Jesus G. Cruz-Garza

Mobile Brain-Body Imaging Scientist | Postdoctoral Fellow

Houston, TX | jgcruzgarza@gmail.com | https://jgcruzgarza.com/ | Google Scholar

My expertise is in mobile brain-body imaging (MoBI), through mobile EEG. My research is at the intersection of neuroscience, machine learning, engineering, the study of the human experiences in mobile settings, including virtual reality. I am also experienced with neurosurgery interventions and in vivo convection-enhanced drug delivery mechanisms for the brain.

Research Focus

Mobile Brain-Body Imaging | Mobile EEG | Brain-Computer Interfaces | Neuroaesthetics | Machine Learning | Neuro-engineering

Skills

Mobile Brain-Body Imaging (MoBI) | EEG | Matlab | EEGLAB | Lab Streaming Layer | Neural Signal Processing | Machine Learning | Deep Learning | Functional Connectivity | Scientific Outreach | Editor | English (full proficiency), Spanish (native)

Education

2014 – 2019 Doctor of Philosophy, Electrical and Computer Engineering
University of Houston, Houston, TX
Dissertation: Neural Characterization of the Improvisational Creative Process

2009 – 2014 Bachelor of Science, Engineering Physics
Tecnológico de Monterrey, Monterrey, México
Honors

Professional Experience

Research Experience

Oct 2021 - *Present* Postdoctoral Fellow
Neural Electrokinetics Laboratory, Department of Neurosurgery, Houston Methodist Research Institute, Houston TX.
PI: Amir Faraji

- Brain-computer interfaces, nerve-computer interfaces in extended reality (XR). Both invasive and non-invasive.
- Electro-kinetic drug delivery into and from brain tissue.

Jan 2020 - Sept 2021 Postdoctoral Associate
Design and Augmented Intelligence Laboratory, Cornell University, Ithaca NY.
PI: Saleh Kalantari

- Neural markers of landmark recognition in VR.
  Salient features of building landmarks in VR are associated to theta-band modulation in parietal scalp regions.
- Classroom design effect on cognitive performance and neural features.
  Neural features are affected by window placement and room dimensions, consistently across participants.
- Navigation-related brain dynamics in a VR pre-occupancy healthcare setting architectural design.
  Color to highlight architectural features and enhanced signage yield more efficient navigation strategies, and beta-band desynchronization in occipital regions.

2017 – 2019 Graduate Research Fellow: Doctoral Fellowship in High Performance Computing
Center for Advanced Computing and Data Science, University of Houston, Houston, TX
PI: Jose L. Contreras-Vidal

- Leading role in multidisciplinary research in neuroaesthetics with mobile brain-body imaging.
  Co-editor in the book "Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity". *Springer Series on Bio- and Neurosystems*. Springer, 2019.
- Developed classical and deep learning techniques for neural feature extraction and visualization in natural settings.
  We can automatically extract EEG features associated to stages of the human creative process through deep learning that match those engineered by experts.

2014 – 2017 Graduate Research Fellow: Doctoral Fellowship in Translational Research
Houston Methodist Research Institute-University of Houston, Houston, TX
PI: Jose L. Contreras-Vidal

- Assaying neural individuality and variation in freely behaving people based on qEEG.
  First mobile EEG data collection in hundreds of participants in museum settings.
- Functions and Development of Mirror Neuron System.
  Neural patterns associated to imitation behaviors in human infants (6-24 mo). Eunice Kennedy Shriver National Institutes of Child Health & Human Development, Program Grant P01 HD064653-01; 2014-2015.

2012 – 2014 Lead Research Assistant
Tecnológico de Monterrey, Monterrey, México

- Promoted from Research Assistant within a year's time.
- Responsible for starting and developing the BCI research area at Tecnológico de Monterrey.
- Experimental research on intra-cavity generation of a superposition of Bessel-Gauss beams.

Teaching Experience

2022 Postdoctoral research mentor, Summar Undergraduate Research Internship, Neural Electrokinetics laboratory.

2020 – 2021 Postdoctoral research mentor, Design and Augmented Intelligence Laboratory, Cornell University.

2021 – 2022 Invited research mentor, Laboratory for Noninvasive Brain-Machine Interface Systems, University of Houston.

2019 – 2021 Invited lectures, Department of Design and Environmental Analysis, Cornell University.
Postdoctoral research mentor, Design and Augmented Intelligence Laboratory, Cornell University.

2018 – 2021 Graduate research mentor, NSF Research Experience for Undergraduates, University of Houston BRAIN Center.

2014 – 2018 Graduate research mentor, Laboratory for Noninvasive Brain-Machine Interface Systems, University of Houston.

2015 – 2016 Teaching Fellow for first year Exploratory Studies students at University of Houston, Houston TX.

2012 – 2013 Physics Laboratory Instructor. – Tecnológico de Monterrey. México.
Prepared and carried out laboratory practice to second-year engineering students.

2009 – 2013 Teaching Assistant. – Tecnológico de Monterrey, México.
Assisted physics professors during in-class assignments.

Industry Experience

2013 Product Innovation Intern. -PepsiCo, NY.
Research and development of mechanical product prototypes. Advisor: Richard Velazquez.

2012 Research Intern. –Corning Cable Systems, Mexico.
Characterization of optical fiber mass fusion splicing, and an innovative geometrical approach to improve insertion loss measurement. Advisors: Yah Hua, Guillermo Cardenas, Constantine Saravanos.

