John Desnoyers-Stewart

1-672-513-7545 john@desnoyers.ca North Vancouver, BC

Professional Engineer, Designer, and Artist

John Desnoyers-Stewart is an interdisciplinary artist-researcher who creates immersive installations and performances to encourage new perspectives on immersive technology and to better understand its true potential. Combining his background in engineering and art he is investigating and altering how technology shapes the body and its place in the physical and social world. His multi-user installations transform real bodies into ethereal forms and incorporate physical touch into the virtual world, encouraging immersants to see and experience each other in a new light. Through his artwork and research, he hopes to encourage social connection and collaborative creativity by exploring positive social applications of abstract embodiment in virtual reality.

Education

- 2018–2024 / Doctor of Philosophy Candidate / Simon Fraser University (Expected graduation Apr 2024) School of Interactive Arts and Technology—GPA: 4.33 (A+) Supervisor: Bernhard E. Riecke
- 2016–2018 / Master of Fine Arts in Interdisciplinary Studies / University of Regina Concentrations: Creative Technologies and Computer Science—GPA: 92.0% (A+) Exhibition: Transcending Perception: An exploration into virtual, mixed, and expanded reality [DOI: 10.13140/RG.2.2.13743.64161] Supervisors: Dr. Megan L. Smith and David Gerhard
 - 2015 / Additional Coursework / University of Regina Drawing, Painting, Digital Art, Electronic Music—GPA: 93.0% (A+)
- 2006–2011 / BASc in Industrial Systems Engineering (Co-Op) / University of Regina Graduated with Distinction—GPA: 81.5% (A-)

Grants

2023 / Canada Council for the Arts Research and Creation Grant (\$25,000) Collaborator. Prototyping multimodal installation for cultivating felt connection through harmonizing breathing by bridging somaesthetics and VR. September 2023 – August 2024.

Kindle Arts Art & Travel Grant (\$1,700) Funding to support making costumes for Synedelica roaming mixed reality performance and travel to Otherworld 2023 at Cowichan Lake, BC.

Canada Council for the Arts—Arts Abroad Travel Grant (\$1,500) Travel funding to partially support the exhibition of Eve 3.0 at Laval Virtual 2023.

2022 / Canada Council for the Arts Concept to Realization Grant (\$16,620) Principal Applicant. Star-Stuff interactive installation at H.R. MacMillan Space Centre. Improved scientific accuracy, created projection version, and supported 1-year exhibition. August 2022–December 2023.

Canada Council for the Arts—Arts Abroad Travel Grant (\$2,400) Development & Promotion. Eve 3.0 Exhibition at Recto VRso in Laval France. Travelled to France to finalize the production of Eve 3.0 with European collaborators and exhibit a work-in-progress performance at Recto VRso 2022.

2021 / Canada Council for the Arts Research and Creation Grant (\$20,340) Principal Applicant. Exploring the potential for embodied telepresent connection through remote touch and biofeedback with a team of 4 artists, programmers, & researchers. July 2021–December 2022.

Awards

	Awaras
2018-2023 /	SSHRC Doctoral Fellowship (\$80,000), Provost Prize of Distinction (\$20,000)
2024 /	Helmut & Hugo Eppich Family Graduate Scholarship (\$1,500)
2023 /	BC Arts Council Scholarship (\$6,000), SFU FCAT Graduate Fellowship (\$3,500), SFU SIAT Graduate Fellowship (\$3,500), Helen Pitt Graduate Scholarship (\$2,500), Helmut & Hugo Eppich Family Graduate Scholarship (\$1,500), SFU Travel and Research Award (\$1,500)
2022 /	SFU FCAT Graduate Fellowship (\$7,000), UBC Okanagan FCCS Sessional Faculty Research Award (\$1,000), SFU Travel and Research Award (\$2,485)
2021 /	Helmut & Hugo Eppich Family Graduate Scholarship (\$1,500), SFU Travel and Research Award (\$150)
2020 /	SFU SIAT Graduate Fellowship (\$6,500), Tom Calvert Graduate Scholarship (\$1,800), Helen Pitt Graduate Scholarship (\$1,000), Helmut & Hugo Eppich Family Graduate Scholarship (\$1,000)
2019 /	Engineers Canada TD Meloche-Monnex Scholarship (\$7,500), SFU Travel and Minor Research Award (2x \$1,000)
2018 /	SFU SIAT Graduate Fellowship (\$6,500), UR Graduate Scholarship (\$4,500), Doris and W.A. Riddell Graduate Scholarship in the Fine Arts (\$2,700), John Spencer Middleton & Jack Spencer Gordon Middleton Scholarship (\$1,000), National Academy of Sciences Student Fellows Symposium Award (\$1,000)
2017 /	Saskatchewan Innovation and Opportunity Graduate Scholarship (\$10,000), Saskatchewan Innovation and Excellence Graduate Scholarship (\$5,000), Dr. David Barnard Graduate Scholarship in Fine Arts (\$2,000), UR Graduate Scholarship (\$2,500), Faculty of Graduate Studies and Research Travel Award (2x \$1,000), University of Regina Graduate Students Association Travel Award (\$750), University of Regina International Experience Travel Fund (2x \$750)
2016 /	Faculty of Graduate Studies and Research Graduate Scholarship (\$6,000), Media Art and Performance Dean's List and Academic Silver Scholarship (\$400)
2007–2009 /	Engineering Dean's List and Academic Silver Scholarship (3x \$750)

Exhibitions

Museum Exhibitions

2022-current / Star-Stuff: a way for the universe to know itself [immersive installation] music by Dale Nichols. H.R. MacMillan Space Centre. Vancouver, BC. December 2022 – current

Curated Installations and Performances in Galleries and Festivals

2024 / Awedyssey [10-minute Immersive Planetarium Show] with the iSpace Lab. Dome Fest West. Fiske Planetarium, Boulder, CO. May 2–5, 2024. domefestwest.com/2024-dfw-selections/awedyssey **Créaction: Symbiosis** [multi-user VR] with Sonya Khalfallah Riahi Recto VRso 2024. Laval, France. April 11–14, 2024.

