

SIMON FRASER UNIVERSITY
Curriculum Vitae

Date: March 1, 2019

Initials: AJK

1. SURNAME: Kitson FIRST NAME: Alexandra
MIDDLE NAME(S): Jean
2. DEPARTMENT/SCHOOL: Simon Fraser University
3. FACULTY: Interactive Arts and Technology
4. PRESENT RANK: PhD Candidate SINCE: 2018

5. **POST-SECONDARY EDUCATION**

University or Institution	Degree	Subject Area	Dates
Simon Fraser University	PhD	Interactive Arts and Technology	Sept 2014 – present
The University of British Columbia	BSc	Cognitive Systems: Cognitive and Brain	Sept 2008 – May 2013
ETH Zürich	Exchange	Neuroinformatics	Sept 2011 – June 2012

Special Professional Qualifications

An interdisciplinary approach to designing for wellness in virtual environments through cognitive science, positive psychology, and deep learning approaches.

6. **EMPLOYMENT RECORD**

(a) *Prior to coming to Simon Fraser University*

University, Company or Organization	Rank or Title	Dates
University of British Columbia	Teaching Assistant	Jan – Apr 2013
Digital Media Academy	Lead Instructor	Jun – Aug 2014/15/16/17

(b) *At SFU*

Rank or Title	Dates
Research Assistant	Jan 2013-present

(c) *Date of granting of tenure at SFU:*

7. **LEAVES OF ABSENCE**

University, Company or Organization at which Leave was taken	Type of Leave	Dates
N/A		

8. **TEACHING**

(a) *Areas of special interest and accomplishments*

Using emergent technologies for research, clinical, and artistic purposes.

(b) *Courses Taught at SFU*

Session	Course Number	Scheduled Hours	Class Size	Hours Taught				
				Lectures	Tutorials	Labs	Grading	Other
Fall 2018	IAT 804	Thur 10:30am-1:20pm	20	3	5	0	35	12
Spring 2018	IAT 802	Tues 2:30-5:20pm	9	3	5	0	40	10
Fall 2017	IAT 804	Thur 10:30am-1:20pm	30	3	5.5	0	35	12
Summer 2017	IAT 445	Tues/Thur 2:30-8:20pm	40	4	3.5	51	38.5	13.5
Fall 2016	IAT 445	Thur 4:30-6:20pm; Fri 10:30am-2:30pm	40	4	1	48	40	13

(c) *Graduate Research Supervision*

Student Name	Program Type	Year		Supervisory Role (supervisor, co-supervisor, committee member)
		Start	Finish	

(d) *Graduate Program Supervision*

Student Name	Program Type	Year	Supervisory Role
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		Start	Finish	(supervisor, co-supervisor, committee member)

(e) *Continuing Education Activities*(Sept 2015 - Dec 2015). **Certificate Program in University Teaching and Learning: Simon Fraser University**

Four-month, 120 hour, Senate approved non-credit certificate

Full scale course design, teaching philosophy statement, presentations

(f) *Visiting Lecturer (indicate university/organization and dates)*(g) *Other*(Jun 2014 – present). **Crisis Intervention and Suicide Prevention Centre of BC:** Over 500 hours in senior leadership role as mentor to new volunteers, helping them transition to independently supporting callers and chatters.(May – Aug 2015). **Undergraduate Mentorship:** I supervised undergraduate research assistants to complete a summer thesis project by assisting with research design and collecting data. I helped train the RAs in the necessary research methods and software.(Sept 2010 – May 2013). **First Year Mentorship Program:** I helped enable active involvement in orienting and guiding first year students at the University of British Columbia, meeting throughout the year for continued support.**9. SCHOLARLY AND PROFESSIONAL ACTIVITIES**(a) *Areas of special interest and accomplishments*

Positive Technology, CyberPsychology, Virtual and Augmented Reality, Deep Learning

(b) *Research or equivalent grants (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC))*

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
SSHRC	Small Grant	C		2017	Bernhard E. Riecke	Alissa Antle
NSERC	Engage Grant	C			Bernhard E. Riecke	
NSERC	Engage Plus Grant	C			Bernhard E. Riecke	
NSERC	Engage Grant	C			Bernhard E. Riecke	
SSHRC	Insight Partnership Grant	C			Thecla Schiphorst	Philippe Pasquier
NSERC	Engage Grant	C			Bernhard E. Riecke	
NSERC	Discovery Grant	C			Bernhard E. Riecke	

(c) *Research or equivalent contracts (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)).*

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)

