! Overall it was a really good, fun experience. I went to the Jam alone and before I started I knew absolutely nothing about programming.

I formed my team of people by shouting, “Who needs a team?” and taking in the first 3-4 people who looked at me. We got together and it turns out that I was the only non-programmer, but also the only artist — so my role was pretty much set from the start.

The game we decided to make was a roguelike where you left a “time trail” in your wake and could go back in time to solve puzzles or attack enemies in your “trail”, etc.

As a non-programmer I submitted my image assets to the discord, while another member uploaded them to Unity and pushed my stuff to the Github. Thanks to a team of programmers around me, I could hyperfocus on art and designing a game implicitly through my choice of assets.

But you care about seeing what I learned! So here's five lessons I learned, particularly geared toward people who (like me) don't consider themselves a "programmer":

1. Make ugly placeholders of everything first, then polish later on

For example: I spent a few hours one of the nights making a glacier/giant ice cube pile that never made it into the final demo of the game because it just wasn't really needed anywhere. Sure, I can post it somewhere else, but it was kind of sad seeing so many assets essentially go to waste.

2. Really detail out what's actually being programmed into the game and what stuff is feasible

At a game jam you don't have time to mess around with massively experimental things that may never come to completion or even randomly just get cut without

3. Be prepared for a pseudo competitive nature at the Jam

Make a conscious choice whether or not you'll get into the competitiveness of the Jam. That way you don't get waffly feelings about feeling inferior throughout the weekend.

4. There's a lot of fun and learning that comes from doing things fast instead of doing things properly

I loved seeing what I was capable of doing within the span of a few hours. Turns out you can actually accomplish a lot when you have tiny deadlines! This is particularly with regards to drawing. Sure, I didn't make the best pieces I've ever done, but the fact is I got them *finished* – and that's more than I can say for a lot of my more ambitious projects that got me nowhere and taught me little except how to feel stuck.

5. You can thrive in a group of randomly-chosen members as long as someone takes the lead

It seems like the individual relationships between people scales inversely with the amount of leadership required by any one person, anecdotally. It was very interesting seeing firsthand that you don't need to be personal friends with people in order to produce something substantial together - especially when there's independent parts that can be developed separately. Of course, cohesion can be somewhat of an issue, but if there's even one person who can be a liaison between departments things work out surprisingly well.

What about game dev knowledge?

I also learned about game development as a whole this weekend. I came to appreciate what programmers have to deal with on a minute and large scale. I came to understand what code debt is firsthand, as well as the frustrating nature of merge conflicts.

For artists: try to limit your colour palette or stylistic choices when doing videogame art. Cohesiveness is

more important than necessarily looking great in a vacuum.

I also had a good experience seeing what other people have to deal with in departments other than my own. While the specific problems vary it seems there's universal issues that everyone has to deal with. For example, all of us had to deal with the sadness of assembling something that was amazing but useless in the context of the project.

This leads me to another lesson, maybe the biggest one:

“What makes something “polished” depends on the gap between what a game does and what it wants to do. The smaller the gap, the more polished the game.”

Ultimately, what matters for a good game, good art, good anything, is not a vague concept of how “good” your output is in a self-imposed vacuum; what matters is how much of your goal you fulfill.

Therefore, the biggest takeaway from my game jam, that I want to carry into my “regular” life, is that the relationship between goal and output is very often more important than the “raw” output alone.

Seriously! It perhaps sounds obvious to hear, but actually applying that is harder than it seems. I guess kind of like how boxing has different weight classes, you really need to figure out your own weight class and operate in there instead of comparing yourself to the heaviest of the heavies.

SPOTLIGHT ON ALEXANDRA ORLANDO'S YOUTUBE CHANNEL

FRIDAY, DECEMBER 7, 2018

Alexandra Orlando, an alum of the Games Institute and a former Editor in Chief for First Person Scholar, maintains a YouTube channel for academically-oriented games criticism. When she's not working on video essays, she works as freelance writer.

