RAY LC.

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EDUCATION.

2017-2020 Parsons School of Design.

MFA in Design and Technology [thesis], New York, NY 10011.

School of Art, Media, and Technology, advised by Jess Irish and Sven Travis.

2006-2012 University of California, Los Angeles.

PHD in <u>Neuroscience</u> [thesis], Los Angeles, CA 90095. Department of <u>Neurobiology</u>, advised by Dr. Tom Otis.

2000-2003 University of California, Berkeley.

BS in Electrical Engineering and Computer Sciences [thesis], Berkeley, CA 94720.

Departments of **EECS** and **Mathematics**, advised by Dr. James Landay.

CURATED EXHIBITIONS.

2022 Whopper @ TalkToMe Festival Ukraine, "games and conflict", exhibition, online.

2022 Drizzle @ University of Graz Wegener Center for Climate Change, exhibition.

2022 Drizzle and Chikyuchi (mobile vers) @ Data Art for Climate Action Gallery, exhibition.

2021 Make4Green @ JCCAC Floating Projects, "participatory sustainability art", exhibition.

2021 Prismatic @ CityU SCM MFA showcase, JCCAC, "on bodily interactions", exhibition.

2021 Insphere @ Sketch 2, Floating Projects Hong Kong, ML drawings, exhibition.

2021 Presentation of Self in Machine Life @ NYSCI @ Brick Theatre @ CityU, performance.

2021 Down to the Holograph @ Ars Electronica Artificial Intentionalities, exhibition, online.

2021 Home Alone @ Ars Electronica .art Concrete House Global Gallery, exhibition.

2021 I'm Always Here @ Osage Gallery Hong Kong, VR and machine learning, exhibition.

2021 I Love You Project @ SDGs X ARTs, Museum of Tokyo University of the Arts, exhibition.

2021 Chikyuchi @ Art Machines 2 Constructing Contexts exhibit, Hong Kong, exhibition.

2021 Mimicry of Hollows @ The 5th Floor Gallery, Tokyo Japan, exhibition.

2021 I Was of Three Minds @ Floating Projects, JCCAC, machine learning art, exhibition.

2021 D-Normal V-Essay @ Floating Projects, choreographing a VR dance, exhibition.

2020 Navigating in Place @ Generative Art Conference, place and grid cells, exhibition.

2020 NeurIPS, "Imitations of Immortality," GPT-2-human poetic variations, exhibition.

2020 Decertainfy @ Burning Man BRCVR and Ars Electronica .art Gallery, film.

2020 Just a Stage @ Elektron Tallinn residency "dis/placed," performance.

2020 Skin of Our Sheath @ New Museum EdgeCut "VR in situ dance," performance.

2020 NYC Short Documentary Film Festival, "Shamima" official selection, film.

2020 Navigating in Place @ Kone Foundation Saari Residency, exhibition, online.

- 2020 Network Intelligence @ CICA Museum 6th International New Media Art, exhibition.
- 2019 A Case for Play @ NeON Digital Arts fest, "Empowering Rohingya Refugees", exhibition.
- 2019 Technology and Social Good @ Columbia University curator and artist, exhibition.
- 2019 Expressive Motions @ IEEE ICRA-X Robotic Art, "Secret Lives of Machines", exhibition.
- 2019 An Immersive Rohingya Experience @ Ars Electronica Linz, exhibition.
- 2019 Rohingya Documentaries and VR Experience @ THP ArtLab Lahore, exhibition.