(d) *Invited Presentations (Identify whether International/National/Local)*

(2019). Lucid Loop: A Virtual Reality Bioresponsive System using Creative Artificial Intelligence for Lucid Dreaming Practices. MIT Media Lab, Cambridge, MA, USA. *International invited 15 min. oral presentation*

(2017). Are You Dreaming? A Phenomenological Study of Lucid Dreaming for Designing Virtual Reality. SFU, Surrey, Canada. *Local invited 30 min. oral presentation*

(2016). Moving Through Virtual Reality: Is Illusory Self-Motion (vection) More Than a Cool Sensory Experience? The University Women's Club of Vancouver, BC, Canada. *Local invited oral presentation*

(2015). Spatial Navigation and Orientation in Virtual Reality and Application in the Creation an Experiential Flying Game. SFU, Surrey, Canada. *Local invited 30 min. oral presentation*

(e) *Other Presentations*

(2018). *Going Beyond: Lucid Dreaming as a Lens into Transformative Experience Design for Virtual Reality*. Symposium presentation presented at the 23rd Annual CyberPsychology, CyberTherapy & Social Networking Conference, Gatineau, Canada. *International 20 min. oral presentation*

(2018). Are You Dreaming? Designing for Introspective Experiences in Virtual Reality through a Phenomenological Study on Lucid Dreaming Practices. Proceedings of the 2018 CHI Conference. ACM: 1-10. [doi: 10.1145/3173574.3173917](https://doi.org/10.1145/3173574.3173917). *International 20 min. oral presentation*

(2017). A User Study Comparing Two Low-Cost Chair Interfaces for Embodied Virtual Locomotion. Talk presented at Psychonomic 58th Annual Meeting, Vancouver, BC, Canada. *International 20 min. oral presentation*

(2016). Lost Spirit: An Embodied Flying Experience in a Virtual Reality Game with Kinect. IEEEVR Workshop on Mixed Reality Art, Greenville, United States. *International 20 min. oral presentation*

(2016). Moving Through Virtual Reality: Is Illusory Self-Motion (vection) More Than A Cool Sensory Experience?. SFU's Three Minute Thesis (3MT) finals, Burnaby, Canada. *Local oral presentation*

(2015). Influence of Movement Expertise on a Virtual Point-to-Origin Task. 2nd International Workshop on Movement and Computing, Vancouver, Canada. *International 15 min. oral presentation*

(2015). Exploring Facial Expressions for Human-Computer Interaction: Combining Visual Face Tracking and EMG Data to Control a Flight Simulation Game. ISEA 21st International Symposium on Electronic Art, Vancouver, Canada. *International 20 min. oral presentation*

(2014). Sonic Cradle: Investigating Meditative Aspects of an Interactive Technology. NCE-GRAND 2014 Conference, Ottawa, Canada. *National 20 min. oral presentation*

(f) *Other*

(2017). Designing virtual environments for breath-awareness and eliciting positive affective states. Poster presented at the 3rd Annual Innovations in Psychiatry and Behavioral Health: Virtual Reality and Behavior Change, Stanford, CA, USA. *International poster presentation*

(2014). Does Movement Experience Influence Navigation Strategy in a Virtual Point-to-Origin Task?. 55th Annual Meeting of the Psychonomic Society, LA, United States. *International poster presentation*

(g) *Conference Participation (Organizer, Keynote Speaker, etc.)*

(2017). Low-cost Consumer Locomotion Interfaces for Virtual Navigation. Consumer Virtual Reality (CVR) Conference, Vancouver, BC, Canada. *Local demonstration booth*

(2016). TeleSpider: Investigating Motion-Cueing Interfaces for Control of a Remote Robotic Spider. Consumer Virtual Reality (CVR) Conference, Vancouver, BC, Canada. *Local demonstration booth*