Certifications

LinkedIn Machine Learning Certificate
LinkedIn MATLAB Certificate
IEEE MOVE Community Disaster Relief Training
CITI Human Subjects Certification
Jóvenes Emprendedores, Secretaría de Educación Pública

Membership & Associations

Co-founder
2021- *Present* Secretary. Arab Heritage ERG. Houston Methodist Research Institute.

Founder
2018 – 2019 BRAIN Center Student Group, at the University of Houston.

Executive Board
2018 – 2019 Co-President. Graduate and Professional Student Association (GPSA), at University of Houston.
2017 – 2018 Treasurer. Graduate and Professional Student Association (GPSA), at University of Houston.
2016 – 2017 Graduate representative. IEEE Student Branch at the University of Houston.

Member:
2015 – *Present* IEEE, IEEE-EMBS, SFN, SHPE, BCI Society.

Awards

2019 University of Houston
Outstanding Educational Program (GPSA)
Outstanding Program Award (GPSA)
Nomination. The Legacy Award

2018, 2022 National Science Foundation
NSF ACACEME Fellowship. Future Faculty training and mentoring program.
University of Houston
Nomination. Outstanding Student Organization (GPSA). University of Houston.
Nomination. Outstanding New Student Organization (for GPSA). University of Houston.

2017 University of Houston
Seed Funding for Advanced Computing (SeFAC). Fellow Center for Advanced Computing and Data Science (CACDS) in High Performance Computing (HPC).
Outstanding Graduate and Professional Student Leader. University of Houston. Houston, TX.
IEEE
IEEE Region 5 Outstanding Student Branch. Denver, Colorado.

2016 University of Houston
Nomination. Outstanding Graduate and Professional Student Leader.
IEEE
Travel Grant IEEE Future Leaders Forum. New Orleans.
Allegiance for the Arts in Research Universities
Travel Grant A2RU. Emerging Creatives Summit, University of Michigan. Ann Arbor, MI.

2015 University of Houston
University of Houston – Methodist Hospital Research Institute Graduate Fellowship in Translational Research.
Future Faculty Fellowship at University of Houston.

2014 University of Houston
Tuition Fellowship for the PhD program at University of Houston.
Nominated for the Graduate Research and Scholarship Projects 'Best Scholarly Publication by a Graduate Student Award' at University of Houston. –Awarded for outstanding high-quality papers by graduate students.
Tecnológico de Monterrey

Distinguished Student Award for Research and Development. Awarded for outstanding undergraduate research activity.

2013 Tecnológico de Monterrey

Student Development Diploma. Awarded for outstanding performance extracurricular activities; for participation in dance exhibitions.

Distinguished Student Award. Awarded to outstanding academic and extracurricular undergraduate performance.

2011 Impulso Mexico Joven 2011, by Mexican Institute of Youth (IMJUVE). As a founding member of Jaquemat. This national award was bestowed on our project for its outstanding social impact.

2009 Tecnológico de Monterrey

Academic Excellence Scholarship.

CENEVAL

CENEVAL honoree as top 0.05% top scorer in the national standardized test for high school students.

Professional Service

Publons profile: https://publons.com/researcher/1345990/jesus-gabriel-cruz-garza/peer-review/

2021-*Present* Reviewer, Scientific Reports, Springer Nature.

2020-*Present* Review Board Member, Sensors, MDPI.
Reviewer, Sensors, MDPI.
Reviewer, Applied Sciences, MDPI.
Reviewer, Brain Sciences, MDPI.
Reviewer, Electronics, MDPI.
Reviewer, Mobile Brain-Body Imaging. Conference.
Reviewer, Groundworks. Arts-inclusive research platform.
Reviewer, Alliance for the Arts and Research Universities.

2019-*Present* Reviewer, Frontiers in Human Neuroscience.
Reviewer, Frontiers in Neuroscience.

2020 Workshop organizational committee and reviewer. International Conference on Pattern Recognition (ICPR)-International Workshop on Artificial Intelligence for Healthcare Applications (AIHA).

2017-2019 Conference organizational committee and reviewer. Mobile Brain-body imaging and the neuroscience of art, innovation and creativity.

2019 University of Houston

Founding President, BRAIN Student Group

Logistics Coordinator, IEEE Engineering in Medicine and Biology Society Houston Chapter.

2017-2018 University of Houston

Treasurer, Graduate and Professional Student Association (GPSA)

Search Committee for Vice Provost and Dean of the Graduate School

Co-President, Graduate and Professional Student Association (GPSA)

2017-2019 Vice-President, IEEE Engineering in Medicine and Biology Society, Houston Chapter.

2016-2017 IEEE Graduate Representative Chair, University of Houston.
IEEExtreme Logistics Coordinator.

Graduate and Professional Student Association (GPSA), University of Houston.

2011-2012 Jaquemat.

Founding member, Instructor, Outreach coordinator. Tecnológico de Monterrey, Mexico.
Jaquemat is a nationally recognized social development project. The main purpose of the project was to train middle school students for the national Math Olympiads.