Kingdom of Illumination VR [multi-user VR] with Brad Necyk, music by Gary James Joynes. VMF Winter Arts. Victoria, BC. February 16–19, 2024.

Bardo [interactive Installation] with Pravin Pillay, music by Ruby Singh. VMF Winter Arts. Victoria, BC. February 16–19, 2024.

Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols. VMF Winter Arts. Victoria, BC. February 16–19, 2024.

2023 / Eve 3.0: stories of our extreme selves [multi-user VR performance] with Margherita Bergamo Meneghini, Daniel González-Franco, Veronica Boniotti, and more. Produced by Compagnie Voix. compagnievoix.com/en/projects/creation/eve-3

- Les Rencontres ArTeC. Paris, France. November 16, 2023.
- ZED Festival 2023. Bologna, Italy. October 18–22, 2023. zedfestival.org
- PAN Festival 2023. Riva del Garda, Italy. June 23–25, 2023.
- TIFAWT Rabat Digital Arts. Rabat, Morocco. May 15–21, 2023.
- Recto VRso 2023. Laval, France. April 12–14, 2023.
- Seesaw House Residency, Riva Del Garda, Italy, April 1, 2023.

Eve 3.0: "Dear Diary" [stereoscopic VR video] with Margherita Bergamo Meneghini, Daniel González-Franco, Veronica Boniotti, and more. Produced by Compagnie Voix. <u>compagnievoix.com/en/projects/creation/eve-3</u>

- Filmmaker Expanded 2023. Milan, Italy. November 21–23, 2023.
- Cinedans 2023. Amsterdam, Netherlands. March 24–26, 2023.

Kingdom of Illumination VR [VR Spatial/Interactive Video] with Brad Necyk, music by Gary James Joynes. V-Unframed. Curated by Fanny Surzur. Beaumont Studios, Vancouver, BC. November 24–26, 2023. <u>alliancefrancaise.ca/v-unframed/en/the-artworks-2023/</u>

Awedyssey [10-minute Immersive Planetarium Show] with the iSpace Lab. Cosmic Nights: Humans in Space. H.R. MacMillan Space Centre. Vancouver, BC. Nov 23, 2023.

Embodied Telepresent Connection (ETC) [multi-user VR prototype] with Katerina Stepanova, Alex Kitson, Vlad Ryzhov, Pinyao Liu, and Bernhard Riecke.

- Hyper Canada, Winnipeg, MB, Canada. November 18, 2023.
- Signals at VIFF 2023. Vancouver, BC. October 1–7, 2023.

Bardo [interactive Installation] with Pravin Pillay, music by Ruby Singh. *Extended Reality (XR) Mixer.* KWENCH, Victoria, BC. October 19, 2023.

Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols. *Extended Reality (XR) Mixer.* KWENCH, Victoria, BC. October 19, 2023.

The Rain is the River is the Ocean [Improvisational Multimedia Performance] with Pravin Pillay, Naomi Jason, Ruby Singh. *Xchange #5*. Tidemark Theatre. Campbell River, BC. Performed July 5, 2023. Streaming Oct 2023 – Aug 2024. tidemarktheatre.com/event/xchange/

Créaction: Symbiosis [multi-user VR] with Sonya Khalfallah Riahi

- FIVARS 2023. Toronto, Canada. September 15–19, 2023.
- Valeurs de l'empreinte. Curated by Emmanuel Boldrini, Léa Dedola, Bastien Mouchet. Université Lumière Lyon 2, Lyon, France. March 24–25 2023. <u>fabula.org/actualites/108024/valeurs-de-lempreinte.html</u>

2022 / Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols.

- FIVARS 2022. Los Angeles, California and Toronto, Canada. October 28–November 16, 2022. <u>fivars.net/stories/storiesfall2022/star-stuff/</u>
- Virtual Reality Experience 2022. Milan, Italy & Online. October 6–30, 2022.
- SIGGRAPH 2022 Immersive Pavilion. Vancouver, BC. August 8–11, 2022. doi.org/10.1145/3532834.3536198.

Synedelica [multi-user VR] with Noah Miller and Bernhard Riecke, music by Patrick Pennefather. V-Unframed. Curated by Fanny Surzur. Centre for Digital Media, Vancouver, BC. October 1–3 2022. <u>https://www.alliancefrancaise.ca/v-unframed/the-artworks-2022/</u>

Créaction: Symbiosis [multi-user VR] with Sonya Khalfallah Riahi Signals, Vancouver International Film Festival 2022. Curated by Debi Wong, Loretta Todd, & Loc Dao. Centre for Digital Media, Vancouver, BC. October 1–2 2022. <u>https://viff.org/signals/</u>

Eve 3.0: stories of our extreme selves [multi-user VR performance] with Margherita Bergamo Meneghini, Veronica Boniotti, Mark Lee, Maria Leon Arraez, Daniel González-Franco, Kirstin Huber, Amira-Sade Moodie, Dale Nichols and more. Produced by Compagnie Voix. compagnievoix.com/en/projects/creation/eve-3

- Tanzahoi 2022. Hamburg, Germany. September 9–18 2022.
- Recto VRso 2022. Laval, France. April 12–17, 2022.