10. SERVICE TO THE UNIVERSITY

(a) *Areas of special interest and accomplishments*

(2018). Faculty of Communication, Art and Technology Student Experience Survey

(b) *Memberships on committees, including offices held and dates*

Graduate Student Association

(Sept 2015 – present). Chair

(Sept 2015 – present). Graduate Program Committee PhD Representative

(Sept 2015 – present). SFU Graduate Student Society Caucus Representative

(Sept 2014 – Aug 2015). Vice-Chair

(c) *Other service, including dates*

11. SERVICE TO THE COMMUNITY

(a) *Memberships on scholarly societies, including offices held and dates*

(2017 – present). ACM Student Membership

(2014 – present). IEEE Student Membership

(2014 – present). Psychonomic Society Membership

(b) *Memberships on other societies, including offices held and dates*

(c) *Memberships on scholarly committees, including offices held and dates*

(d) *Memberships on other committees, including offices held and dates*

(e) *Editorships (list journal and dates)*

(f) *Reviewer (journal, agency, etc. including dates)*

(2018). CHI 2019 Conference, Double blind, Refereed: 3

(2018). IEEEVR 2019 Conference, Double Blind, Refereed: 3

(2017). CHI 2018 Conference, Double blind, Refereed: 1

(2016). CHI 2017 Conference, Double blind, Refereed: 2

(2016). IEEEVR 2017 Conference, Double blind, Refereed: 3

(2014). NCE-GRAND Conference, Double blind, Refereed: 3

(g) *External examiner (indicate universities and dates)*

(h) *Consultant (indicate organization and dates)*

(i) *Other service to the community*

(Nov 2012 – present). **Crisis Intervention and Suicide Prevention Centre of BC Volunteer:** Over 500 hours of providing callers and chatters with support for alleviating emotional distress and setting short term goals.

(Sep 2009 – Aug 2011). **Vancouver General Hospital Volunteer:** Occupational therapy for evening programs, facilitating crafts, music therapy, games, and outings.

(Sep 2004 – Aug 2008). **Port McNeill Figure Skating Club CanSkate Instructor:** Volunteer to teach children aged 5-12 the fundamentals of ice skating, organizing games and activities around the curriculum.

12. AWARDS AND DISTINCTIONS

(a) *Awards for Teaching (indicate name of award, awarding organizations, date)*

(b) *Awards for Scholarship (indicate name of award, awarding organizations, date)*

(2019). Graduate Fellowship, SFU, \$6500

(2019). Helmut and Hugo Eppich Family Graduate Scholarship, \$1000

(2018). Travel and Minor Research Award, SFU, \$1500

(2018). GSS Professional Development Grant, SFU, \$500

(2018). Doctoral Award, SSHRC, \$20000/yr, SFU

(2018). Graduate Fellowship, SFU, \$6500

(2018). The Franklin D. & Helen K. Van Pykstra Graduate Scholarship, SFU, \$3500

(2018). Travel and Minor Research Award, SFU, \$500

(2017). Open Access Award, SFU, \$100

(2017). Vanier Canada Graduate Scholarship, NSERC, \$50000/yr (SFU nomination)

(2017). Doctoral Graduate Scholarship, NSERC, \$21000/yr (SFU nomination)

(2017). Graduate Fellowship, SFU, \$6500

(2017). The Clark Wilson Graduate Scholarship, \$1400

(2016). Travel and Minor Research Award, SFU, \$500

(2015). FCAT Graduate Fellowship, SFU, \$3250

(2008). Catalyst Paper Corporation Scholarship, UBC, \$3000

(2008). Norman MacKenzie Alumni Entrance Scholarship, UBC, \$2000

(2008). President's Entrance Scholarship, UBC, \$2000

(c) *Awards for Service (indicate name of award, awarding organizations, date)*

(2017). Distress Services Award, Vancouver Crisis Centre

(2016). 500 Hours for Community Service Award, Vancouver Crisis Centre

(d) *Other Awards*

(2016). 3MT Competiton Finalist (Semi-Final Winner), SFU, \$100

(2012). Kelly and Diane Gibney Bursary in Science, UBC, \$150

(2012). Crichton Family Bursary, UBC, \$1000

13. OTHER RELEVANT INFORMATION (Maximum One Page)

Simon Fraser University
Publications Record

SURNAME: Kitson

FIRST NAME: Alexandra

Initials: AJK

MIDDLE NAME(S): Jean

Date: 01/03/19

1. REFEREED PUBLICATIONS

* presenting author

(a) Journals

Kitson, A., Prpa, M., & Riecke, B. E. (2018). Immersive Interactive Technologies for Positive Change: A Scoping Review and Design Considerations. *Frontiers in Psychology*, 9, 1–19. <https://doi.org/10.3389/fpsyg.2018.01354>

Kitson, A., Sproll, D., & Riecke, B. E. (2016). Influence of Ethnicity, Gender and Answering Mode on a Virtual Point-to-Origin Task. *Front Behav Neurosci*, 7(10.3389): 1-22. doi:10.3389/fnbeh.2016.00022

(b) Conference Proceedings

Kitson, A.*, DiPaola, S., & Riecke, B. E. (2019, May). Lucid Loop: A Virtual Deep Learning Biofeedback System for Lucid Dreaming Practice. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Glasgow, UK. ACM: 1-6. doi: 10.1145/3290607.3312952

Kitson, A.*, Schiphorst, T., & Riecke, B. E. (2018, April). Are You Dreaming? Designing for Introspective Experiences in Virtual Reality through a Phenomenological Study on Lucid Dreaming Practices. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, Montreal, QC, Canada. ACM: 1-10. doi: [10.1145/3173574.3173917](https://doi.org/10.1145/3173574.3173917)

Hashemian, A. M., **Kitson, A.**, Nguyen-Vo, T., Benko, H., Stuerzlinger, W., & Riecke, B. E.* (2018, March). Investigating a Sparse Peripheral Display in a Head-Mounted Display for VR Locomotion (2-pg extended abstract and poster). Presented at the IEEE Virtual Reality 2018, Reutlingen, Germany: IEEE.