Publications

Journal Articles

1. Cruz-Garza, Jesus G., Michael Darfler, James D. Rounds, Elita Gao, and Saleh Kalantari. "EEG-based investigation of the impact of room size and window placement on cognitive performance." Journal of Building Engineering 53 (2022): 104540. https://doi.org/10.1016/j.jobe.2022.104540

2. Darfler, Michael, **Jesus G. Cruz-Garza**, and Saleh Kalantari. "An EEG-Based Investigation of the Effect of Perceived Observation on Visual Memory in Virtual Environments" Brain Sciences 12, no. 2: 269 (2022). https://doi.org/10.3390/brainsci12020269

3. Kalantari, Saleh, Vidushi Tripathi, Julia Kan, James D. Rounds, Armin Mostafavi, Robin Snell, and **Jesus G. Cruz-Garza**. "Evaluating the impacts of color, graphics, and architectural features on wayfinding in healthcare settings using EEG data and virtual response testing." Journal of Environmental Psychology 79 (2022): 101744. https://doi.org/10.1016/j.jenvp.2021.101744

4. Kalantari S, Rounds JD, Kan J, Tripathi V, **Cruz-Garza JG**. Comparing physiological responses during cognitive tests in virtual environments vs. in identical real-world environments. Sci Rep. 2021 May 13;11(1):10227. doi: 10.1038/s41598-021-89297-y. PMID: 33986337; PMCID: PMC8119471. https://doi.org/10.1038/s41598-021-89297-y

5. Paek, Andrew Y., Justin A. Brantley, Akshay S. Ravindran, Kevin Nathan, Yongtian He, David Eguren, **Jesus G. Cruz-Garza** et al. "A Roadmap towards Standards for Neurally Controlled End Effectors." IEEE open journal of engineering in medicine and biology 2 (2021). https:/doi.org/10.1109/OJEMB.2021.3059161

6. Rounds, James D., **Jesus Gabriel Cruz-Garza**, and Saleh Kalantari. "Using Posterior EEG Theta Band to Assess the Effects of Architectural Designs on Landmark Recognition in an Urban Setting." Frontiers in Human Neuroscience 14 (2020): 537. https://doi.org/10.3389/fnhum.2020.584385

7. **Cruz-Garza, Jesus G.**, Akshay Sujatha Ravindran, Anastasiya E. Kopteva, Cristina Rivera Garza, and Jose L. Contreras-Vidal. "Characterization of the stages of creative writing with mobile EEG using Generalized Partial Directed Coherence." Frontiers in human neuroscience (2020): 533. https://doi.org/10.3389/fnhum.2020.577651

8. Ravindran, Akshay Sujatha, Aryan Mobiny, **Jesus G Cruz-Garza**, Andrew Paek, Anastasiya Kopteva, and Jose Luis Contreras-Vidal. "Assaying neural activity of children during video game play in public spaces: A Deep Learning Approach." Journal of neural engineering (2019). https://doi.org/10.1088/1741-2552/ab1876

9. **Cruz-Garza, Jesus G.**, Justin A. Brantley, Sho Nakagome, Kimberly Kontson, Murad Megjhani, Dario Robleto, and Jose Luis Contreras-Vidal. "Deployment of Mobile EEG Technology in an Art Museum Setting: Evaluation of Signal Quality and Usability." Frontiers in human neuroscience 11 (2017): 527. https://doi.org/10.3389/fnhum.2017.00527

10. Contreras-Vidal, Jose L., Nikunj A Bhagat, Justin Brantley, **Jesus G. Cruz-Garza**, Yongtian He, Quinn Manley, Sho Nakagome, et al. 2016. "Powered Exoskeletons for Bipedal Locomotion after Spinal Cord Injury." Journal of Neural Engineering 13 (3): 031001. https://doi.org/10.1088/1741-2560/13/3/031001/

11. Kontson, Kimberly L., Murad Megjhani, Justin A. Brantley, **Jesus G. Cruz-Garza,** Sho Nakagome, Dario Robleto, Michelle White, Eugene Civillico, and Jose L. Contreras-Vidal. 2015. "Your Brain on Art: Emergent Cortical Dynamics During Aesthetic Experiences." Frontiers in Human Neuroscience 9 (November): 626. https://doi.org/10.3389/fnhum.2015.00626

12. **Cruz-Garza, Jesus G.,** Zachery R. Hernandez, Teresa Tse, Eunice Caducoy, Berdakh Abibullaev, and Jose L. Contreras-Vidal. 2015. "A Novel Experimental and Analytical Approach to the Multimodal Neural Decoding of Intent During Social

Interaction in Freely-Behaving Human Infants." Journal of Visualized Experiments: JoVE, no. 104 (October). https://doi.org/10.3791/53406.

13. **Cruz-Garza, Jesus G.,** Zachery R. Hernandez, Sargoon Nepaul, Karen K. Bradley, and Jose L. Contreras-Vidal. 2014. "Neural Decoding of Expressive Human Movement from Scalp Electroencephalography (EEG)." Frontiers in Human Neuroscience 8 (April): 188. https://doi.org/10.3389/fnhum.2014.00188

14. Zhu, Bingzhao, **Jesus G. Cruz-Garza**, Mahsa Shoaran, and Saleh Kalantari. "Identifying Uncertainty States during Wayfinding in Indoor Environments: An EEG Classification Study." Advanced Engineering Informatics (2021). *In press*. https://doi.org/10.1101/2021.12.14.453704

