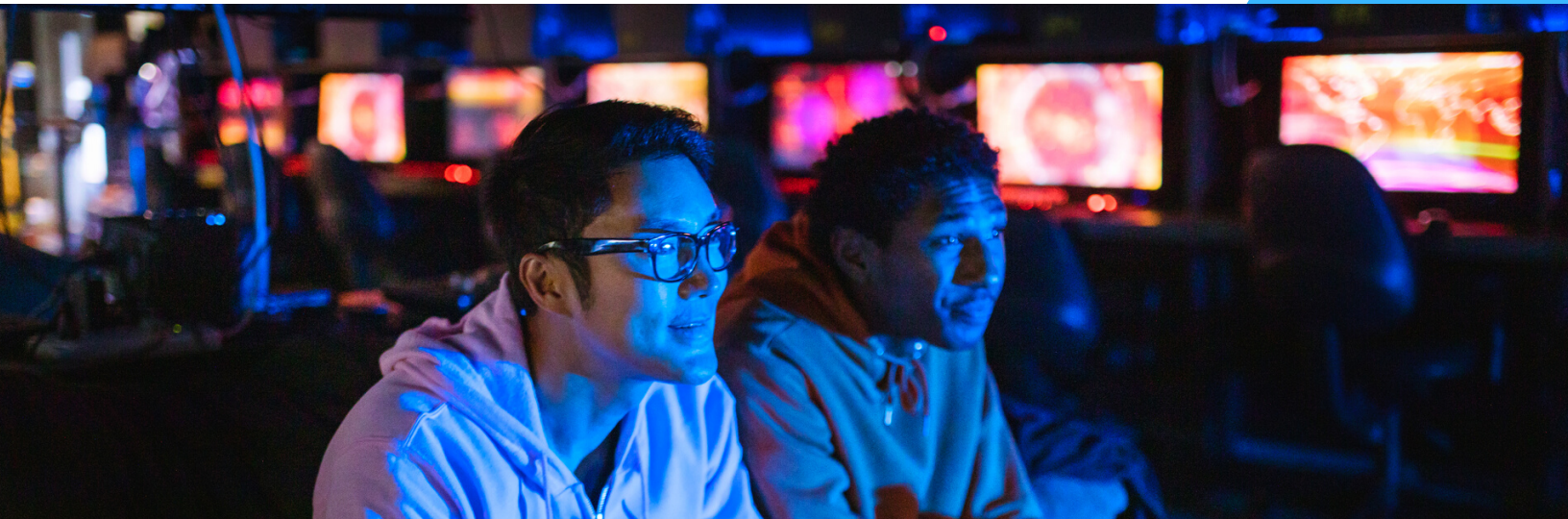# UNIVERSITY OF WATERLOO | THE GAMES INSTITUTE

INSTANT REPLAY

Collaboration, Cooperation, and Connection

In the W23 Term, many members worked hard to make new connections and foster cross-collaborative projects across their networks. **Dr. Lili Liu** (Dean of Health) invited researchers from the University of Saxion, Netherlands to visit the GI and present and share their research. In turn, GI Members travelled in-person to Hamburg, Germany to present at CHI23. The GI Podcast resumed with new episodes, and *Terrorarium*, a game created by GI members and Stitch Media, was nominated for an award by the Canadian Game Awards.

Additionally, the GI's Anti-racism, Decolonization, Equity, Diversity, and Inclusion (ADE) Committee kicked off their event series with lectures, panels, and workshops. **Ekaterina Durmanova** (A) successfully defended her thesis last fall and has since accepted a job at Ubisoft Germany. **Dr. John Muñoz** (J & F Alliance, Adjunct) presented his VR work at the Games Developers Conference (GDC).

Drs. Adan Jerreat-Poole (Communication Arts) and **Lai-Tze Fan** (Sociology and Legal Studies) presented lectures at the DS Bytes series, and PhD candidates **Toben Racicot** (English) and **Joey Femia** (English) presented their research at the PRES Lecture Series.

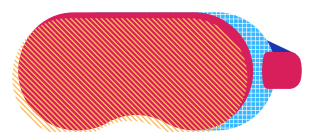Catch up on all the latest news and more in this installment of Instant Replay!

NEWSLETTER HIGHLIGHTS

EKATERINA DURMOVA
How to Puzzle Your Way Through Academia

Master's student Ekaterina Durmanova (Ekat) has been a part of the GI community in more ways than one since 2016. Her first moment of exposure was through the Undergraduate Game Dev Club, where she participated in a Game Jam that was captained by, then student, **Dr. Cayley MacArthur** (Stratford). The Jam was captivating enough for Ekat to return to the GI time and time again; first as a volunteer for other Game Jams and, eventually, participating as a captain herself alongside fellow GI Members: **Arielle Ginsberg** (Management Sciences), **Alex Glover** (Systems Design Engineering), and **Dr. MacArthur**.

With the intent of a game jam being to create a game from scratch in two days, Ekat reminisced on how stressful managing the event could be. "It's one of the most taxing things you can volunteer for but also one of the most rewarding", she said.

Beyond the excitement of game jams, Ekat started getting more involved in research at the GI by working as a researcher assistant with **Dr. Lennart Nacke** (Stratford). With a growing interest in Human Computer Interaction (HCI) and her experience in game design, she started her Master's of Engineering in Fall 2019, and officially joined the GI as a Master's student in 2020. She was an active community member and enjoyed opportunities to collaborate with others on projects like "Curioscape: A Curiosity-driven Escape Room Board Game"with fellow GI member, **Joe Tu** (Stratford). Their creation allows players to start the game without needing a rule book.

[A Curioscape player using a RFID card and interacting with the first iteration of the game.]