Kitson, A., Hashemian, A. M., Stepanova, E. R., Kruijff, E., & Riecke, B. E.* (2017). Comparing Leaning-Based Motion Cueing Interfaces for Virtual Reality Locomotion. Presented at 3DUI, LA, CA, USA: 73–82.

Kitson, A., Hashemian, A. M., Stepanova, E. R., Kruijff, E., & Riecke, B. E.* (2017). Lean Into It: Exploring Leaning-Based Motion Cueing Interfaces for Virtual Reality Movement. *IEEE Virtual Reality (VR)*, LA, CA: 215-216. doi: 10.1109/VR.2017.7892253

Freiberg, J., **Kitson, A.**, & Riecke, B. E.* (2017). Development and Evaluation of a Hands-Free Motion Cueing Interface for Ground-Based Navigation. *IEEE VR*, LA, CA: 273-274. doi: 10.1109/VR.2017.7892282

Stepanova, E. R.*, Schiphorst, T., **Kitson, A.**, von der Heyde, M., & Riecke, B. E. (2017, July). Gathering and Apply Guidelines for TeleSpider Design for Urban Search and Rescue Applications on a Mobile Robot. In M. Kurosu (Ed.), *Human-Computer Interaction. Interaction Contexts, HCI 2017*, Cham: Springer, Vol. 10272: 562 – 581.

Tong, X., **Kitson, A.***, Salimi, M., Gromala, D., & Riecke, B. E. (2016, March). Lost Spirit: An Embodied Flying Experience in a Virtual Reality Game with Kinect. *IEEE International Workshop on Mixed Reality Art (MRA)*, Greenville, SC: 5-6. doi: 10.1109/MIXRA.2016.7858996

Kitson, A.*, Riecke, B. E., & Stepanova, E. R. (2015). Influence of Movement Expertise on a Virtual Point-to-Origin Task. Presented at the MOCO'15 – 2nd International Workshop on Movement and Computing, Vancouver, Canada: ACM: 100–103 doi:10.1145/2790994.2791014

Kitson, A., Riecke, B. E.*, Hashemian, A. M., & Neustaedter, C. (2015). NaviChair: an embodied interface to navigate virtual reality. Presented at the SUI '15: Symposium on Spatial User Interaction, Los Angeles, CA, USA: ACM: 123–126.

Kruijff, E.*, Riecke, B. E., Trepkowski, C., & **Kitson, A.** (2015). Upper Body Leaning can affect Forward Self-Motion Perception in Virtual Environments. Presented at the SUI '15: Symposium on Spatial User Interaction, Los Angeles, CA, USA: ACM: 103–112.

Bayatpour, S., Bernardet, U., Dipaola, S., **Kitson, A.***, & Riecke, B. E. (2015, August). Exploring Facial Expressions for Human-Computer Interaction: Combining Visual Face Tracking and EMG Data to Control a Flight Simulation Game. In *Proceedings of ISEA 2015*. ISEA 2015: 1-7.

Kitson, A.*, Riecke, B. E., & Vidyarthi, J. (2014). Sonic Cradle: Investigating Meditative Aspects of an Interactive Technology. In *NCE-GRAND 2014 Conference*. Ottawa, Canada: 1–4.