Journal Articles in peer review and in preparation

1. **Jesus G. Cruz-Garza**, Khaled M. Taghlabi, Shruti Gupta, Arvind Pandey, Allison M. Frazier, Shawn Brisbay, John D. Patterson, Ernesto A. Salegio, Christopher J. Kantorak, Christof Karmonik, Philip J. Horner, Robert C. Rostomily, Amir H. Faraji. "Magnetic Resonance-Guided Stereotaxy for Infusions to the Pig Brain." Journal of Visualized Experiments. 2022. *In peer review.*

2. Jaime R. Guerrero, Khaled Taghlabi, **Jesus G. Cruz-Garza**, Saad Javeed, Christopher Dibble, Wilson Z. Ray, Amir H. Faraji. "Incorporating Intraoperative Mechanomyography to Peripheral Nerve Decompression Surgery." Operative Neurosurgery. *2022. In peer review.*

3. Takashi Hirase, Khaled Taghlabi, **Jesus G Cruz Garza**, Amir H Faraji, Comron Saifi. "Incidence of Postoperative VTE Complications Among Spine Procedures in Patients Treated for Oncologic Spinal Pathology." 2022. *In preparation.*

4. Khaled M. Taghlabi, **Jesus G. Cruz-Garza**, Amir H. Faraji. Functional Outcomes of Peripheral Nerve Interfaces: A Literature Review. 2022. *In preparation.*

5. Mauricio Ramirez-Moreno, **Cruz-Garza, J.G**., Akanksha Acharya, Girija Chatufale, Jose L. Contreras-Vidal. "Brain-to-brain communication during musical improvisation". 2022. *In peer review*.

6. **Jesus G. Cruz-Garza**, Girija Chatufale, Dario Robleto, Jose L. Contreras-Vidal. "Neural dynamics associated to the human creative process in the visual arts through mobile Brain-Body Imaging". 2022. *In preparation*.

7. **Jesus G. Cruz-Garza**, Majo Delgadillo, Cristina Rivera Garza, Jose L. Contreras-Vidal. "Embodied writing: Understanding neural dynamics during creative writing". 2022. *In preparation.*

Conference Articles

1. Yang, Qi, **Jesus G. Cruz-Garza**, Saleh Kalantari. "MindSculpt: Using Brain-Computer Interface to Enable Designers to Create Diverse Geometries by Thinking". ACADIA 2021 Conference, Realignments: Toward Critical Computation. Publication date: November 03, 2021. https://2021.acadia.org/gallery/#

2. Yang, Qi, **Jesus G. Cruz-Garza**, Saleh Kalantari. "MindOpen-Prototyping Real-time BCI for Designers in Virtual Reality based on Self-chosen Motor Imagery". 8th International BCI Meeting, 109: 2-I-43, pp 109. Publication date: June 7, 2021. https://bcisociety.org/wp-content/uploads/2021/05/vBCI-Abstract-Book-.pdf

3. **Cruz-Garza, Jesus G.,** Akshay S. Ravindran, Cristina Rivera Garza, Jose L. Contreras-Vidal. "Characterizing the stages of creative writing from frontal and temporal mobile EEG data using Partial Directed Coherence". International Graphonomics Conference (Your Brain on Art): Graphonomics and Your Brain on Art, Innovation, and Creativity. International Graphonomics Society. Cancun, Mexico. June 10, 2019.

4. Saleh Kalantari, Jose L. Contreras-Vidal, Joshua Stanton Smith, **Jesus G. Cruz-Garza**, Pamela Banner. Evaluating Educational Settings through Biometric Data and Virtual Response Testing. ACADIA, 2018. https://par.nsf.gov/servlets/purl/10090190

5. Contreras-Vidal, Jose L., **Jesus Cruz-Garza**, and Anastasiya Kopteva. "Towards a whole body brain-machine interface system for decoding expressive movement intent Challenges and Opportunities." In Brain-Computer Interface (BCI), 2017 5th International Winter Conference on, pp. 1-4. IEEE, 2017. https://doi.org/10.1109/IWW-BCI.2017.7858142

6. Hernandez, Zachery R., **Jesus G. Cruz-Garza,** Teresa Tse, and Jose L. Contreras-Vidal. 2014. "Decoding of Intentional Actions from Scalp Electroencephalography (EEG) in Freely-Behaving Infants." Conference Proceedings: 2014 Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Conference 2014: 2115–18. https://doi.org/10.1109/EMBC.2014.6944034

Datasets

1. Mauricio A. Ramírez-Moreno, **Jesus G. Cruz-Garza**, José L. Contreras-Vidal, June 27, 2022, "Mobile EEG recordings of musical (jazz) improvisation", IEEE Dataport, doi: https://dx.doi.org/10.21227/hx73-7159.

2. **Cruz-Garza, Jesus G**., Justin A Brantley, Sho Nakagome, Kim Kontson, Dario Robleto, Jose L. Contreras-Vidal. "Mobile EEG Recordings in an Art Museum Setting." December 2017. https://doi.org/10.21227/H2TM00

3. Akshay Sujatha Ravindran, **Jesus G. Cruz-Garza**, Anastasiya Kopteva, Andrew Paek, Aryan Mobiny, Zachary Hernandez, Jose Luis Contreras-Vidal . "Multi-modal mobile brain-body imaging (MoBI) dataset for assaying neural and head movement responses associated with creative video game play in children ." December 2017. https://doi.org/10.21227/H23W88