Some of her favourite GI memories were games nights, midday yoga breaks, and the sense of community that was cultivated there. But, one of the difficulties Ekat encountered during this time was the inability to conduct research in person for her Master's thesis due to the Covid-19 Pandemic. Her thesis "The Effects of Juicy Game Design on Exergames" explored how visual embellishments in exercise games (exergames for short) can affect participant enjoyment. But how can you study exergames without in person studies? To resolve this, Ekat relied on questionnaires and used GIFs to convey different levels of visual embellishments. Even though her research process wasn't how she envisioned it to be, she successfully defended her thesis in December 2022.

After the defense, Ekat was ready for a change. She was ready to step out of academia and look for opportunities in industry. Through networking at the GI, she was offered and accepted a position at Ubisoft, Germany (making her another GI alum to join the company along with **Dr. Stuart Hallifax** (A), now in Montreal!) Her new position is User Experience Research Tools Coordinator (say that ten times fast), and on a day-to-day basis, she optimizes research processes through the tools and software Ubisoft uses for development. When asked about her job, she said, "I like to find ways to puzzle piece all these tools together and make them work more fluidly for the developers in Ubisoft."

Struggling to write a thesis? Start a farm on Stardew Valley! It's Dr. MacArthur and Ekat's favourite way to finish a paper and a farm all at once!

The biggest value Ekat will take away from the GI is to be open to her wacky and weird ideas. Coming from the Faculty of Arts during her undergrad to Engineering in her Masters, she learned that these fields aren't that different. "Collaboration is so magical and it's so easy to get stuck in a box at UW," she says. "If you take the people around you as they are rather than focusing on their academic background, you will find very interesting projects that may be more impactful."

ADE for Games Communities Workshop and Speaker Series

Last year the ADE Committee successfully applied for a SSHRC Connection grant to create a speaker series entitled: "ADE For Game Communities: Enculturing Anti-Racism, Decolonization, Equity, Diversity, and Inclusion (ADE) in Games Research and Creation." Co-PI's **Drs. Gerald Voorhees** (Communication Arts & Chair of the GI's ADE Committee) and **Daniel Harley** (Stratford) put together a series of lectures, workshops, and panels for people from marginalized groups to share their unique knowledge on these overarching questions:

1. How do we make anti-racism, decolonization, and equity vital elements of the research and development of games and playable media?
2. What can we do to ensure that the methods and approaches we practice in our scholarship are respectful and responsive to the needs of the marginalized communities?
3. What can we do to ensure that the methods and approaches we practice in our scholarship and creative work are respectful and responsive to the needs of the marginalized communities?

Theses 8 events set the record for the most events we've run in one term!

By highlighting historically marginalized voices, the GI community and audience members gained fundamental understandings, were challenged with critical questions, and learned practical skills and insights to address current challenges across games communities in academia and the industry. The series features 8 distinguished speakers, workshops, and panels between February - May and will continue with a second set of 8 events in Fall 2023.

The Winter 2023 Events are:

Inclusion and Accessibility	*Representing Disability*	*Black Representation*	*Indigenous Representation*
"Structures of Care and Accessibility Workshop" with D. Squinkifier and Dr. Jess Rowan Marcotte	"Designing for Disability and Accessibility Panel" with Triskal deHaven, Dr. Katta Spiel, and Dr. Cayley MacArthur	"Just Relationships for Research Panel" with Dr. Kishonna Gray, Dr. Liz Nilsen, and Dr. Rhona Hanning	"A Discussion on Indigenous Research and Epistemology" with Dr. Kelly Laurila and Dr. Hector Perez
"The Impact of Genuine and Mindful Inclusion of Marginalized Communities in Creative Works" with Elaine Gómez-Sanchez	"Researching Disability and Play - Where's the Fun in That?" with Dr. Katta Spiel	"The Changing Same: Blackness, Representation, and Video Games" with Dr. André Brock	"From Custer's Revenge to Red Dead Redemption: Changing the Language of Indigenous Representation" with Dr. Ashlee Bird

Feminist Think Tank and the Coalition of Muslim Women Host Counter Speech Workshop

On January 5 and 6, the Coalition of Muslim Women, in conjunction with Feminist Think Tank (FTT), held a two-day counter speech lab to address online Islamophobic hate. The lab was aimed at Muslim youth between the ages of 17 and 25. The two-day workshop covered topics, including cyber safety, counter speech, restorative justice, and content creation. **Drs. Brianna Wiens** (English) and **Shana MacDonald** (Communication Arts) spoke on their experiences with social media and counter speech through the @aesthetic.resistance Instagram account. Participants were encouraged to post uplifting and positive content as a form of counter speech.

Dr. Will Zhao and Evan Jones speak at "Where Will the Future of AI Take Us?"

On January 24, the Office of Research hosted "The AI Tsunami – Where will it take us?", a panel discussion on the future of Artificial Intelligence (AI). **Dr. Will Zhao** (Stratford) and **Evan Jones** (GI Advisory Board Member and founder of Stitch Media) were among those speaking on the panel.

Dr. Zhao focused on the impact of chatbots and noted that before the advent of "generative pre-training transformer" (GPT), there was a general nonchalance or rejection of chatbots by the public. After the advent of GPT technology, Zhao said that AI is finally able to convincingly imitate human conversational abilities. He called for further consideration of the consequences of trusting AI too much, which has now turned into an authoritative source of information.

Evan Jones spoke about incorporating AI into storytelling and virtual reality, and even about his experience using the method of "photo bashing" where elements of multiple images are taken to form a brand-new image. This method was used in Stitch Media's *Rival Books of Aster* and *Terrorarium* games created with the GI. This step of Stitch Media's brainstorming process has been streamlined greatly by AI generated art. However, Jones did note that this is something that must be treated with caution as copyright law falls severely behind technological advances.