- 2019 Machine Gaze @ New York Hall of Science, "a curious surveillance camera", exhibition.
- 2019 Creative Flow @ DeConstrukt NYC, "generative dance with wearable beats", exhibition.
- 2018 Flora @ Java Studios NYC, "evolution of digital TVs in physical interaction", exhibition.
- 2018 Artistic Intelligence @ ISCMA Art Machines, "visually speaking sculpture", exhibition.
- 2018 G[AR]MENT @ NYC Media Lab, "augmented reality fashion show", exhibition.
- 2018 Secret Lives of Machines @ Parsons Major Major, "emotional devices," exhibition.
- 2018 Tektiles Resident @ Brooklyn Fashion Design Accelerator, exhibition.
- 2017 Gesturize @ Loomia Creator Lab, "fashion tech design for embodied action", exhibition.
- 2017 Process Space LMCC Governor's Island, gesture recognition dance improv, exhibition.
- 2015 3rd Skin @ Tokyo Golden Egg, "fashion tech painting", performance.
- 2015 Artificial Gaze @ Tokyo Bunka Gakuen, "computer vision inspired fashion", exhibition.
- 2014 ダンス目なし@ 12th 1 Wall Gallery show, "movement with seeing" photos, exhibition.
- 2014 Kapayaan @ Bohol Center Philippines, "Philippines before Haiyan", exhibition.
- 2014 A Fable @ Gallery Hana Shimokitazawa, "machine-made stories", exhibition.
- 2013 Implicit Mirror @ BankArt NYK, TPAM Yokohama Japan residency, exhibition.
- 2013 Species Descent @ Kiyoshi Saito Museum group residency, exhibition.

SELECTED ENGAGEMENTS.

- 2022 Collaborative Writing for Purposed Design @ Goethe Institute, workshop.
- 2022 Technology, Identity, and Power @ M+, "on neuro psych art game design", panel.
- 2022 ACM IUI Intelligent User Interfaces HAI-GEN workshop on human-AI, workshop, paper.
- 2022 Game Kitchen @ Goethe Institute @ Current Plans, "Games for Social Good", talk.
- 2021 Dance Fusion @ Hong Kong Art Center, Art Factory performance fellow, course.
- 2021 Climate Fiction for Social Purpose @ ICIDS Interactive Storytelling, workshop.
- 2021 IASDR Congress of Design Research "Emotional Capacities in Design" panel, chair.
- 2021 HKUST Computational Media Arts Seminar "HCI in artistic interventions", talk.
- 2021 Cranbrook Academy artist's workshop "Creative explorations in machine learning", talk.
- 2021 Tsinghua-Politecnico Milano Future Fashion, "Second Organ" Aria Bao, contest winner.
- 2021 ACM UIST, "LineUp: Projection-based AR language learning" Hongni Ye, contest winner.
- 2021 Remote Bodies @ Digitally Engaged Learning DEL conference HKBU AVA, paper.
- 2021 Posthuman Art @ Ars Electronica Hong Kong Garden, "Mind the Machine", talk.
- 2021 ACM IDC Interaction Design and Children, "KOMI: smart toy for feline pets," talk.
- 2021 Clothes for Robots @ ACM IEEE HRI Human Robot Interaction, workshop.
- 2020 ACM FDG, "Echo Hunt: A case study in player interaction in VR vs 2D screen," demo.
- 2020 Alien Life @ Angewandte Festival "Uncertainty in quantum and human scale," talk.
- 2020 Just a Stage @ Elektron Tallinn mentor "Fruitful Misunderstandings," talk.
- 2020 CHI Play, "Effects of NPC player type on moral responses in interrogation." poster.