(c) Other

2. NON-REFEREED PUBLICATIONS

(a) *Journals*

(b) *Conference Proceedings*

- Kitson, A.***, Gaggioli, A., & Riecke, B. E. (2019). Digital Wellbeing: Considering Self-transcendence. (accepted) CHI International Workshop on Designing for Digital Wellbeing, Glasgow, UK. ACM: 1-4.
- Kitson, A.***, Stepanova, E. R., Aguilar, I., Wainwright, N., & Riecke, B.E. (2019, June). Transcending the Lab: Using Storytelling and Theatre Practices to Support Self-Transcendent Experiences in Virtual Reality. (accepted) Oral presentation at the 24th Annual CyberPsychology, CyberTherapy & Social Networking Conference, Norfolk, VA, USA.
- Kitson, A.***, DiPaola, S., & Riecke, B. E. (2019, June). Can We Support Lucid Dreaming Practices with a Creative Deep Learning Algorithm and Immersive Virtual Reality Biofeedback System? (accepted) Poster presentation at the 24th Annual CyberPsychology, CyberTherapy & Social Networking Conference, Norfolk, VA, USA.
- Kitson, A.***, Buie, E., Stepanova, E. R., Chirico, A., Riecke, B. E., & Gaggioli, A. (2019, May). Transformative Experience Design: Using Interactive Technologies and Narrative to Support Transformative Experiences. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Glasgow, UK. ACM: 1-4. doi: 10.1145/3290607.3311762
- Kitson, A.***, & Riecke, B. E. (2018, June). Going Beyond: Lucid Dreaming as a Lens into Transformative Experience Design for Virtual Reality. Symposium presentation at the 23rd Annual CyberPsychology, CyberTherapy & Social Networking Conference, Gatineau, QC, Canada. Retrieved from <http://interactivemediainstitute.com/cypsy23/>
- Stepanova, E. R.*, Quesnel, D., **Kitson, A.**, Prpa, M., Aguilar, I., & Riecke, B. E. (2018, June). A framework for studying transformative experiences through VR. Symposium presentation at the 23rd Annual CyberPsychology, CyberTherapy & Social Networking Conference, Gatineau, Canada. Retrieved from <http://interactivemediainstitute.com/cypsy23/>
- Kitson, A.**, & Riecke, B. E.* (2018, March). Can Lucid Dreaming Research Guide Self-Transcendent Experience Design in Virtual Reality? Presented at the Virtual and Augmented Reality for Good Workshop at IEEE Virtual Reality 2018, Reutlingen, Germany: IEEE: 1-4.
- Kitson, A.***, Nguyen-Vo, T., Hashemian, A. M., Stepanova, E. R., & Riecke, B. E. (2017, November). A User Study Comparing Two Low-Cost Chair Interfaces for Embodied Virtual Locomotion. Talk presented at Psychonomic 58th Annual Meeting, Vancouver, BC, Canada.
- Stepanova, E. R.*, Quesnel, D., **Kitson, A.**, Prpa, M., & Riecke, B. E. (2017, November). Virtual Reality as a Tool for Inducing and Understanding Transformative Experiences. Poster presented at the Psychonomic Society 58th Annual Meeting, Vancouver, BC, Canada.
- Kitson, A.***, Prpa, M., & Riecke, B. E. (2017, October). Designing virtual environments for breath-awareness and eliciting positive affective states. Poster presented at the 3rd Annual Innovations in Psychiatry and Behavioral Health: Virtual Reality and Behavior Change, Stanford, CA, USA.
- Prpa, M., Quesnel, D., Vidyarthi, J., **Kitson, A.**, & Riecke, B.E.* (2016, April). Sonic Cradle - Immersive interaction design combining breathing and neurofeedback to foster focused attention meditation on breath. In ICM, 2nd international conference on mindfulness, Rome, Italy.
- Kitson, A.**, Riecke, B. E.*, Grechkin, T. Y., Von Der Heyde, M. (2016, May). Effect of Physical Rotations and Gender for Navigation Performance in Virtual Environments. Poster presented at the International Meeting of the Psychonomic Society, Grenada, Spain. Retrieved from <http://www.ps2016.org/>
- Riecke, B. E.*, Stepanova, E. R., & **Kitson, A.** (2016, May). New response patterns in point-to-origin tasks depending on stimulus type and response mode. Talk presented at the International Meeting of the Psychonomic Society, Granada, Spain. Retrieved from <http://www.ps2016.org/>
- Kitson, A.***, Sproll, D., & Riecke, B. E. (2014). Does Movement Experience Influence Navigation Strategy in a Virtual Point-to-Origin Task? Poster, Psychonomics 2014, LA, USA.

(c) *Other*

3. **BOOKS**

(a) *Authored*

(b) *Edited*

(c) *Chapters*

4. **PATENTS**

5. **SPECIAL COPYRIGHTS**

6. **ARTISTIC WORKS, PERFORMANCES, DESIGNS**

7. **OTHER WORKS**

8. **WORK SUBMITTED (including publisher and date of submission)**

9. **WORK IN PROGRESS (including degree of completion)**

Kitson, A., Stepanova, E. R., Aguilar, I. A., Wrainwright, N., & Riecke, B. E. (2019). Transcending the Lab: Supporting Self-Transcendent Experiences in Virtual Reality through Rituals and Gradual Transitions. (Full paper complete) will submit to the *6th ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play, CHI PLAY 2019*. ACM: 1-10.