Drs. Adan Jerreat-Poole and Lai-Tze Fan Deliver Virtual Lectures at DS Bytes: A Lunchtime Speaker Series

Drs. Adan Jerreat-Poole (Communication Arts) and **Lai-Tze Fan** (Sociology and Legal Studies) were guest lecturers at the 6-part "DS Bytes: A Lunchtime Speaker Series" on January 19 and March 21 respectively. Dr. Jerreat-Poole's lecture "Glitch: Disability, Feminism, Technology" focused on the inclusion of the crip community, or those who experience any form of disability, in "Glitch Feminism," a lens which grew out of the societal tendency to view human shortfalls as glitches. However, Jerreat-Poole said that despite these shortfalls, we all continue to exist, underscoring the need for digital communities that are "sick, crip, mad, disabled, neurodivergent, feminist, and queer."

Dr. Fan's lecture "E.Q. vs. I.Q. Testing Gendered AI in Apple's Siri" explored the gendering of AI assistants who are predominantly female presenting and relegated to areas of care, customer service, and comfort. Fan argued against the idea consumers like hearing women's voices more than men's voices. Instead, she argued that AI assistants are designed for efficacy rather than intelligence, and that if a woman's voice gets the job done—content production, task completion, transactions—then that is what will be used.
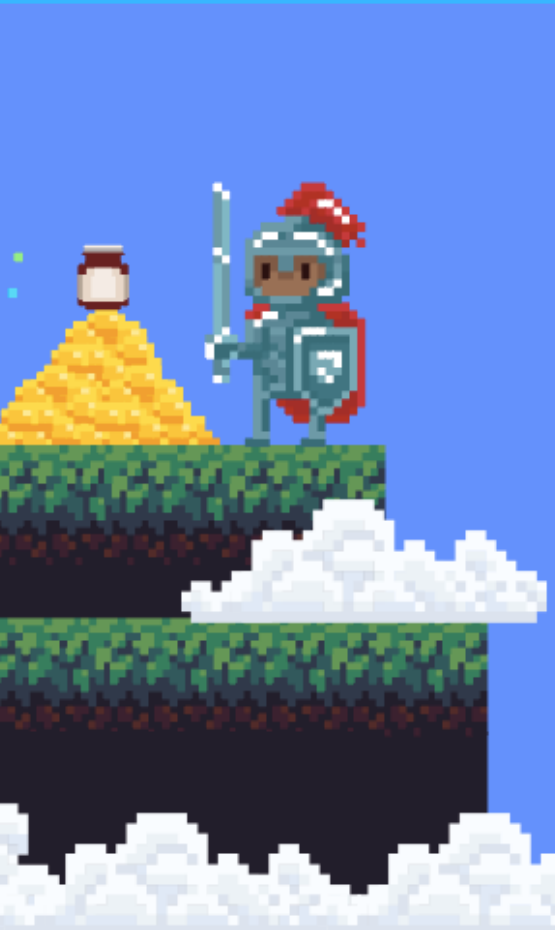
PhD candidates **Toben Racicot** and **Joey Femia** (both in English) presented at the "Projects and Research by English Students" (PRES) lecture series on January 25 and March 24 respectively. Racicot presented "Everything Should Be Findable: Redesigning Loot in RPGs" where he talked about making loot in role-playing games (RPGs) more accessible and enjoyable. He zeroed in on the design philosophy of "everything should be findable." He argued that reducing the scope of treasure tables to match player progression, assigning loot to monsters, and unifying loot tiers across the genre will shift gameplay away from optimal strategies and toward viable play. Viable play, in Racicot's words, "empowers novice players, respects a player's time, and enables a difficulty that does not prevent new players from experiencing a game."

Femia presented "Failure in Disability Games Studies" where they examined why there is a lack of appeal to play characters with disabilities in RPGs. This may be due to how disabled characters have physical, mental, and social barriers in a game world and how this might impact their ability to win a game. Femia argued that in a society obsessed with winning, the fear of disability in gaming culture stems from a societal fear. They explored new ways to transform the idea that disability in games from a disadvantage towards an exploration of the challenges faced by disability communities.

GLOBAL GAME JAM AT THE GI

GI Members participated in this year's Global Game Jam from January 30 to February 5. The event was captained by **Alexander Glover** (Systems Design Engineering) and **Natalie Nova** (Management Science). This year, thirteen games were completed and showcased!

- The Bagumbagumba Forest by Jason Dong, Jessica Yuan, and Oscar Yang
- Farmer's Blade by Emily Tram and Ryan Tram
- Mycelium by Cole, Ian, Mike, and Zoe
- Old Oak by Nelson L.
- Phantomime by team Plasmtize
- Rhizome on the Rough by Jerry Guo and Kevin Guo
- Root of Darkness by Anthony Tu, Benjamin Zhao, Grace Zhao
- Rootsweeper by team jiujiubee
- Square Root Sword by Allan Chew, Hongliang Lyu, Haotian Mo, Jialing, Jason Mao, and Zheng
- Sue Root by Cam, Jim, and Zuhab
- Sweat-er Shop by Jonathan Shim and Julian O'Grady
- Turtle Roots by Liam Hickey, Lucas Fryzek, and Phuc Huy Ngyuen
- Uprooting For You by Owen Gallagher and Nicole Planeta
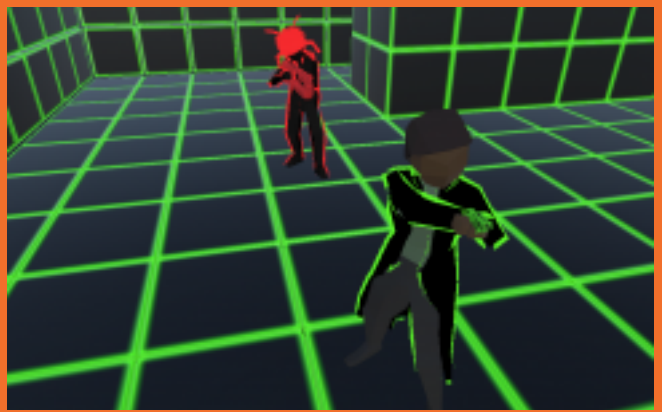
Ukraine War Photo Exhibit with VR