- 2019 NeON Digital Arts Festival REACT, "360 Filmmaking for Empowerment," workshop.
- 2019 Ars Electronica Future Innovators Summit and Exhibit, "Future Humanity," talk.
- 2019 Immersive Storytelling of Rohingya Refugee Experience @ THP ArtLab Lahore, talk.
- 2019 Creative Tech Week Conference NYC, "Secret Lives of Machines," talk.
- 2019 Critical Creative Practice, CAMD Symposium at Northeastern University Art Media, talk.
- 2019 International Symposium on Computation Media Art, City Univ of Hong Kong, talk.
- 2018 VRbal @ Microsoft Imagine Cup finals, "ML-based VR training for speech", talk.
- 2018 Serendicity @ Verizon Al Design Jam Parsons School of Design, talk.
- 2016 Falling Walls Tokyo invited by Euraxess Japan, "Extinguishing Fear", talk.
- 2016 7th International Symposium on Optogenetics, Tokyo Medical Dental University, poster.
- 2015 45th Society for Neuroscience meeting, Chicago IL, poster.
- 2015 38th Japan Neuroscience Society annual meeting, Kobe Japan, poster.
- 2015 Doshisha University Faculty of Medical Sciences, invite Hiroaki Taniguchi, Kyoto, talk.
- 2014 Juntendo University Medical School M2/M3 series, invite Dr. Junichi Azuma, Tokyo, talk.
- 2013 RIKEN BSI Annual Retreat, Karuizawa, Japan, poster.
- 2012 Harvard Genetics Seminar talk and visit, invite Dr. Jesse Gray, Boston, MA, talk.
- 2012 UCLA Undergraduate Research Fellowship Program colloquium, Los Angeles CA, poster.
- 2011 2nd Cold Spring Harbor Computational Cognitive Neurobiology, China, workshop.
- 2011 UCLA Interdepartmental Neuroscience Program retreat, Los Angeles CA, talk.
- 2011 Gordon Conference on Cerebellum in Health and Disease, New London NH, poster.
- 2010 Cold Spring Harbor computational neuro summer workshop, Suzhou China, talk.
- 2010 13th Annual UCLA Science Poster Day, Los Angeles, CA, poster.
- 2010 7th Forum of European Neuroscience, Amsterdam Netherlands, poster.
- 2010 7th Okinawa Computational Neuroscience Course, Okinawa Japan, talk.
- 2010 17th Cognitive Neuroscience meeting, Montreal Canada, article.
- 2009 RIKEN Brain Science Institute Summer Program, Tokyo Japan, poster.
- 2009 4th UCLA Dynamics of Neural Microcircuits Symposium, Los Angeles CA, poster.
- 2008 UCLA Neuroscience Graduate Forum, Los Angeles CA, talk.
- 2008 12th UCLA Brain Research Institute Neuroscience poster, Los Angeles, CA, poster.
- 2008 38th Society for Neuroscience meeting, Washington DC, poster.
- 2008 25th Microelectrode Techniques for Cell Physiology, Plymouth UK, <u>workshop</u>.
- 2006 Berkeley Scientific "Anticipatory postural adjustment in unloading", Berkeley CA, paper.
- 2006 Berkeley Scientific "Protein sequence alignment folding simulation", Berkeley CA, paper.
- 2005 UC Berkeley Psychology undergraduate research fair, Berkeley CA, poster.
- 2005 Palo Alto Research Center undergraduate colloquium, Palo Alto CA, poster.

REFEREED PUBLICATIONS.

- 2022 LC R, and Monir F. (2022) "A Case for Play: Immersive Storytelling of Rohingya Refugee Experience." In Alsina P, Mor E (eds). <u>Proceedings of the 27th International Symposium on Electronic Art (ISEA'22)</u>. Barcelona, Spain: 10-16 June. <u>In Press</u>.
- 2022 Xu HS, **LC R**. (2022) "Cohesiveness of Robots in Groups Affects the Perception of Social Rejection by Human Observers." <u>Proceedings of the 2022 ACM IEEE International Conference on Human-Robot Interaction (HRI'22)</u>. IEEE Press, 1100-1104. <u>Online</u>.