Body RemiXer Virtualization for Recto VRso 2020 [virtual reality archival work] with Ekaterina Stepanova, Bernhard Riecke and Patrick Pennefather. Curated by Judith Guez. *Recto VRso 2022.* Laval, France. April 12–17, 2022. <u>rectovrso.laval-virtual.com/en/virtual-edition-2020/</u>

2021 / Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols. V-Unframed. Curated by Fanny Surzur. Centre for Digital Media, Vancouver, BC. October 1–3 2021. ~450 attendees. alliancefrancaise.ca/v-unframed/en/the-artworks-2021/star-stuff/

SIRIUS [20-minute VR experience] with Noah Miller, Ekaterina Stepanova, Ashu Adhikari, Bernhard Riecke, Patrick Pennefather, Alex Kitson, Denise Quesnel. Curated by Fanny Surzur. V-Unframed. Centre for Digital Media, Vancouver, BC. October 1–3 2021. ~450 attendees. alliancefrancaise.ca/v-unframed/en/the-artworks-2021/sirius/

Body RemiXer Virtualization for Recto VRso 2020 [virtual reality archival work] with Ekaterina Stepanova, Bernhard Riecke and Patrick Pennefather. Exhibited as part of the Recto VRso 2020 online gallery. Curated by Judith Guez. *FIAV Festival International d'Art Vidéo de Casablanca 2021*. https://www.fiav.ma/assets/pdf/installations/6.pdf

2020 / Body RemiXer [Online] [multi-user online virtual reality experience]

with Ekaterina Stepanova, Bernhard Riecke and Patrick Pennefather. Curated by Dr. Judith Guez Recto VRso @Vancouver 2020. Online and at Alliance Française Vancouver. October 2–4, 2020. https://www.alliancefrancaise.ca/rectovrso2020/

Body RemiXer Virtualization for Recto VRso 2020 [virtual reality archival work] with Ekaterina Stepanova, Bernhard Riecke and Patrick Pennefather. Curated by Dr. Judith Guez Recto VRso Virtualization 2020. rectovrso.laval-virtual.com/en/virtual-edition-2020/

Body RemiXer [mixed reality installation]. Cancelled due to COVID-19 with Ekaterina Stepanova, Bernhard Riecke and Patrick Pennefather. Curated by Dr. Judith Guez Accepted at Recto VRso Festival at Laval Virtual 2020, Laval, France.

2019 / Transcending Perception [Multi-user mixed reality installation/performance] with performers: Robyn Murray, Kestrel Paton, Charlotte Telfer-Wan, Annabelle Wong, Sarah U. Digital Carnival, Richmond World Festival 2019, Richmond, BC. August 30–31, 2019. Curated by Wynne Palmer.1000+ attendees. <u>https://www.youtube.com/watch?v=XLH6DyXihRI</u>

Body RemiXer [Multi-user mixed reality installation] with Ekaterina Stepanova and Bernhard Riecke The Fun Palace Carnival of Mixed Realities. Curated by Patrick Pennefather. Centre for Digital Media, Vancouver, BC. June 25, 2019. ~400 attendees.

JeL [Collaborative Breathing installation]

with Ekaterina Stepanova, Philippe Pasquier, and Bernhard Riecke.

The Fun Palace Carnival of Mixed Realities. Curated by Patrick Pennefather. Centre for Digital Media, Vancouver, BC. June 25, 2019. ~400 attendees.

2018 / Transcending Perception [Multi-user mixed reality installation/performance] with Yujie Gao and performers: Carla Harris, WL Altman, Helen Pridmore, Krista Solheim, Tara Solheim, and Clinton Ackerman. Nuit Blanche Regina, Regina, SK, September 29, 2018. ~500 attendees.

Transcending Perception: an exploration into virtual, mixed, and expanded reality [Multi-user mixed reality installation/performance] with performers: WL Altman, Helen Pridmore, Clinton Ackerman, and Megan L. Smith.

Fifth Parallel Gallery, Regina, SK, April 17–27, 2018. ~500 attendees.

Invited Public Demonstrations

- 2024 / **Eve 3.0: stories of our extreme selves** [multi-user VR performance] with Margherita Bergamo Meneghini, Daniel González-Franco, Veronica Boniotti, and more. Produced by Compagnie Voix. compagnievoix.com/en/projects/creation/eve-3
 - EVA London 2024. London, UK, July 8–12, 2024.
 - Leiden University. Leiden, Netherlands. February 27 & 29, 2024.

Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols. Telefilm Canada Canadian Innovation Lounge @ SXSW. Austin, Texas. March 9 & 12, 2024.

Bardo [interactive Installation] with Pravin Pillay, music by Ruby Singh.

Telefilm Canada Canadian Innovation Lounge @ SXSW. Austin, Texas. March 9 & 12, 2024.

2023 / Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols.

- IRL X iSpace Open Lab. CiTIUS, University of Santiago de Compostela, Spain. April 20, 2023. <u>intangiblerealitieslab.org/news/irl-x-ispace</u>
- Immersive Technologies Seminar Series: Expanding Social Realities through Abstract Embodiment. University of British Columbia Okanagan Campus, Kelowna, BC. February 8, 2023. <u>events.ok.ubc.ca/event/immersive-technologies-seminar-series-expanding-social-</u> realities-through-abstract-embodiment
- Night of Ideas Vancouver | More? Slow is Beautiful. BCIT Downtown Campus, Vancouver, BC. February 1, 2023. <u>pwias.ubc.ca/events/feb-1-night-of-ideas-2023/</u>

Synedelica [roaming MR] with Noah Miller. *IRLX iSpace Open Lab.* CiTIUS, University of Santiago de Compostela, Spain. April 20, 2023. <u>intangiblerealitieslab.org/news/irl-x-ispace</u>

Embodied Telepresent Connection (ETC) [multi-user VR prototype] with Katerina Stepanova. *IRL X iSpace Open Lab.* CiTIUS, University of Santiago de Compostela, Spain. April 20, 2023. intangiblerealitieslab.org/news/irl-x-ispace

2022 / **Star-Stuff: a way for the universe to know itself** [multi-user VR] with music by Dale Nichols. SFU Surrey Community Open House 2022, Surrey, BC. October 27, 2022. <u>sfu.ca/surrey/open-house-2022.html</u>

Synedelica [roaming MR]. SFU Surrey Community Open House 2022, Surrey, BC. October 27, 2022. <u>sfu.ca/surrey/open-house-2022.html</u>

2019 / Body RemiXer [mixed reality installation] with Ekaterina Stepanova and Bernhard Riecke. 2019 Provincial Summit on Aging, Richmond, BC, Canada, November 7-8, 2019. **Body RemiXer** [mixed reality installation] with Ekaterina Stepanova and Bernhard Riecke. *Help my Grandma Day*, Digital Health Circle, Surrey, BC, Canada, September 30, 2019.