Orlando's research interests include narratology, gender and esports. A chapter she co-authored with Gerald Voorhees about neoliberal masculinities in play in Counter Strike: Go Esports was recently published in the book "Masculinities in Play":

"Masculinities in Play is a significant addition to the field of games studies making headway with both practical and theoretical approaches to many contemporary critical issues. The collection has writing from some of the best current and emerging scholars in the field so it is a must read!"

- Alexandra Orlando

The videos Orlando publishes on her YouTube channel makes games scholarship accessible to non-expert and non-academic audiences while pushing the boundaries of what we expect for game studies. She examines gender in twitch streaming, the intersection between film theory and game cinematics, and East Asian game studies. She also posts scholarly criticisms of films, animation, and even K-pop.

Her game-specific videos have looked at K-pop and eSports, sex games, Canadian Horror games, and the historical context of Hentai games. Orlando's most viewed video is entitled "Dissecting Sex Games on Newgrounds". The video received close to 5,000 views.

She also publishes video series on specific games, including Deus Ex and Warframe, allowing her to bring more in-depth games research to her channel. With her publication of the Warframe video essay series, Orlando stated:

"I took care with this video to summarize and condense the assault of information out there on starting this addicting F2P game. I hope to take the same approach in upcoming video essays and other tutorials for this kind of complex content."

- Alexandra Orlando, from her blog

Outside of her own channel, Orlando is a regular cast member on the YouTube channel "SpoilerWarningShow" with over 6,500 subscribers. There, she shares her perspective on popular games such as Horizon Zero Dawn and Assassin's Creed.

MULTIDISCIPLINARY PANEL: HORIZON ZERO DAWN

MONDAY, DECEMBER 10, 2018

Thursday, December 6th, three students from different disciplines came together to share their perspectives on Horizon Zero Dawn (2017). The panel discussion was by no means a debate; rather, it was designed to explore three different approaches to the study of games and to showcase the nuances of curiosity, criticism and analytical methodology.

Watch the full panel here, or keep reading for more details on how the event unfolded ...

Horizon Zero Dawn is a popular AAA game set in a post-post-apocalyptic world where you play as a female protagonist, Aloy, and use a focus – an Augmented Reality-style interface – to help you battle mechanical animals. The game set the stage for the conversation, but the spotlight was on the panelists.

Karina Arrambide, GI resident and Systems Design Engineering PhD student, studies player behaviours and emotions by applying methodologies from Games User Research. Karina uses biometrics to measure player responses during

gameplay in order to determine effective and ineffective game design mechanics. She brought to the panel ideas about how the design elements in Horizon Zero Dawn constructed the relationship between the game and the player.

Nicholas Hobin, GI resident and English PhD student, studies narratives in videogames through the lens of how videogames reflect and manifest processes of conceptualization. His specific focus is on animals in videogames and the cybernetic triangle - the relationship between humans, animals, and machines. Nicholas brought to the conversation theories on the cybernetic triangle in order to analyze how Horizon Zero Dawn constructs, or deconstructs, our relationships to animals and technology.

John Harris, GI resident and Computer Science PhD student, studies player experiences in asymmetric game play. His research focuses on building playful experiences that bring different kinds of players together. His specialized research background allowed him to notice the subtler details of the game mechanics and character designs and he discussed how these parts work together.

The panel began with each speaker sharing their overall impressions on the game. What made the game unique? What were the highlights of the game? And what limitations did it have? Even in these short preambles, the differences in their disciplinary perspectives were clear.

Karina commented on how specific mechanics in the game make for a unique player experience, for example how players can change the difficulty level of combat so that they could focus more on the game's story. Nicholas discussed posthumanism in the context of the game, explaining how concepts like "anthropocentrism" and the "cybernetic triangle" relate to the themes in Horizon Zero Dawn. And John discussed his impressions of some of the systems in the game, like how the robo-animals behaved.