In spring, UW welcomed 34 Ukrainian students to help them continue their studies which had been disrupted by the Russian invasion in February 2022. Many of the students joined the GI as research assistants including **Halyna Padalko** (Global Governance, also pictured in the photos to the right), **Nazarii Kulyk, Stepan Boiko, Vasyl Chomko, Vladyslav Shein, Anastasiia Avksientieva, Severyn Balaniuk** (Computer Science)**, Karyna Sukhni**, and **Vsevolod Slavinskyi** (all funded by Waterloo.Ai).

To share their stories and educate others about their lived experiences and what was happening in Ukraine, Padalko decided they should host a photo exhibit about the war and bring it around to different spots on campus throughout the year. She and the other students organized the exhibit to show pictures from the everyday life of the Ukrainian people. Padalko said on the exhibit, "We showed our bombed universities, countless homeless people, volunteers who get married at the war, and the damage to our once beautiful buildings, concert venues, schools, and metro stations. We had a VR station from the GI to help us recreate how our cities looked before the war vs now, which shows the heartbreak and destruction."

The inclusion of VR was an idea from **Nazarii Kulyk** who thought to add it to the exhibit. This innovation had come from finding a 360-degree YouTube video showcasing Ukrainian cities before and after the start of the war. After discussions with GI members about the uses of VR, it was decided to use it in the exhibit. The new addition immersed audiences in the destruction the war brought to Ukraine.

The exhibit popped up multiple times across campus beginning in Spring 2022, Fall 2022, and ended with a final showcasing in Winter 2023 from February 13-17. Ukrainian students shared first-hand stories of the war in their country, and visitors were able to experience Ukraine before and after the war through VR. The exhibit has since moved to Kitchener City Hall.

Dr. John Muñoz Presents at GDC 2023

Dr. John Muñoz (J&F Alliance, Adjunct) participated in a panel with collaborators *Drs. Ifigenia Mavridou* and *Romain Trachel* at GDC in San Francisco on March 20. In the panel "Biometrics: Novel Tools, Methodologies, and Practices," they showed how they used biometric sensors and biofeedback applications for player testing. They described engagement, excitement, and arousal levels of players in playtesting and with VR applications.
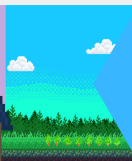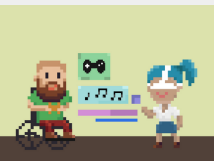
Dr. Gerald Voorhees Speaks on Digital Games in the Canadian Context Panel

On April 12, **Dr. Gerald Voorhees** (Communication Arts) participated in the Massey Dialogues panel "The Politics of Play: Digital Games in the Canadian Context." He was joined by *Dr. Christopher Young, Kaelen Doyle Myerscough*, and moderator *Christine Tran.* The panel reflected on Canada's role as a one of the most prominent game-producing nations in the world and asked about the kind of infrastructures scholars, policymakers, and gamers should build to make more equitable terms of play for the future.

Drs. Brianna Wiens and Shana MacDonald Host Book Launch
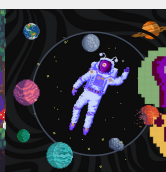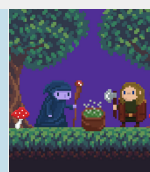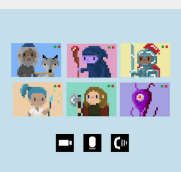
On April 13, **Drs. Brianna Wiens** (English) and **Shana MacDonald** (Communication Arts) celebrated the publication of their second edited collection "Stories of Feminist Protest and Resistance: Digital Performative Assemblies." Along with their co-editors *Drs. Michelle MacArthur* and *Milena Radzikowska,* they held a book launch through the Critical Media Lab at Communitech. The book features the collaborative work of Wiens and MacDonald themselves and twenty other scholars and researchers, whose work explores a wide range of topics within media and feminist studies, including a contributing chapter from PhD Candidate **Sid Heeg** (Sustainability Management).

[Pictured below from left to right: Drs. Shana MacDonald, Brianna Wiens, and Michelle MacArthur]

This year's ACM CHI Conference took place in Hamburg, Germany this year from April 23 -28. GI members (faculty and students!) had the pleasure of presenting their research. To read more about their research and presentations, check out page 11 for more details!

- Ahmed Anwar (Management Science)
- Dr. Craig S. Kaplan (Computer Science)
- Dr. Daniel Vogel (Computer Science)
- Dr. Katja Rogers (University of Amsterdam, A)
- Ken Jen Lee (Computer Science)
- Dr. Leah Zhang-Kennedy (Stratford)
- Dr. Lennart E. Nacke (Stratford)
- Dr. Oliver Schneider (Management Science)
- Tianzheng Shi (Psychology)
- Dr. Ville Mäkelä (Stratford)

GI NEWS

## GI PODCAST RESUMES WITH SECOND SEASON

After a long hiatus, the GI Podcast co-hosted by **Sid Heeg** (Sustainability Management) and **Toben Racicot** (English) has resumed a monthly release schedule with three new episodes this term! The podcast is available wherever you listen to podcasts! Check out the latest episodes!