Other Non-Curated Exhibitions

- 2023 / Synedelica [roaming MR performance] with Chloe Chua, Marina Tsougranis, and Noah Miller.
 - Otherworld 2023. Lake Cowichan, BC. June 8–12, 2023
 - Burn in the Forest 2023. Merritt, BC. July 26–31, 2023

Publications

Peer Reviewed Journal Papers

 2023 / <u>Desnoyers-Stewart, J.</u>, Bergamo Meneghini, M., Stepanova, E. R., & Riecke, B. E.
 Real Human Touch: Performer-Facilitated Touch Enhances Presence and Embodiment in Immersive Performance. Frontiers in Virtual Reality. doi.org/10.3389/frvir.2023.1336581.

Pinyao, P., <u>Desnoyers-Stewart, J.</u>, Stepanova, E. R., & Riecke, B. E. Breath of Light: A Meditative Installation Reimagining Shared Breathing. Leonardo 56(5). 471–477 <u>https://doi.org/10.1162/leon_a_02401</u>.

2022 / Miller, N., <u>Desnoyers-Stewart, J.</u>, Stepanova, E. R., Kitson, A., Bizzocchi, J., & Riecke, B. E. Sipping the Virtual Elixir: An autoethnographic close reading of Ayahuasca Kosmik Journey a self-transcendent virtual experience. Virtual Creativity, 12(1), 27–44. <u>https://doi.org/10.1386/vcr_00059_1</u>.

Murai, Y., Antle, A.N., Kitson, A., Candau, Y., Adibi, A., Dao-Kroeker, Z., <u>Desnoyers-Stewart, J.</u>, & Jacobs, K. 2022. Facilitating Critical Reflection in Online Distributed Maker Workshops: Case Studies. International Journal of Child-Computer Interaction 33 (September): 100509. https://doi.org/10.1016/j.ijcci.2022.100509.

2020 / Desnoyers-Stewart, J., Stepanova, E. R., Riecke, B., & Pennefather, P.

Body RemiXer: Extending Bodies to Stimulate Social Connection Through an Immersive Installation. Leonardo, 53(4), 394–400. doi.org/10.1162/LEON_a_01925

Pennefather, P., Rizzotti, P., <u>Desnoyers-Stewart, J.</u>, Stepanova, E. R., Riecke B., Danenkov, L., Ryzhov, V., Saroyan J., Beltran, W., & Chak, R. (2020).

A Fun Palace: A Mixed Reality Event Through the Looking Glass of Cybernetics. Cybernetics & Human Knowing 27(2), 61–80.

 2018 / <u>Desnoyers-Stewart, J.</u>, Gerhard D., & Smith, M. L.
 Augmenting a MIDI Keyboard Using Virtual Interfaces. Journal of the Audio Engineering Society, 66(6), 439–447. <u>doi.org/10.17743/jaes.2018.0034</u>

Peer Reviewed Conference Papers * = Presenting Author

- 2024 / Bergamo Meneghini, M., <u>Desnoyers-Stewart, J.</u>, González-Franco, D., & Boniotti, V.
 Eve 3.0: stories of our extreme selves. Proceedings of EVA London 2024, London, UK, July 8–12, 2024.
- 2023 / Miller, N.*, Stepanova, E. R., <u>Desnoyers-Stewart, J.</u>, Adhikari, A., Kitson, A., Pennefather, P., Quesnel, D., Brauns, K., Friedl-Werner, A., Stahn, A., & Riecke, B. E. Awedyssey: Eliciting Selftranscendent Emotions in Virtual Reality to Support Wellbeing. DIS '23. Pittsburg, PA, Jul 10–14, 2023. 23 p. ACM. <u>doi.org/10.1145/3563657.3595998</u>

Stepanova, E. R.*, <u>Desnoyers-Stewart, J.*</u>, Kitson, A., Riecke, B. E., Antle, A., El Ali, A., Frey, J., Tsaknaki, V., & Howell, N. **Designing with Biosignals: Challenges, Opportunities, and Future Directions for Integrating Physiological Signals in Human-Computer Interaction**. [workshop] In DIS '23. Pittsburg, PA, Jul 10–14, 2023. 4p. ACM. doi.org/10.1145/3563703.3591454

Desnoyers-Stewart, J., Stepanova, E. R.*, Liu, P., Kitson, A., Ryzhov, V., Pennefather, P., & Riecke, B. E. Embodied Telepresent Connection (ETC): Exploring Virtual Social Touch Through Pseudohaptics. CHI '23 Extended Abstracts. Hamburg, Germany, Apr 23–28, 2023, 7 p. ACM. doi.org/10.1145/3544549.3585843

Stepanova, E. R.*, <u>Desnoyers-Stewart, J.</u>, Riecke, B. E., Huisman, G., & El Ali, A. **Human Bodies as** Interaction Materials for Somatic, Social, and Multisensory Virtual Reality Experiences. Body x Materials workshop at *CHI* '23. Hamburg, Germany, Apr 23–28, 2023.