- 2022 **LC R**, Ruijters V. (2022) "CHIKYUCHI: In-person/remote game exhibition for climate change influence." *Proceedings of the 16th International Conference on Tangible, Embedded, and Embodied Interaction (TEI'22)*. 81, 1-4. February 13-16, Daejeon, Republic of Korea. ACM, New York, USA. Online.
- 2021 Erol Z, Zhang ZY, Uzgunay E, **LC R**. (2021) "SOUND OF(F): Contextual storytelling using machine learning representations of sound and music." In Wölfel M, Bernhardt J (eds), Interactivity and Game Creation. ArtsIT 2021. Lecture Notes of the Institute for Computer Sciences, Social Informatics, Telecommunications Engineering. Springer, Cham. Online.
- 2021 Song ZJ, Sun Y, Ruijters V, LC R. (2021) "Climate Influence: Implicit game-based interactive storytelling for climate action purpose." In Mateas M, Lamas D (eds). Interactive Storytelling ICIDS 2021: Lecture Notes in Computer Science. Tallinn, Estonia: 7-10 December. Springer, Cham. Online.
- 2021 Song ZJ, Sun Y, **LC R**. (2021) "Drizzle: A comic for covert climate action influence." In Lee KP, Lou YQ (eds). *IASDR 2021: Proceedings of International Association of Societies of Design Research*. Hong Kong: 6-8 December. Springer, Cham. Online.
- 2021 Liu HJ, LC R, Cormio C, Yu MX, Kim M. (2021) "Designing for Distance Nursing: Reconnecting nursing students with senior home residents during COVID-19." <u>IASDR</u> <u>2021: Proceedings of International Association of Societies of Design Research</u>. Hong Kong: 6-8 December. Springer, Cham. <u>Online</u>.
- 2021 **LC R**. (2021) "Imitations of Immortality: Learning from Human Imitative Examples in Transformer Poetry Generation." <u>ARTECH 2021: Proceedings of the 10th International Conference on Digital and Interactive Arts</u>. 8: 1-9. Aveiro, Portugal: ACM, NYC. <u>Online</u>.
- 2021 LC R, Benayoun M, Lindborg PM, Xu HS, Chan HC, Yip KM, Zhang TY. (2021) "Power Chess: Robot-to-Robot Nonverbal Emotional Expression Applied to Competitive Play." ARTECH 2021: Proceedings of the 10th International Conference on Digital and Interactive Arts. 2:1-11. Alveiro, Portugal: 13-15 October. ACM, NYC. Online.
- 2021 LC R. *Imitations of Immortality*, edited by Zijing Song, 1st ed. Hong Kong: <u>Floating Projects Press</u> 2021, 60 pgs, ISBN 978-988-75664-1-0.
- 2021 Song ZJ, Sun Y, LC R. *Drizzle*, 1st ed. Hong Kong: <u>Floating Projects Press</u> 2021, 18 pgs, ISBN 978-988-75664-2-7.
- 2021 W Honorable Mention Award top 5%
 Friedman N, Love K, LC R, Sabin JE, Hoffman G, Ju W. (2021) "What Robots Need From Clothing." In <u>ACM Designing Interactive Systems Conference (DIS'21)</u>. June 28-July 2, ACM, New York, USA, 1345-1355. Online.
- 2021 **LC R**, and Mizuno D. (2021) "Designing for Narrative Influence: Speculative Storytelling for Social Good in Times of Public Health and Climate Crises." In <u>CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI'21)</u>. May 8-13, Yokohama, Japan. ACM, New York, USA, Article 29, 1-13. <u>Online</u>.
- Zamfirescu-Pereira JD, Sirkin D, Goedicke D, LC R, Friedman N, Mandel I, Martelaro N, Ju W. (2021) "Fake It to Make It: Exploratory Prototyping in HRI." <u>Companion Proceedings of the 2021 ACM IEEE International Conference on Human-Robot Interaction (HRI'21)</u>.