- Welcome Back to Season Two
- Board Game Design with AC Atienza
- Haptic Experience with Dr. Oliver Schneider

THE GAMES INSTITUTE G PODCAST
UNIVERSITY OF WATERLOO

TERRORARIUM BY STITCH MEDIA NOMINATED FOR CANADIAN GAME AWARD
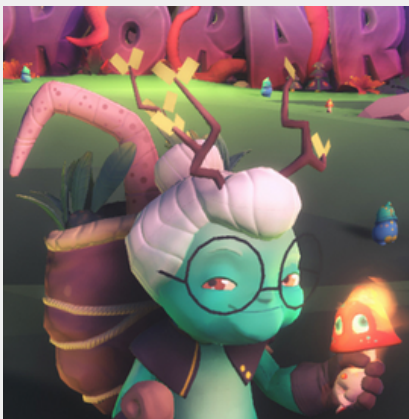
Terrorarium by Stich Media, a GI industry partner, has recently been nominated for the Best VR/AR Game by the Canadian Game Awards. *Terrorarium* was the result of a collaborative effort with Stitch Media and GI researchers and was co-funded by GI, Mitacs, and SSRHC. The design process was used as a case study to further IMMERSe research topics surrounding: narratology, interactive narratives, cultural analysis of games, and innovative gameplay interactions. Contributing researchers included **Dr. Adam Bradley** (A), **Dr. Judy Ehrentraut** (A), **Dr. Michael Hancock** (A), and the GI's Executive Director, **Dr. Neil Randall**. As of December 2022, it has been available to play on the TiltFive, a new digital table-top platform. Congratulations to the team!

This term, the GI welcomed many visiting scholars and researchers interested in the expanding field of games and interactive technologies.

On March 7, delegates from the Saxion University of Applied Sciences and University of Alberta visited Dr. Lili Liu (Dean of Health) for future collaboration on health and technology research, and the GI was included in this visit to demonstrate the diverse research into health and games that GI members do. The visitors from Saxion University presented their research which included the use of immersive technology in areas of social work, designing serious games for nurses, and the increased use of technology in healthcare.

GI members presented their research as well with a VR demonstration led by **Dr. Hector Perez Lopez Portillo** (Faculty of Health). **Sid Heeg** (Sustainability Management) presented on the effects of misinformation on farming. **Marco Aurelio Moran Ledesma** (Systems Design Engineering) gave a demonstration of his work on a 3D printed leg used for training simulations for surgeons. **Florian Marcher** (Computer Science) presented his work on digital terrain generation and how green spaces affect health. Closing out the presentations was **Dr. Eugene Kukshinov** (Psychology) presented on the affordances of social VR applications.

[Dr. Hector Perez assisting in VR Demonstration]

[Saxon University delegation pictured alongside GI Members]

[Agata Antkiewicz giving a tour to the teachers]

On April 21, teachers from Waterloo Region visited the GI to learn about potential career paths for high school students. GI members presented their research to demonstrate the wide variety of work they do and how that can help high school students see what post-secondary education can offer. Included in the presentations were **Sid Heeg** (Sustainability Management) repeated their presentation on misinformation about farming on social media; **Alexander Glover** (Systems Design Engineering) who spoke on how AI can be used to teach decision making processes; **Marco-Moran Ledesma** (Systems Design Engineering) who spoke on the development of haptic devices for teaching and training purposes; **Samira Mehrabi** (Aging, Health, Well-being) who talked about the use of immersive VR exergames for aging populations; and **Florian Marcher** (Computer Science) whose work on procedural generation demonstrates the effect green spaces have on health.

Coffee and Games

The weekly Coffee and Games social hour continued this term every Thursday afternoon, captained by **Akshana Ranganathan** (Operations Coordinator) and **Miguel Ilustre** (Research Communications Coordinator). Here to Slay was a popular choice for attendees, and people got to experience **Eugene Kushinkov's** (Psychology) Russian-language version of Barking Up the Wrong Tree. Congratulations to **Jay Smith** (English) for showing up the most and earning a GI swag bag!

W23 Research Speed Dating

Each year, GI members participate in a research 'speed dating' event to get to know people outside of their lab groups and disciplines. This term, we held the second GI Research Speed Dating event where participants were paired up and responded to questions within thirty second intervals. Thanks to everyone who came, and we hope you all learned something new!

Feminist Think Tank Simmer Pot

Every Thursday afternoon, **Drs. Brianna Wiens** (English) and **Shana MacDonald** (Communication Arts) led the Simmer Pot, a drop-in work session. Students and faculty took part in discussions on feminism, digital media, life in academia, and how to make a community.

ADE Committee Lunch

The ADE Committee welcomed GI members to come out for the Committee's termly meet and greet over lunch. Committee Chair, **Dr. Gerald Voorhees** (Communication Arts), delivered a presentation on the goals for the Committee and its ongoing commitments to anti-racism, decolonialism, equity, diversity and inclusion at the GI.

Celebrating Agata's 10 Year Work Anniversary

Agata Antkiewicz (BA, MA) celebrated 10 years of working at the GI this April! As the Associate Director of Strategic Planning and Administration, much of the work at the GI wouldn't be possible without her.

Thank you for all the hard work, Agata!

On February 2, FASS (Faculty, Alumni, Staff, and Students) Theatre Company presented "The Other Side of the Story," a not-so-malicious musical comedy redeeming fan favourite villains. **Mohamed Fouda** (Haptics Experience Lab, pictured left) put on a performance that captivated audiences as the tragically misunderstood Waluigi. He was clearly the fan favourite as he was rushed by a horde of clamoring fans asking for his autograph.