2022 / Desnoyers-Stewart, J.*

Star-Stuff: a shared immersive experience in space. ISEA '22: Possibilities, Barcelona, Spain. June 10–16, 2022, pp. 209–216. [article]

Spartin, L. & <u>Desnoyers-Stewart, J.</u>

Digital Relationality: Relational aesthetics in contemporary interactive art. Proceedings of EVA London 2022, London, UK, July 4–8, 2022, pp. 150–157. https://doi.org/10.14236/ewic/EVA2022.29

Stepanova, E. R.*, <u>Desnoyers-Stewart, J.</u>, Höök, K., & Riecke, B. E. **Strategies for Fostering a Genuine Feeling of Connection in Technologically Mediated Systems**. CHI' 22, New Orleans, LA, USA. April 30–May 5, 2022, 26 p. ACM. <u>https://doi.org/10.1145/3491102.3517580</u>

Pennefather, P. & <u>Desnoyers-Stewart</u>, J.*

The Fun Palace: Designing Human Experiences at Mixed Reality Events to Increase Engagement. ISEA '22: Possibilities, Barcelona, Spain. June 10–16, 2022, pp. 217–221. [article]

2021 / Antle, A.N., Kitson, A., Murai, Y., <u>Desnoyers-Stewart, J.</u>, Candau, Y., Adibi, A., Jacobs, K., & Dao-Kroeker, Z. (2021, June).

Opportunities and Scaffolds for Critical Reflection on Ethical Issues in an Online After School Biowearable Workshop for Youth. FabLearn '21. Online. Jun 2–3, 2021, 5 p. doi.org/10.1145/3466725.3466762

Murai, Y., Antle, A.N., Kitson, A., Adibi, A., Candau, Y., Dao-Kroeker, Z., <u>Desnoyers-Stewart, J.</u>, & Jacobs, K., (2021, June)

Facilitating Online Distributed Critical Making: Lessons Learned. FabLearn '21. Online. Jun 2–3, 2021, 9 p. doi.org/10.1145/3466725.3466759

2020 / Stepanova, E. R.*, <u>Desnoyers-Stewart, J.</u>, Pasquier, P., & Riecke, B. E.

JeL: Breathing Together to Connect with Others and Nature.

DIS '20. Eindhoven, NL, July 6–10, 2020, 14 p. ACM. <u>doi.org/10.1145/3357236.3395532</u>

Desnoyers-Stewart, J.

Engaging with a CHI Paper Through Embodied Action: A Situated Analysis of "Design for Collaborative Survival."

CHI '20 Extended Abstracts, Honolulu, HI, USA. April 25–30, 2020, 11 p. ACM. doi.org/10.1145/3334480.3381825

Kitson, A., <u>Desnoyers-Stewart, J.</u>, Miller, N., Adhikari, A., Stepanova, E. R., & Riecke, B. **Can We Trust What's Real? Using Fiction to Explore the Potential Dissociative Effects of Immersive Virtual Reality**. Exploring Potentially Abusive Ethical, Social and Political Implications of Mixed Reality Research in HCl at *CHI '20*. Honolulu, HI, USA, April 25–30, 2020, 5 p. [article]

2019 / <u>Desnoyers-Stewart, J.*</u>, Smith, M. L., & Riecke, B. E. **Transcending the Virtual Mirror Stage: Embodying the virtual self through the digital** **mirror**. In Radical Immersions: Navigating Between Virtual / Physical Environments and Information Bubbles. Proceedings of DRHA 2019, London, UK, Sep 8–10, 2019, pp. 156–67. [article]

Smith, M.L.*, <u>Desnoyers-Stewart, J.</u>, & Kratzig, G.

Designing Virtual Reality Tools: making simulated interventions feel and act like their real counterparts.

In Proceedings of I/ITSEC 2019, Orlando, USA, Dec 2–6, 2019, 13 p. [article]

Smith, M.L.* & Desnoyers-Stewart, J.

Riding Through Walls: a journey in physical computing through Google Street View. Proceedings of EVA London 2019, London, UK, July 8–11,2019, 381–388 doi.org/10.14236/ewic/EVA2019.71

Desnoyers-Stewart, J.*, Stepanova, K., Pasquier, P., & Riecke, B. E.

JeL: Connecting Through Breath in Virtual Reality.

CHI '19 Extended Abstracts. Glasgow, Scotland, UK, May 4–9, 2019, 6 p. ACM. doi.org/10.1145/3290607.3312845

Desnoyers-Stewart, J.*

Transcending Projection: Progressive Engagement with Virtual Reality in Public Spaces. Challenges Using Head-Mounted Displays in Shared and Social Spaces at *CHI '19*. Glasgow, Scotland, UK, May 4–9, 2019, 5 p. [article]

2018 / Desnoyers-Stewart, J.*, Gerhard D., & Smith, M. L.

Augmenting Virtuality with a Synchronized Dynamic Musical Interface: a user evaluation of a Mixed Reality MIDI Keyboard. In M. Aramaki, M. Davies, R. Kronland-Martinet, & S. Ystad (Eds.), Music Technology with Swing: 13th International Symposium, CMMR 2017, Matosinhos, Portugal, September 25-28, 2017, Revised Selected Papers. LNCS. Cham, Switzerland: Springer. 540–557. doi.org/10.1007/978-3-030-01692-0_36.

2017 / Desnoyers-Stewart, J.*, Gerhard D., & Smith, M. L.

Mixed Reality MIDI Keyboard.

Proceedings of the 13th International Symposium on CMMR, Matosinhos, Portugal, September 25–28, 2017, 376–386. Marseille: Les éditions de PRISM. [article]

Desnoyers-Stewart, J.*, Gerhard D., & Smith, M. L.

Mixed Reality MIDI Keyboard Demonstration.