Book Chapters

1. Nakagome, Sho, Alexander Craik, Akshay Sujatha Ravindran, Yongtian He, **Jesus G. Cruz-Garza**, and Jose L. Contreras-Vidal. "Deep learning methods for EEG neural classification." In Handbook of Neuroengineering, pp. 1-39. Singapore: Springer Singapore, 2022. ISBN: 978-981-15-2848-4. https://doi.org/10.1007/978-981-15-2848-4_78-1

2. Contreras-Vidal, Jose L., Dario Robleto, and Jesus G. Cruz-Garza. "**Towards a Roadmap for Neuroaesthetics**." In Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity, pp. 215-220. Springer, Cham, 2019. , https://doi.org/10.1007/978-3-030-24326-5_25

3. Contreras-Vidal, Jose L., **Jesus G. Cruz-Garza**, Dario Robleto, José M. Azorín, and Chang S. Nam. "Introduction: The Confluence of Art, Neuroscience, and Creativity Through Mobile Brain–Body Imaging." In Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity, pp. 1-3. Springer, Cham, 2019. https://doi.org/10.1007/978-3-030-24326-5_1

4. **Cruz-Garza, Jesus G**., Anastasiya E. Kopteva, Jo Ann Fleischhauer, and Jose L. Contreras-Vidal. "Into the Mind of an Artist: Convergent Research at the Nexus of Art, Science, and Technology." In Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity, pp. 61-74. Springer, Cham, 2019. https://doi.org/10.1007/978-3-030-24326-5_8

5. **Cruz-Garza, Jesus G.,** Girija Chatufale, Dario Robleto, Jose L. Contreras-Vidal, "Your Brain on Art: A new paradigm to study artistic creativity based on the Exquisite Coprse using Mobile Brain-body Imaging." Brain-Computer Interfaces for Artistic Expression. Publisher: Springer Nature Switzerland AG. Editor: Anton Nijholt. 2019. . https://doi.org/10.1007/978-3-030-14323-7_10

6. Todd, Eric, **Jesus G. Cruz-Garza**, Austin Moreau, James Templeton, Dr. Jose Luis Contreras-Vidal. "Self-Conscience/Physical Memory: An immersive, kinetic art installation driven by real-time and archival EEG signals". Brain-

Computer Interfaces for Artistic Expression. Publisher: Springer Nature Switzerland AG. Editor: Anton Nijholt. 2019. https://doi.org/10.1007/978-3-030-14323-7_11

7. **Cruz-Garza, Jesus G**. "Re-sincronzación entre la lectura, el cuerpo, y el espacio". Chapter 10, pp. 95-110. Bienvenido: You Have Been Transported. Publisher: Canal Press, Houston TX. Programa de Escritura Creativa, PhD in Hispanic Studies, University of Houston. Editors: Cristina Rivera Garza, Majo Delgadillo. December 2018. http://bit.ly/youhavebeentransported

Books

1. Contreras-Vidal, Jose L., Dario Robleto, **Jesus G. Cruz-Garza**, José M. Azorín, and Chang S. Nam (eds). Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity. Springer Series on Bio- and Neurosystems. Springer, 2019. https://doi.org/10.1007/978-3-030-24326-5

2. Mireya Soledad Jamal, Tanner Cormeens, Sababa Chowdhury, Daniellie Itati Silva, Russey Enrique Esponoza López, Laura Gillespie, Laura Lucía Quintón, Elmer Josue Villalobos, **Jesús G. Cruz-Garza**, Mauricio Patron Rivera. "Bienvenido: You Have Been Transported." Publisher: Canal Press, Houston TX. Programa de Escritura Creativa, PhD in Hispanic Studies, University of Houston. Editors: Cristina Rivera Garza, Majo Delgadillo. December 2018. http://bit.ly/youhavebeentransported

Doctoral Dissertation

1. **Cruz Garza, J.G.**, 2019. Neural Characterization of the Improvisational Creative Process. Doctoral dissertation. University of Houston. https://uh-ir.tdl.org/handle/10657/5654

Meeting Abstracts and Presentations

1. Yang, Qi, **Jesus G. Cruz-Garza**, Saleh Kalantari. "Using Brain-Computer Interface to Enable Designers to Create Diverse Geometries by Thinking." ACADIA 2021 Conference, Realignments: Toward Critical Computation. November 3-6, 2021.

2. Yang, Qi, **Jesus G. Cruz-Garza**, Saleh Kalantari. "MindOpen-Prototyping Real-time BCI for Designers in Virtual Reality based on Self-chosen Motor Imagery." 8th International BCI Meeting. June 7-9, 2021.

3. **Cruz-Garza, Jesus**, James Rounds, Joshua Smith, Saleh Kalantari. "Cognitive Performance in Immersive Virtual Environments: Initial Assessment on Behavioral and Physiological Outcomes". http://anfa.ucsd.edu/talks4.html. The Academy of Neuroscience for Architecture: ANFA 2020 Virtual Conference. September 14-25. University of California San Diego, CA.

4. **Cruz-Garza, Jesus**, James Rounds, Joshua Smith, Saleh Kalantari. "Immersive Virtual Environments and Physical Built Environments: Consistent cognitive performance and physiological metrics." MoBI 2020-2021 4th International Mobile Brain/Body Imaging Conference, La Jolla, CA.

5. Rounds, James, **Jesus Cruz-Garza**, Michael Darfler, Saleh Kalantari. "Neural Decoding of the Landmark Recognition Process in Urban Settings". MoBI 2020-2021 4th International Mobile Brain/Body Imaging Conference, La Jolla, CA.