For the rest of the panel, the speakers responded to more direct questions about game narrative, player choice and autonomy, world-building, non-player characters, and combat mechanics. The responses from the panelists revealed how complex the game is because they were able to provide answers while simultaneously posing more questions. The panel closed with the question:

**Would you research Horizon Zero Dawn?
How would you study it?**

John answered "no" he wouldn't study the game. Not because it's not worthy of critical inquiry, but because John's research methodology from his Computer Science background requires looking at games from the bottom-up and then testing player responses.

Horizon Zero Dawn is already a completed game so it would be a significant challenge to isolate specific mechanics and measure the player response. Instead, John's research practise has him designing games, such as his work with "Beam Me 'Round, Scotty!"

Nicholas said that he would study a game like Horizon Zero Dawn. One approach would be to study the game through theoretical models of relationships between players and game designers. Game designers and players approach the game from opposite perspectives where designers think about rules, mechanics, and underlying principles, whereas players encounter aesthetics first.

Nicholas would consider how those differences shape and construct Horizon Zero Dawn: how do players interpret the aesthetics? What were the designers communicating to players, whether it was intentional or not? And from there he would consider the circumstances that led up to those design decisions.

Karina said that if she were to run a study about Horizon Zero Dawn she would be interested to look at player behaviour and emotional responses. So, for example, she would want to dig into a question like "how do players respond emotionally when killing a robo-animal compared to a 'real' animal".

Karina might compare player responses from Horizon Zero Dawn with another AAA game like Red Dead Redemption 2 (2018). Similar to John's response, Karina said that since it's a finished game there are limitations to how you can study the game and it really depends on what exactly you're trying to find.





RESEARCH TALKS

These are a sampling of the research talks that took place in Fall 2018. For a full list please visit

uwaterloo.ca/games-institute/news/brown-bags



DR. ALI MAZALEK

ENGAGING BODIES IN COMPUTATION MEDIA

Dr. Ali Mazalek joined us October 9 from Ryerson University to give a Brown Bag talk on human cognition and computational media. Coupled together, large data sets and computational techniques are transforming our interactions with each other and with information sources across society, gradually reinventing our decision-making and knowledge building processes. Yet as physical beings, we still rely heavily on material and sensory ways of constructing knowledge in the world. A gradual shift in the cognitive sciences toward embodied paradigms of human cognition can inspire us to think about why and how computational media should engage our bodies and minds together. By supporting a close connection between our motor, perceptual and cognitive systems, emerging human-computer interaction techniques can offer powerful opportunities to re-think the way we engage with and construct knowledge in a cyberphysical world. This talk presented ongoing research and prototype systems from the Synaesthetic Media Lab that explore how tangible and embodied interactions can support and enhance creativity, discovery and learning across the physical and digital worlds.



TOBEN RACICOT

TRAUMA AND DEMOGORGONS: ANALYZING DUNGEONS & DRAGONS IN STRANGER THINGS

Dungeons & Dragons is more than a motif in Stranger Things. It acts as a therapeutic tool to forestall trauma. Much like Freud's analysis of the "Fort-Da" game his grandson played, Dungeon & Dragons is not simply a game, but a practice that establishes mental armatures in anticipation of future trauma. This paper combines game theory concepts like uncertainty, objectives, role-play, and failure with Freud's theories about trauma, repetition compulsion, and the "Fort-Da" to analyze Dungeon & Dragons' importance in Stranger Things. This analysis shows that games, specifically Dungeons & Dragons, are an effective tool to anticipate trauma; they provide a safe place to become a hero, and empower players to develop psychic protections in anticipation of future traumatic moments.