Alizeh Charania (Psychology) performed with her acapella group, ACE! She took center stage and serenaded the audience with a performance of Soulmate by Natasha Bedingfield.

GI MEMBER ACCOMPLISHMENTS

Publications:

- **Ahmed Anwar** (Management Science)**, Tianzheng Sh**i (Psychology), and **Dr. Oliver Schneider** (Management Science). (2023, April.) "Factors of Haptic Experience across multiple Haptic Modalities." CHI 2023.
- *Arman Hafizi, Jay Henderson, Ali Neshati, Wei Zhou, Edward Lank*, and **Dr. Daniel Vogel** (Computer Science). (2023, April.) "In-vehicle Performance and Distraction for Midair and Touch Direction Gestures." CHI 2023.
- *Daekun Kim, Nikhita Joshi*, and **Dr. Daniel Vogel** (Computer Science). (2023, April.) "Perspective and Geometry Approaches to Mouse Cursor Control in Spatial Augmented Reality." CHI 2023.
- *Damien Masson, Sylvain Malacria, Géry Casiez*, and **Dr. Daniel Vogel** (Computer Science). (2023, April.) "Charagraph: Interactive Generation of Charts for Realtime Annotation of Data-Rich Paragraphs." CHI 2023.
- *Damien Masson, Sylvain Malacria*, **Dr. Daniel Vogel** (Computer Science), Edward Lank, and *Géry Casiez*. (2023, April.) "ChartDetective: Easy and Accurate Interactive Data Extraction from Complex Vector Charts." CHI 2023.
- *David Smith, Joseph Samual Myers*, **Dr. Craig S. Kaplan** (Computer Science), and *Chaim Goodman-Strauss*. "An Aperiodic Monotile." arXiv.
- *Graeme Zinck, Roya A. Cody, Che Yan, Da-Yuan Huang, Wei Li*, and **Dr. Daniel Vogel** (Computer Science). (2023, April.) "Evaluating Across-Hing Dragging with Pen and Touch on Curved and Foldable Displays." CHI 2023.
- **Dr. Leah Zhang-Kennedy** (Stratford), *Saira Aziz, Oluwafunminitemi (Temi) Oluwadare, Lyndon Pan, Zeyu Wu, Sydney E. C. Lamorea, Soda Li, Michael Sun*, **Dr. Ville Mäkelä** (Stratford). (2023, April.) "Passenger Perceptions, Information Preferences, and Usability of Crowding Visualizations on Public Displays in Transit Stations and Vehicle." CHI 2023.
- **Ken Jen Le**e (Computer Science), *Adiran Davila, Hanlin Cheng, Joslin Goh, Elizabeth Nilsen*, **Dr. Edith Law** (Computer Science). (2023, April). "We need to do more … I need to do more": Augmenting Digital Media Consumption via Critical Reflection to Increase Compassion and Promote Prosocial Attitudes and Behaviors." CHI 2023.
- *Jeanine Krath*, **Maximilian Altmeyer** (A), **Gutavo F. Tondello** (A), and **Dr. Lennart E. Nacke** (Stratford). (2023, April). "Hexad-12: Developing and Validating a Short version of the Gamification User Types Hexad Scale." CHI 2023.
- **Sebastian Cmentowski**, **Sukran Karaosmanoglu**, **Dr. Lennart E. Nacke** (Stratford), *Frank Steinicke*, and *Jens Harald Krueger*. (2023, April.) "Never Skip Leg Day Again: Training the Lower Body with Vertical Jumps in a Virtual Reality Exergame." CHI 2023.
- **Dr. Shana MacDonald** (Communication Arts). (2023, March.) "The Queer and Feminist Worlds of Witches & Magical Beings in Feminist YA Graphic Novels." MAI.
- *William Chung* and **Dr. Michael Barnett-Cowan** (Kinesiology and Health Sciences). (2023, April.) "Sensory, reweighting: a common mechanism for subjective visual vertical and cybersickness susceptibility." Virtual Reality.
- *Yen-Ting Yeh, Frabrice Matulic,* and **Dr. Daniel Vogel** (Computer Science). (2023, April.) "Phone Sleight of Hand: Finger-Based Dexterous Gestures for Physical Interaction with Mobile Phones." CHI 2023.
- **Dr. Marcel O'Gorman** (English). (2023, March.) "The AI arms race highlights the urgent need for responsible innovation." The Conversation.

Conference Presentations and Talks:

- **Amerald Fang** (Geomatics) was a finalist in the 2023 GRADflix competition with his video "Hydraulic erosion with game engines."
- *Cheryl Lao, Yanting Zhang,* **Dr. Daniel Vogel** (Computer Science)**, Dr. Craig S. Kaplan** (Computer Science)**, Dr. Morgan McGuire** (Roblox, Adjunct), and *Victor Zordan*. "A Preliminary Study of World Customizability for Virtual Reality Co-Play." CHI 2023.
- **Chris Lawrence** (English) (2023, April). "Sheik, Cyborgs, and Twine Games: A Nonbinary Approach to Teaching Game Studies." Ashby Dialogue Series.
- *Fabrice Matulic, Taiga Kashima, Deniz Beker, Diachi Suzuo, Hiroshi Fijiwara,* and **Dr. Daniel Vogel** (Computer Science). (2023, April.) "Above-Screen Fingertip Tracking with a Phone in Virtual Reality." CHI 2023.
- *Jay Henderson, Ali Nesthai, Sachi Mizobuchi, Wei Zhou*, **Dr. Daniel Vogel** (Computer Science), and *Edward Link*. (2023, April.) "Interaction Region Characteristics for Midair Barehand Targeting on a Television." CHI 2023.
- **Dr. John Muñoz** (J & F Alliance, Adjunct), *Ifigeneia Mavridou,* and *Romain Trachel*. (2023, March.) "Biometrics: Novel Tools, Methodologies, and Practices." Game Developers Conference.
- **Dr. Lennart E. Nacke** (Stratford). (2023, April.) "How to Write Better CHI Papers with LaTeX in Overleaf." CHI 2023.
- **Dr. Lennart E. Nacke** (Stratford)**, Dr. Pejman Mirza-Babaei** (Ontario Tech University), and *Anders Drachen*. (2023, April.) "User Experience Design and Research in Games." CHI 2023.
- **Dr. Katja Rogers** (A), *Katie Seaborn*. (2023, April.) "The Systematic Review-lution: A Manifesto to Promote Rigour and Inclusivity in Research Synthesis." CHI 2023.