6. Acharya, Akanksha, **Jesus Cruz-Garza**, Mauricio Ramírez-Moreno, Cristina Rivera Garza, Jose Contreras-Vidal. " Inter-Brain Synchrony in a Creative Writing Workshop". MoBI 2020-2021 4th International Mobile Brain/Body Imaging Conference, La Jolla, CA.

7. Abigail Turcheck, **Jesus G. Cruz-Garza**, Dr. Jose Luis Contreras-Vidal. Machine Learning-Based data analysis of a longitudinal EEG study of the creative process. 2020 Emerging Researchers National (ERN) Conference in STEM. February 6-8, 2020. Washington Marriott Wardman Park hotel in Washington, DC. https://emerging-researchers.org/projects/424-3/

8. Alarcon, Christian Bernard, Devon E. Bellman, **Jesus Cruz-Garza**, and Jose L. Contreras Vidal. "Creating an Open-source Dataset for Longitudinal Real-world Contextual Brain Imaging Data." In IEEE Galveston Bay Section Student Poster Session. IEEE GBS, 2019. https://doi.org/10.13140/RG.2.2.32011.64801

9. Jose Contreras-Vidal, **Cruz-Garza Jesus G**, Dario Robleto, Rebecca Valls, Woodrow Witt. "The Museum As a Laboratory: Understanding Brain Responses in Action and in Context Using Mobile Brain-Body Imaging". 2019 41st Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC). Berlin, GE. July 24, 2019.

10. Alarcon, Christian Bernard, Devon E. Bellman, **Jesus Cruz-Garza**, and Jose L. Contreras Vidal. "Developing a Mobile Brain-body Imaging (MoBI) Dataset as a Tool to Visualize Creativity: Feasibility Testing Using Task Classification in the Alpha-band Domain." In 2019 Biomedical Engineering Society Conference. BMES, 2019. https://doi.org/10.13140/RG.2.2.34542.15688

11. Christian Bernard Alarcon, Devon Bellman, **Jesus G. Cruz-Garza**, Jose Contreras-Vidal. Developing a Mobile Brain-body Imaging (MoBI) Dataset as a Tool to Visualize Creativity: Feasibility Testing Using Task Classification in the Alpha-band Domain. Biomedical Engineering Society (BMES) 2019 Annual Meeting. October 16-19 2019, Philadelphia, PA, USA.

12. Anna Linnea Rives, **Jesus G. Cruz-Garza**, Jose L. Contreras-Vidal. Relationship Between External Features and the EEG Signals of an Installation Artist. Research Experience for Undergraduates, University of Houston. National Science Foundation (NSF) REU summer program. July 30, 2019.

13. Abigail Turcheck, **Jesus G. Cruz-Garza**, Jose L. Contreras-Vidal. Machine Learning Based Data-Analysis of a Longitudinal EEG Study of the Human Creative Process. Research Experience for Undergraduates, University of Houston. National Science Foundation (NSF) REU summer program. July 30, 2019.

14. Delgadillo, Majo, **Jesús G. Cruz-Garza**, Cristina Rivera Garza. "Body is Other: Mediations and Translations in Creative Writing and Neuroaesthetics". International Graphonomics Conference (Your Brain on Art): Graphonomics and Your Brain on Art, Innovation, and Creativity. International Graphonomics Society. Cancun, Mexico. June 10, 2019.

15. Hong Lin, Jose Contreras-Vidal, Thomas Wilson, Gregory Warner, Phuong Hyunt, **Jesus G Cruz-Garza**. Service Learning in BCI and Biological Research: Real-World Problem Solving in the Data Mining Course (CS 5310). South Gulf-Summit at the Sam Houston State University and the High Impact Practices and Service Learning Showcases at UHD. April 3, 2019. Houston, TX, USA.

16. **Cruz-Garza JG**, Delgadillo MJ, Rivera Garza C, Contreras-Vidal JL. 2018. Progression of neural features associated to the creative writing process through mobile Brain-Body Imaging. Poster session presented at the 8th Annual Neuroengineering Symposium, Gulf Coast Consortia Quantitative Biomedical Sciences. Houston, TX.

17. Pamela Banner, **Jesus G. Cruz-Garza**, Saleh Kalantari, Joshua Smith, Jose L. Contreras-Vidal. "Evaluating Biomarkers for Stress and Learning in Architectural Virtual Reality Environments." NSF Research Experience for Undergraduates, University of Houston. July 2018. Houston, TX.

18. Austin Moreau, **Jesus G. Cruz-Garza**, Jose L. Contreras-Vidal. "Capsule Network for Automatic Feature Extraction and Classification of EEG data". NSF Research Experience for Undergraduates, University of Houston. July 2018. Houston, TX.

19. Austin Moreau, **Jesus G. Cruz-Garza**, Jose L. Contreras-Vidal. "Using Machine Vision to Autonomously Segment Video for Mobile Brain-Body Imaging in Real World Settings." NSF Research Experience for Undergraduates, University of Houston. July 2018. Houston, TX.

20. **Cruz-Garza, Jesus G.**, Girija Chatufale, Jose Luis Contreras-Vidal. "Automatic MoBI feature extraction and visualization in visual art production". International Mobile Brain/Body Imaging Conference. July 2018. Berlin, Germany.