- March 8-11, Boulder, CO, USA. ACM, New York, USA. Online.
- Friedman N, Love K, Bremers A, Parry AJ, LC R, Amgalan B, Liu J, Ju W. (2021) "Designing Functional Clothing for Human-robot Interaction." <u>Companion Proceedings of the 2021 ACM IEEE International Conference on Human-Robot Interaction (HRI'21)</u>. March 8-11, Boulder, CO, USA. ACM, New York, USA. <u>Online</u>.
- **LC R.** (2021) "Now You See Me, Now You Don't: Revealing personality and narratives from playful interactions with machines being watched." <u>Proceedings of the 15th International Conference on Tangible, Embedded, and Embodied Interaction (TEI'21)</u>. 43, 1-7. February 14-17, Salzburg, Austria. ACM, New York, USA. <u>Online</u>.
- 2020 Liu Y, Si Y, **LC R**, Harteveld C. (2020) "cARd: Mixed Reality Approach for a Total Immersive Analog Game Experience." In: Arai K., Kapoor S., Bhatia R. (eds) <u>Proceedings of the Future Technologies Conference (FTC)</u>, Vol. 2. Advances in Intelligent Systems and Computing, vol 1289. Springer, Cham. doi: 10.1007/978-3-030-63089-8_58. <u>Online</u>.
- **LC R**, Alcibar A, Baez A, and Torossian S. (2020) "Machine Gaze: Self-Identification Through Play With a computer Vision-Based Projection and Robotics System." <u>Frontiers in Robotics and Al: Human-Robot Interaction</u>. 7:580835 (2020). <u>Online</u>.
- **LC R**, Zhou S, and Lin L. "Remapping and replay in generative spaces." In: Soddu, C. and Colabella, E. (eds) *GA '20: Proceedings of the 23rd International Conference on Generative Art*. December 15-17, Milan, Italy. 253-268. Domus Argenia, Rome. Online.
- **LC R**, Friedman N, Zamfirescu-Pereira JD, and Ju W. (2020) "Agents of Spatial Influence: Designing incidental interactions with arrangements and gestures." <u>HRI '20 Workshop:</u>

 <u>The Forgotten HRI: Incidental encounters with robots in public spaces. In 2020 ACM IEEE International Conference on Human-Robot Interaction</u>. Cambridge UK. Online.
- 2020 Coutu Y, Chang Y, Zhang W, Sengun S, and **LC R.** (2020) "Immersiveness and usability in VR: a comparative study of Monstrum and Fruit Ninja." In Bostan: <u>Game User Experience and Player-Centered Design</u>. International Series on Computer Entertainment and Media Technology: Springer, 437-448. doi: 10.1007/978-3-030-37643-7_20. <u>Online</u>.
- **LC R** and Fukuoka Y. (2019) "Machine Learning and Therapeutic Strategies in VR."

 <u>ARTECH 2019: Proceedings of the 9th International Conference on Digital and Interactive</u>

 <u>Arts.</u> Braga, Portugal: 42, 1-6. ACM, NY. doi:10.1145/3359852.3359908. Online.
- **LC R.** (2019) "Secret Lives of Machines." <u>Proceedings of IEEE ICRA-X Robotic Art Program</u>. 23-25: Elektra, Montreal, Canada. <u>Online</u>.
- **LC R.** "Artistic Intelligence." <u>Proceedings of International Symposium on Computational Media Art.</u> 12-19 (2018): City University of Hong Kong School of Creative Media. <u>Online</u>.
- **LC R**, Tranquilli M, Wardrop A. "Midi-Rox: A reversible wrap dress to empower one-handed dressing." *Annual Proceedings of the American Occupational Therapy Association*. 120 (2018): New Orleans, US. Online.
- **Luo R***, Uematsu A*, Weitemier A, Aquili L, Koivumaa J, McHugh TJ, and Johansen JP. "A dopaminergic switch for fear to safety transitions." *Nature Communications*, 16 (30087B) (2018). (* equal contribution) Online.
- Dellal SS*, Luo R*, and Otis TS. "GABA_A receptors increase excitability and conduction velocity in cerebellar parallel fiber axons." <u>J. Neurophysiology</u>, 107(11):2958-2970 (2012). (* equal contribution) Online.
- **Luo R.** Fast Times: Excitatory effects of GABA in axonal compartments in the cerebellar molecular layer. UCLA Interdepartmental Neuroscience Program: (2012). Online.