Media Interviews

- **Dr. Ben Thompson** (Faculty of Science) was interviewed on the podcast CBC Quirks on December 31st, 2022.
- **Drs. Jennifer Whitson** (Sociology and Legal Studies) and **Shana Macdonald** (Communication Arts) were interviewed by Terry Lender of Toronto Star for the article "First pandemic of social media age a communications failure" on March 24th, 2023.
- **Dr. Lili Liu** (Dean of Health) was interviewed by Isabel Buckmaster of City News Kitchener for the article "Search-and-rescue research project educates first responders on dementia wellness checks" on February 9th, 2023.

Unofficial Busy Bee award goes to Dr. Daniel Vogel!

Awards and Grants:

- **Michael Xu** (Software Engineering) is a recipient of the Schulich Leader Scholarship, Canada's largest annual science, technology, engineering, and mathematics scholarship.
- **Toben Racicot** (English) is a recipient of the Independent Graduate Instructor Award for Excellence in Teaching from the Department of English.
- **Aleksander Franiczek** (English) is a recipient of the English Graduate Award for Academic excellent and the Lea Vogel-Nimmo English Graduate Professionalization Award from the Department of English.
- **Drs. Ben Thompson** (Faculty of Science) and **Lili Liu** (Dean of Health) are both recipients of the Graham Seed Fund, which seeks to support innovative health-care solutions. Congratulations to Thompson on his project "Enhancing Adherence to amblyopia treatment using social robotics" and Liu's project "Acceptance and usability of the GuardIO, a mobile application to support care partners of persons living with dementia."
- *Damien Masson, Sylvain Malacria,* **Dr. Daniel Vogel** (Computer Science), Edward Lank, and Géry Casiez won the best paper award for "ChartDetective: Easy and Accurate Interactive Data Extraction from Complex Vector Charts." CHI 2023.
- **Dr. Craig S. Kaplan** (Computer Science) along with collaborators *David Smith, Joseph Samuel Myers, and Chaim Goodman-Straus* made a mathematic discovery called the "Einstein" tile, an aperiodic monotile that can cover an infinite plan without creating a repeating pattern. It is the first discovery of its kind! Congratulations to the team for this momentous occasion. Read more on the discovery and what it means for the math community.

It's always exciting to welcome new international members to the GI and to Canada at large!

- Good luck to **Thomas Deffontaines** as he continues his PhD studies at École Centrale de Lille and to **Simone Bassanelli** as he continues his PhD research at the University of Trento.
- **Stepan Boiko** (Waterloo.Ai) and **Anastasiia Avksientieva** (Waterloo.Ai) have finished their research work and degrees.
- **Ritika Puri** (English) has completed her RA work on the Rhetoricon project and is wrapping up her undergraduate degree.
- **Alizeh Charania** (Psychology) joined the GI as a Social Virtual Reality Co-op Research Assistant for **Dr. Daniel Harley** (Stratford) and will continue with her undergraduate degree.
- Congratulations to the freshly minted **Dr. Betsy Brey** (English) for successfully defending her PhD dissertation "Digital Dialogism: Space, Time, and Queerness in Video Games" on April 18th! Dr. Brey became a member of the GI in 2014 when she began her PhD studies in English Language and Literature. She was also the Editor in Chief for First Person Scholar from 2017 – 2019. Check out her contributions to FPS!