21. **Cruz-Garza Jesus G.,** Guillen-Rondon P, Contreras-Vidal JL. "EEG Features Associated with the Human Creative Process in the Visual Arts: A Deep Learning Approach". Theoretical and Computational Neuroscience 2018. January 26, 2018. Houston, TX.

22. **Cruz-Garza, Jesus G.**, and J. L. Contreras-Vidal. Context-Aware Mobile Brain Imaging Applications. Tempe, AZ June 28, 2017. I/UCRC BRAIN Meeting.

23. **Cruz-Garza, Jesus G.,** Girija Chatufale, and J. L. Contreras-Vidal. "Examining the Improvisational Creative Process in the Visual Arts: A Mobile Brain Body Imaging Approach." Graduate Research and Scholar Presentation, University of Houston. 2017. Houston, TX.

24. Sohan Gadkari, Dakota Grusak**, Jesus G. Cruz-Garza**, Justin Brantley, Sho Nakagome, Kimberly Kontson, Jose L. Contreras-Vidal. Evaluation of EEG Systems for Continuous Monitoring of Brain Dynamics in an Unconstrained Museum Setting. Undergraduate Research Day, University of Houston. Houston, TX. October 2016.

25. **Jesus G. Cruz-Garza**, Anastasiya E. Kopteva, Andrew Y. Paek, Jose L. Contreras-Vidal. Your Brain on Art: Examining the neural substrate of creativity in the arts using mobile brain-body imaging. Neuroscience 2016, San Diego, CA. Novemeber 2016.

26. Anastasiya E. Kopteva, **Jesus G. Cruz-Garza**, Andrew Y. Paek, Jose L. Contreras-Vidal. Understand brain aesthetic responses in natural complex settings: a citizen science approach. Neuroscience 2016, San Diego, CA. Novemeber 2016.

27. Mélanie Guirette, Anastasiya E. Kopteva, **Jesus G. Cruz-Garza**, Jo Ann Fleischhauer, Jose L. Contreras-Vidal. Longitudinal Assay of Artist's Creative Process using MoBI Technology. Houston Methodist Research Institute. Houston, Texas, USA. August 2016.

28. Aya Hasan, Stephanie Andrieu, David G. Gonzalez-Sanchez, Anastasiya E. Kopteva, **Jesus G. Cruz-Garza**, Jose L. Contreras-Vidal. How does the brain experience art? Part A: Behavioral Findings. Houston Methodist Research Institute. Houston, Texas, USA. August 2016.

29. Anastasiya E. Kopteva, **Jesus G. Cruz-Garza**, Jo Ann Fleischhauer, Mélanie Guirette, Jose L. Contreras-Vidal. The Creative Brain in Action and in Context: A Longitudinal Assay of the Creative Process using MoBI Technology. 2016 International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation, and Creativity. Cancun, Mexico. July 2016.

30. **Cruz-Garza, JG.** Anastasiya E. Kopteva, Andrew Y. Paek, Jose L. Contreras-Vidal. The Exquisite Corpse: EEG Features Associated with Art Improvisation. 2016 International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation, and Creativity. Cancun, Mexico. July 2016.

31. **Cruz-Garza JG**, Hernandez ZR, Megjhani M, Abibullaev B, Tse TW, Caducoy E, Contreras-Vidal JL. Neural development of social cognition in the first two years of life: Early findings from a cross-sectional study. Society for Neuroscience: Neuroscience 2015. October 21, 2015: Chicago, IL.

32. **Cruz-Garza JG**, Kontson K, Megjhani M, Brantley J, Robleto D, White M, Civillico E, Contreras-Vidal JL. Your Brain On Art : Bringing Research to Public Settings to Increase Brain Awareness and Acquire Big Data. Society for Neuroscience: Neuroscience 2015. October 17, 2015: Chicago, IL.

33. Kontson K, Megjhani M, Brantley J, **Cruz-Garza JG**, Nakagome S, Robleto D, White M, Civillico E, Contreras-Vidal JL. Emergent cortical dynamics during aesthetic experiences. Society for Neuroscience: Neuroscience 2015. October 17, 2015: Chicago, IL.

34. Arenas-Castellanos AJ, Hernandez Z, **Cruz-Garza JG**, Megjhani M, Abibullaev B, Prasad SRP, Tse T, Armstrong C, Long W, Contreras-Vidal JL. "A developmental analysis of behaviors related to the mirror neurom system in 6-24 months infants". Cognitive Development Society 2015. Columbus, OH.

35. Hernandez ZR, **Cruz-Garza JG**, Tse T, Caducoy E, Abibullaev B, et al. Supervised Classification of Intended Behaviors Using Electroencephalography (EEG) from Freely-Behaving Infants: Early findings. 12th Annual Theoretical and Computational Neuroscience Conference; 2015 February 06; Houston, TX, USA. Houston: Gulf Coast Consortia; c2015.

36. Brantley JA, Kung JW, Canela M, **Cruz-Garza JG**, Sigora AV, et al. Powered Lower-Extremity Gait System for Children with Paralysis. Mission Connect Annual Scientific Symposium; 2014 December 05; Houston, TX, USA. Houston: TIRR Foundation; c2014.

37. **Cruz-Garza JG**, Brantley JA, Nakagome S, Robleto D, Contreras-Vidal JL. "The Brain on Art": Assaying the Neuroaesthetics Landscape for Emotional Human Experience. 4th Annual NeuroEngineering Symposium; 2014 October 27; Houston, TX, USA. Houston: Gulf Coast Consortia. p. 3; c2014.