This paper focuses on the trauma of a person missing or leaving, as this is the inciting incident of season one and relevant trauma in most characters' lives, being children of divorced, dead, or emotionally absent parents. Incorporating psychoanalytic theories from Sigmund Freud, Deborah Britzman, E. Ann Kaplan, Cathy Caruth, and Ruth Lays, shows how the game works for the Stranger Things cast as they encounter trauma events through the first season and also how these principles can be applied in readers' lives. Therefore, this paper functions as both psychoanalysis of Dungeons & Dragons in Stranger Things and displaying its potential for real world applications. The understanding brought to light by Dungeons & Dragons' role in Stranger Things allows readers to better grasp the need for imagination, role-play, and collaboration as part of trauma foresight.



AMY LIANG

VIRTUAL REALITY (VR) IN SECOND LANGUAGE LEARNING

Learning a new language can always be exciting but at times frustrating. But how come we never felt learning our first language so hard when we were a little kid? And as grownups having the better executive functioning, why would this advantage we have in return acted as a barrier in our new language learning experience? This short presentation will be looking at the three basic linguistic levels, discuss how and why was it harder for adults to learn a new language, and how can we use modern technologies like AI and VR to help with the language learning experience.



JASON HAWRELIAK

MULTIMODAL SEMIOTICS AND TEACHING
IN A DEDICATED GAME STUDIES PROGRAM

Videogames rely on complex signification systems to communicate information to players, including image, sound, text, haptic feedback, and procedurality. This complexity poses challenges for both theorists and developers. Drawing on a diverse range of game genres, the first half of this talk outlines an analytical framework for tackling the problem of complexity in videogames by way of multimodal semiotics. The second half of the talk looks at some of the challenges and opportunities that come with teaching in a dedicated games program.



JONATHAN ENNS

TOWARDS AN OPEN ARCHITECTURE

Jonathan presents his work on participatory design in Architecture, focusing on new exciting possibilities for tangible user interfaces in the age of modular prefabricated building design. He introduces the historical importance of physical models for design in architecture, then discusses his recent projects that attempt to develop scaled tangible design controls that integrate physical and digital design environments.



EUGENIE ROUDAIA

DESIGN AND EVALUATION OF
CITYQUEST, A VIDEO GAME AIMED AT
OLDER ADULTS WITH FEAR OF FALLING

Older adults face an increased risk of falls, which often have significant negative consequences, including developing a fear of falling. Older adults with fear of falling often restrict their activities, which leads to social isolation and accelerated cognitive decline. This talk presents our work in designing, creating, and evaluating a video game, CityQuest, aimed at improving balance confidence, spatial cognition, and multisensory processing of older adults at risk of falling. First, I will describe the design and conceptualization of the game, including consultations with end users, survey of the literature, and pilot testing. Next, I will present the design and results of the intervention study we conducted in a group of healthy and fall-prone older adults. The study evaluated the effects of the game on balance confidence, spatial cognition, and perception, as well as subjective aspects of game experience and acceptability of the game as a falls-related intervention. Our results indicate that video games that challenge balance, spatial cognition, and perception are rated as enjoyable and beneficial by older adults and present a powerful tool to improve balance confidence, perception, and cognition in older adults.



JOHN MUÑOZ

PHYSIOLOGICAL SENSING IN GAMES
AND VR: FROM USER RESEARCH
TO BIOCYBERNETIC ADAPTATION

Overall, physiological sensing has been extensively used as a passive technique to record human responses while interacting with videogames and VR applications. However, those signals have been also utilized either to extend the communication pathways for interfacing the nervous system with the virtual environments or to augment the interaction by means of modulating game variables in response to any detected human state (biocybernetic adaptation). For instance, cardio-adaptive exercise games (Exergames) can use real-time heart rate measurements to persuade older players to exert in recommended levels, thus avoiding risks and maximizing exercise benefits. In this talk, we will discuss the use of physiological sensing from a game-user research perspective, moving towards a more active use of it as input into games and VR applications and showing biocybernetic systems that augment exercise, rehab and neuro-rehab activities based on serious games for health.

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