Proceedings of Audio Mostly 2017, London, UK, August 23–26, 2017, 5 p. New York: ACM. doi.org/10.1145/3123514.3123560. [article]

Poster Presentations

2022 / Stepanova, E. R., Brauns, K., Friedl-Werner, A., Miller, N., <u>Desnoyers-Stewart, J.</u>, et al. (2022). A Neurophenomenological Approach to Better Understand the Effects of Eliciting Positive Experiences in Virtual Reality. Phenomenological Methods in Neuroscience and Consciousness Research workshop, University of Zürich.

Articles In-Preparation

In-Preparation / Desnoyers-Stewart, J., Antle, A., & Riecke, B.E. (draft manuscript)

Being in Virtual Worlds: how interaction, environment, and touch shape embodiment in immersive experiences.

<u>Desnoyers-Stewart, J.</u> & Riecke, B.E. (draft manuscript) **Real Virtuality: A Framework for the Interconnected Virtual and Real**.

Stepanova, E.R, <u>Desnovers-Stewart</u>, J., & Riecke, B. E. (draft manuscript)

Fluid Boundaries of Virtual Bodies: Exploring the Phenomenology of Embodiment in Asymmetric Mixed Reality.

<u>Desnoyers-Stewart, J.</u> Stepanova, E. R., & Riecke, B.E. (draft manuscript) **Methods for Investigating Social Connection in Immersive Experiences**.

Other Publications

2018 / Desnoyers-Stewart, J. (2018, March). Session IIIb Report //// Integrating Art & Design Education with Science, Engineering & Medicine. In Creative Collaboration @ NAS Notes and Reviews from Creativity and Collaboration: Revisiting Cybernetic Serendipity. Medium.com. medium.com/creative-collaboration-nas/session-iiib-report-integrating-art-design-education-withscience-engineering-medicine-c355edc34edb

Presentations

Invited Talks

2023 / John Desnoyers-Stewart. Expanding Social Realities through Abstract Embodiment. Immersive Technologies Seminar Series. University of British Columbia Okanagan Campus, Kelowna, BC, February 8, 2023.

Severn Cullis-Suzuki, Phenia Marras, Tabitha Robin, Azul Carolina Duque, Brendan McLeod, Ndidi Cascade, & John Desnoyers-Stewart. **Night of Ideas Vancouver | More? Slow is Beautiful**. Moderated by Andrea Reimer. Presented by the French Embassy, Alliance Française, and UBC Peter Wall Institute for Advanced Studies. BCIT Downtown Campus, Vancouver, BC, February 1, 2023.

2020 / John Desnoyers-Stewart, & Sigrid Coggins. How COVID impacts the creativity of digital artists, how they adapt, and find new ways of creation. Round table facilitated by Urszula Gleisner. Laval Virtual Days: XR Trends, online VR conference, September 28, 2020.

<u>John Desnoyers-Stewart.</u> **Remixing Social Realities in Body RemiXer**. Laval Virtual World, online VR conference hosted in France, April 22, 2020.

2019 / John Desnoyers-Stewart. Abstract Embodiment for Social Connection in VR. VR/AR Global Summit 2019, Vancouver, BC, November 2, 2019.

Peer-Reviewed

- 2022 / Miller, N., <u>Desnoyers-Stewart, J.</u>, Stepanova, E. R.*, Kitson, A., Bizzocchi, J., & Riecke, B. E.
 Sipping the Virtual Elixir: An autoethnographic close reading of Ayahuasca Kosmik Journey a self-transcendent virtual experience. Extended Senses '22, London, UK. September 8-9, 2022, 8 p. [article]
- 2020 / John Desnoyers-Stewart, Ekaterina. R. Stepanova, Bernhard. E. Riecke, & Patrick Pennefather. Body RemiXer: Extending Bodies to Stimulate Social Connection Through an Immersive Installation. Art Paper Presentation at SIGGRAPH 2020, Online, August 24–28, 2020.
- 2018 / John Desnoyers-Stewart. Designing Expressive Mixed Reality Interfaces through Practice-Based Research. Presentation at Role/Play: Collaborative Creativity and Creative Collaborations Student Fellows Symposium. National Academy of Sciences, Washington D.C., March 12, 2018. Abstract published in "Creativity and Collaboration: Revisiting Cybernetic Serendipity." Studio International. studiointernational.com/index.php/role-play-collaborative-creativity-creativecollaborations-cybernetic-serendipity-review.

Other Talks

- 2018 / John Desnoyers-Stewart & Ekaterina R. Stepanova. JeL: VR for Social Synchronization. Presentation at SIAT Graduate Colloquium. Simon Fraser University, Surrey Campus, Surrey, BC, November 28, 2018.
- 2017 / John Desnoyers-Stewart: Interdisciplinary MFA Student. Presentation at Art for Lunch. University of Regina, Regina, SK, September 22, 2017.

2016 / **3-Minute Thesis: Improving the Accessibility of Art through Immersive Technology**. Presentation at University of Regina Media Art and Performance Grad Mini Symposium. University of Regina, Regina, SK, October 3, 2016.

Published Software

2022 / Starseed mindful escape [VR Meditation] with music by Dale Nichols. In Hoame VR meditation app. Available on the Oculus Quest Store. https://www.hoame.app/

Star-Stuff: a way for the universe to know itself [multi-user VR] with music by Dale Nichols. Oculus App Lab. <u>https://www.oculus.com/experiences/guest/3367089710082568/</u>

Professional Designations

2015-Current / Professional Engineer/Engineers & Geoscientists British Columbia

Research Experience

2020 / SIRIUS 2020 Research Assistant/Simon Fraser University iSpace Lab

Artistic development of virtual reality sensory stimulation intervention as part of the NASA Scientific International Research in a Unique terrestrial Station (SIRIUS) 2020 study. Contributed to narrative and scene design and development. Created interactive and procedural effects including clouds, aurora, and global weather systems.