NEW GAMES INSTITUTE MEMBRES

- **Akshana Ranganathan (she/her)** is the Operations Coordinator. She is in her 2A term of Health Science at UWaterloo. She has a minor addiction to reading books in her free time and overanalyzing the movie it's made into afterwards.
- **Alizeh Aharania (she/her)** is a 3A Psychology undergraduate student in the Research-Intensive Specialization Co-op program. Currently she is working as a Social Virtual Reality Co-op Research Assistant at the University of Waterloo Stratford School of Interaction and Design School of Interaction Design and Business and the Games Institute.
- **Chris Wang (he/him)** is an undergraduate student in the Management Engineering program. He is currently working on developing hardware and software prototyping for interactive haptic, VR, and tangible experiences with Dr. Oliver Schneider.
- **Dr. Daria Daphon Ho (she/her) – Faculty Member,** delights in exploring people and ideas on the move, as in the maritime history of the Pacific Ocean world. Specifically, she researches the history of Chinese seaborne trade with Japan, Southeast Asia, and Western countries, and coastal piracy and violence in early-modern and modern times.
- **Dr. Dmytro Chumachenko (he/him) – Post Doctoral Fellow,** received a Ph.D. degree in Artificial Intelligence Systems and Tools. He works primarily in the simulation of epidemic processes, especially infectious diseases, and he is interested in assessing the quality of education in Ukraine with the goal of improving the quality of higher education in the country.
- **Jay Smith (they/them)** is a master's thesis student in the English Literature and Literature. They are academically interested in Queer Theory and Representation in modern media and developing fields of research like comics studies and interactive media.
- **Miguel Ilustre (he/him)** is an undergraduate student in Honours Arts, majoring in Political Science and Legal Studies. He is the Research Communications Coordinator for winter 2023. He is interested in air power strategy, nuclear politics, and the militarization of space.
- **Dr. Mina Momeni (she/her) - Faculty Member,** holds a PhD in Communication and Culture from the joint program at Toronto Metropolitan University and York University, and she received her MFA in Documentary Media from Toronto Metropolitan University. Her studies focus on comprehending individuals' connection with digital media technologies and exploring people's interaction with different digital platforms and smart applications.
- **Mustapha Unubi Momoh (he/him)** is a MASc student of Systems Design Engineering. His research interests include 3D computer vision for virtual reality, human factors, and machine learning. He enjoys working with AI and founded Karaam Analytics Limited to provide Data Analytics services to firms and individuals.
- **Sakeenah Ashique (she/her)** is an undergraduate student in the Honors Art and Business program. She is working as a research assistant for Dr. Shana MacDonald to provide data management assistance for her feminist media archive.
- **Sophia Richardson (she/they)** is an undergraduate student in Knowledge Integration, specializing in environmental sustainability, philosophy of science and science communication. She is a collaborative interdisciplinary student with years of knowledge mobilization, nature interpretation and visual design experience.
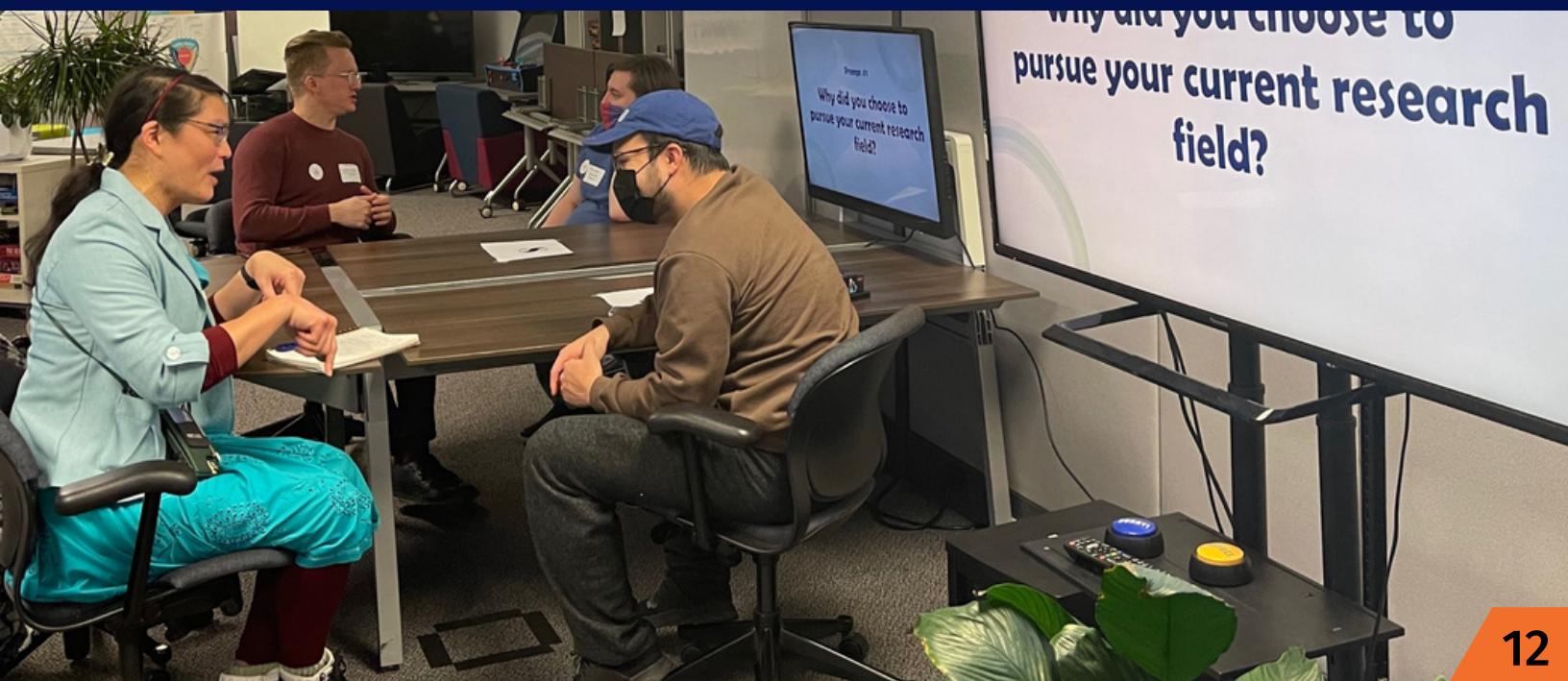
Bolded names in this document denote GI members while *italicized names* denote collaborators and guests. Names marked with "(A)" denote former GI members. (Stratford) denotes affiliation to the Stratford School of Interaction Design and Business. (English) denotes affiliation to the English Language and Literature department

The Games Institute and its members acknowledge that the land on which our community works and lives today is the traditional land of the Attawandaron (Neutral), Anishinaabeg and Haudenosaunee peoples. We recognize that the University of Waterloo, of which the Games Institute is part, is situated on the Haldimand Tract – the land taken without consent and subsequently promised to the Six Nations – that includes ten kilometers on either side of the Grand River.

We recognize the enduring presence and deep traditional knowledge, laws and philosophies of the Indigenous Peoples with whom we share this land today. As the Games Institute facilitates researchers of games, digital spaces, and interactive technologies, we undertake to make space for Indigenous scholars, designers, commentators and creators to uplift voices that are marginalized in the academic and gaming community.