BioWearables Workshop Research Assistant/Simon Fraser University, Tangible Embodied Child-Computer Interaction Lab

Designed and developed electronic systems for wearable biosensing based around Arduino for use in an ethics of biowearables workshop and will facilitate forthcoming workshops for high school students.

- 2018–Current / **iSpace Lab**/Simon Fraser University, School of Interactive Art and Technology Research in transformative experiences, bioresponsive interfaces, and interactive art using Virtual Reality. Contributing to grant writing on major grants including SSHRC Insight Development Grant 2019, AGE-WELL NCE Core research Program 2020, New Frontiers in Research Fund 2020.
- 2017–2018 / CCJS Research Assistant / University of Regina Faculty of Media, Art, and Performance Developed novel mixed reality hardware and software integrated real objects in virtual environments for training simulations.
- 2016–2018 / SSHRC Research Assistant/University of Regina Faculty of Media, Art, and Performance Created documentation, marketing, and event planning for Riding Through Walls, a SSHRC funded project to cycle cross-Canada through Google Street View.
 - 2011 / Final Project: Biocomposite Ski/University of Regina Faculty of Engineering and Applied Science Supervisors: Dr. Denise Stilling, Dr. Amr Henni Colleagues: Stephanie Campbell, Garret Sliva

Designed and built a ski with flax bio-composite in place of traditional fiberglass, improving the full lifecycle sustainability without compromising performance.

Teaching Experience

Professional Development

- 2023 / Teaching Development Program Certificate / University of British Columbia Sessional Instructor
- 2023 / MDST 490/Media Studies Seminar Series/Sep-Dec/University of British Columbia
- 2022 / IGS 501C/Interdisciplinary Research Methods/Sep-Dec/University of British Columbia

Taught interdisciplinary research methods including practice-based, qualitative, and quantitative approaches. Students were encouraged to rethink dominant modes of research and dissemination and consider creative ways of generating and communicating knowledge.

2021 / MDST 490/**Media Studies Seminar Series**/Sep-Dec/University of British Columbia Taught contemporary media theory informed by human-computer interaction through a hands-on online course. Encouraged students to engage deeply with the material through creative in-class assignments, discussions, and debates. Personal and professional growth was emphasized through assignments that could be aligned to individual needs. Received excellent reviews from students and encouraged one undergraduate student to successfully publish their first paper.

IGS 501C/Interdisciplinary Research Methods/Sep-Dec/University of British Columbia

Taught interdisciplinary research methods including practice-based, qualitative, and quantitative approaches. Students were encouraged to rethink dominant modes of research and dissemination and consider creative ways of generating and communicating knowledge. (Concurrent with MDST 490)

Teaching Assistant

- 2020 / IAT 445 / Immersive Environments / Jan-Apr / Simon Fraser University Led workshops and assisted in facilitating hands-on lectures. Graded assignments and collaborated with professor in adjusting lecture content per Just in time Teaching reviews.
- 2018 / CTCH 204/Introduction to New Media Graphic Design/Jan-Apr/University of Regina Led two classes including one lecture on basic programming concepts, assisted students in creating projects in Processing, provided constructive feedback through critiques, and marked assignments.

Guest Lectures

- 2024 / Expanding Social Realities IAT 320: Body Interface, Mar. 18, 2024, Simon Fraser University. Expanding Social Realities VR/AR Design & Dev., Feb. 28, 2024, Vancouver Film School.
- 2020 / Transcending the Virtual Mirror Stage: Embodying the virtual self through the digital mirror + Body RemiXer: Extending Bodies to Stimulate Social Connection. IAT 445: Immersive Environments, Mar. 24, 2020, Simon Fraser University.
- 2019 / High Definition Render Pipeline and Visual Effects Graph in Unity. IAT 487–Directed Studies, Jul. 2, 2019, Simon Fraser University.

Connecting through Immersive Installations: JeL and Body RemiXer. DIAL 392W: Semester in Alternate Realities, Mar. 27, 2019, Simon Fraser University.

2017 / Virtual and Augmented Reality. CTCH 110: Introduction to Creative Technologies, Nov. 10, 2017, University of Regina.

Mixed Reality Wearables. CTCH 310AB: Wearables: Art and Body Tech, Oct 17, 2017, University of Regina.

Professional Experience

2016–2020 / Owner & Marketing Consultant/Tru Dimension Technology

Provide support in all aspects of marketing and business development strategy for clients. Primarily focused on working with new businesses to ensure their successful market entry.

/Website development and maintenance.

/Graphic design of marketing materials, logos, and website graphics.

/Market analysis and recommendation of pricing, product offering.

2018–2020 / Engineering Consultant/Center for Collaborative Justice and Safety, University of Regina Design and prototyping services for the development of mixed reality hardware used in training simulation.

- /3D printed rapid prototyping
- /Steam VR sensor integration
- /Mechanical design and fabrication support
- 2013-2016 / Product Specialist / Brandt Agricultural Products

Prepared product definitions for new product development. Designed custom applications. Analyzed and researched new and existing markets to determine future product development direction. Organized and attended trade shows.

- /Developed business cases and product definitions for new agricultural products.
- /Created surveys which provided direction for product development.
- /Determined pricing to maximize profit potential using economic and statistical methods.
- 2011–2012 / Project Engineer-In-Training/Watergroup Companies Inc

Developed water treatment products. Performed conceptual, plastics & fluid system design. Tested products, supported marketing, estimated cost. Produced market analyses, brochures, manuals and bilingual technical writing.

/Worked regularly with international suppliers and customers in developing products.

/Utilized SolidWorks to produce molded plastic and sheet metal designs.

/Designed & built prototypes and tested customized filtration & reverse osmosis.

Internship Experience

2010 / Research & Design Co-op / Bridgeview Manufacturing

Designed new products and improved existing products. Optimized designs through stress and fluid dynamics analyses. Trained team members to use CAD/CAE software.

- 2009 / Equipment Lifecycle Engineering Co-op / Bruce Power LLP Monitored preventative maintenance of critical valves to comply with the Canadian Nuclear Safety Commission. Analyzed failures and history to recommend changes.
- 2009 / Design Engineering Co-op / Case New Holland Agriculture Worked with a team of engineers to design new agricultural products and improve existing ones. Provided manufacturing support, recommendations, and design changes.
- 2008 / Industrial Engineering Co-op/General Motors of Canada Designed workstations and devices to improve ergonomics, safety and productivity. Documentation, monitoring and troubleshooting of manufacturing processes.

Service

Peer-Review

2024 /	SIGGRAPH 2024 / External Reviewer / 9 reviews
	DIS 2024/ Playful Experiences Reviewer / 2 reviews
2023 🖊	EVA London 2023 / Program Committee / 5 reviews (full papers)
2022 /	ACM DIS 2022 / Reviewer / 2 reviews (full papers)

- ACM CHI 2022/Reviewer/ 1 review (work-in-progress) ACM CHI 2023/Reviewer/ 1 review (full paper)
- 2020 / ACM DIS 2020/Reviewer/ 1 review (1 full paper) ACM TEI 2021/Program Committee/ 3 reviews (work-in-progress)
- 2019 / ACM CHI 2020/Reviewer/4 reviews (1 full paper, 3 Alt.CHI) IEEE VR 2020/Reviewer/ 3 reviews (conference papers)

ACM TEI 2020/ Reviewer/3 reviews (1 full paper, 1 pictorial, 1 work-in-progress)

Volunteering

- 2018 / Graduate Student Representative / Creative Technologies Committee
- 2017-2018 / Graduate Student Representative / MAP Graduate Program Committee
 - 2017 / Student Volunteer / INSTINT New Orleans, January 22–24, 2017
- 2011–2014 / Alumni Representative / Regina Engineering Students' Society
- 2010-2011 / Vice President of Finance / Regina Engineering Students' Society
- 2009–2010 / Design Director/Regina Engineering Students' Society
- 2008–2009 / Publications Director/Regina Engineering Students' Society

Press

- 2024 / Samantha Duerksen, **Review: Victoria's first Winter Arts Festival surpassed expectations**, Monday Magazine (Victoria, BC), February 22, 2024. <u>mondaymag.com/community/review-victorias-first-winter-arts-festival-surpassed-expectations-7320910</u>
 - Samantha Duerksen, **PHOTOS: First Winter Arts Festival put Victoria in a whole new light**, Victoria News (Victoria, BC), February 21, 2024. <u>vicnews.com/community/photos-first-winter-arts-festival-put-victoria-in-a-whole-new-light-7320622</u>
- 2023 / John Desnoyers-Stewart is creating new social spaces through virtual reality, Engineers Canada, June 22, 2023. <u>engineerscanada.ca/news-and-events/news/john-desnoyers-stewart-</u> is-creating-new-social-spaces-through-virtual-reality
 - Interview, Arts and Technology Answer to the question "MORE?" Nuit des idées Canada, February 10, 2023. <u>youtu.be/oLrw_13jZjQ</u>
- 2022 / Interview, **Twinkle, Twinkle, Little 'Star-Stuff'**, SIGGRAPH Blog, November 11, 2022. https://blog.siggraph.org/2022/11/twinkle-twinkle-little-star-stuff.html/
- 2020 / Interview by Léa Paule, **Body Remixer connects real people through virtual bodies**, Laval Virtual Blog, December 18, 2020. <u>https://blog.laval-virtual.com/en/body-remixer-connects-real-people-through-virtual-bodies/</u>
 - Clarissa Yap & Samantha Tester, **Body RemiXer: SFU PhD students launch a new VR installation**, *SFU News*, October 2, 2020. <u>https://www.sfu.ca/sfunews/stories/2020/10/body-remixer--sfu-phd-students-launch-a-new-</u> <u>vr-installation-.html</u>
- 2018 / Interview by Francis Rumsey, August 2018 Spotlight Interview: John Desnoyers-Stewart, AES E-News, August 4, 2018. <u>http://www.aes.org/e-news/2018/Aug3.cfm</u>
 - Creating Music and Art through Virtual Reality at the University of Regina, CBC News: Saskatchewan at 6:00, (Regina, SK), April 26, 2018. <u>youtu.be/G1BZXWfSWCU</u>
 - Jennifer Ackerman, **Masters project challenges boundaries of virtual reality**, Leader Post (Regina, SK), April 25, 2018. <u>leaderpost.com/news/local-news/masters-project-challenges-boundaries-of-virtual-reality</u>

Research Interests

- /Art and Technology
- /Virtual and Mixed Reality
- /Embodied Interaction
- /Play and Improvisation
- /Tactility/Embodiment /Tangible Interfaces /Research In-the-wild
- /Practice-based research

/Industrial Design
 /Sustainable Manufacturing
 /Biocomposites

Competencies *** = Expert **=Advanced *=Novice

Software			
idEdge***, Pro/E Creo*,			
/Digital Art: Photoshop***, Illustrator***, InDesign***, Blender**			
/Music Production: Bitwig**, Ableton Live**, Cubase*, Pure Data**			
/Programming: Unity***, C#***, C++**, Java*, VB*, Python*			
/Hardware: Vive***, Kinect***, Leap Motion***, Arduino***			
/Web Development: Wordpress***, HTML**, CSS**, PHP*			
Languages			
/English – Native***			
/French – Proficient* *			
/Painting & Drawing**			

/Electronic Music Composition*

Engineering

/Product Development***
/Composite Design**
/Design for Manufacturing**
/Prototyping***
/Testing**

Other

/Paper & Report Writing***
/Market Research***
/Budgeting & Forecasting**
/Data Analysis**