38. Hernandez ZR, Tse T, **Cruz-Garza JG**, Contreras-Vidal JL. Decoding of Intentional Actions from Scalp Electroencephalography (EEG) in Freely Behaving Infants . 4th Annual NeuroEngineering Symposium; 2014 October 27; Houston, TX, USA. Houston: Gulf Coast Consortia. p. 7; c2014.

39. **Cruz-Garza JG**, Hernandez ZR, Nepaul S, Bradley KK, Contreras-Vidal JL. Decoding of Expressive Human Movement from Scalp Electroencephalography. In: Cantu Ortiz FJ, Duron Villasenor SY, editors. 44 Congreso de Investigación y Desarrollo; 2014; Monterrey, NL, México. Monterrey: Tecnológico de Monterrey. p. 391. ISBN: 978-607-501-293-3; c2014.

40. **Cruz-Garza JG**, Tamez-Duque J, Soto R. Real time decoding of intentions using low-cost EEG for assistive lower limb exoskeleton. Congreso de Mecatrónica, Tecnológico de Monterrey; 2014; Monterrey, NL, Mexico.

Technical Reports

1. **Cruz-Garza, Jesus G**. Technical Report: Artistic Brain-Computer Interfaces. 2016 International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation, and Creativity. July 2016.

2. **Cruz Garza JG.** Technical Report: Improving the Performance of Insertion Loss Measurements in Single Mode Optical Fiber Reference Connectors: A geometrical approach. Reynosa, Mexico: Corning Cable Systems, Corning Inc; December 2012.

3. **Cruz Garza JG.** Technical Report: Characterization of mass fusion optical fiber splicing. Reynosa, Mexico: Corning Cable Systems, Corning Inc; August 2012.

Advocacy

1. Graduate Bill of Rights, the University of Houston. https://www.uh.edu/sga/pdf/graduate-bill-of-rights.pdf

Invited Talks and Presentations

2021

Mobile Brain-Body Imaging and the Neuroscience of the human creative process: Classical Machine Learning and Deep Learning approaches.
Presenter.
Skype a Scientist. North Bergen, NJ.
January 15.

2020

Introduction to EEG analysis in EEG data.
Presenter.
NSF Research Experience for Undergraduates (REU). University of Houston. Houston, TX.
July 3.

Introduction to Machine Learning for BCI.
Presenter.
NSF Research Experience for Undergraduates (REU). University of Houston. Houston, TX.
June 16.

Mobile Brain-Body Imaging and the Neuroscience of the human creative process: Classical Machine Learning and Deep Learning approaches.
Presenter.
Cornell University. Ithaca, NY.
March 24.

Introduction to Brain-Computer Interfaces in Augmented Design
Presenter.
Cornell University. Ithaca, NY.
February 26.

Mobile Brain-Body Imaging and the Neuroscience of the human creative process.
Presenter.
University of Cassino and Southern Lazio. Cassino, IT.
January 16.

2018

Re-sincronización entre la lectura, el cuerpo, y el espacio.
Presenter.
Book Presentation for Bienvenidos: You Have Been Transported. Houston TX.
December.

Evaluating biomarkers for stress and learning in architectural virtual reality.
Presenter.
Council on Undergraduate Research's REU Symposium. Panel, University of Houston, Houston TX.
October 28.

The neuroscience of artistic perception and production.
Arts and Technology, Masters in Arts Leadership program, University of Houston College of the Arts. Houston TX.
September 13.

SHPE. Brain-Machine Interface Systems: Opportunities that lie ahead for new graduate students.
Keynote Speaker.

Society for Hispanic Professional Engineers Annual Meeting, University of Houston chapter, Houston TX
Feb 23.

2016

Graduate School: Representation of latin american students in graduate programs.
Keynote Speaker.
Society for Hispanic and Professional Engineers (SHPE), University of Houston chapter, Houston TX.
November 11.

Your Brain on Art: The Neuroscience of Aesthetics and Creativity.
Technical Presenter.
Houston Arts Partners Conference. Alley Theater, Houston, TX.
September 10.

Neural activity associated with expressive movement in dance.
Technical Presenter.
2016 International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation, and Creativity. Live Aqua, Cancun, Mexico.
July.

Artistic Brain-Computer Interfaces Review Panel.
Panelist.
2016 International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation, and Creativity. Live Aqua, Cancun, Mexico.
July.

I wish I knew this from the start: Graduate Student-led Panel.
Panelist.
Graduate School, University of Houston, Houston TX.
August.

Resume Workshop and Interview Recommendations.
Presenter.
PROMES & IEEE, University of Houston, Houston TX.
September.

The Brain on Art: Understanding Neural, Cultural and Demographic Factors in Art Appreciation.
Presenter.
Museum of Fine Arts, Houston, TX.
May 12.

Your Brain on Art: Actividad cerebral en la improvisacion articstica.
Technical Presenter.
Museo de Arte Contemporaneo (MARCO). Monterrey, Nuevo León, México.
May.

The integration of arts and science in a university setting.
Presenter.
A2RU Emerging Creatives Summit, University of Michigan. Ann Arbor, MI.
March 11.

Your Brain On Art: Investigating the neural basis of aesthetics and creativity using mobile brain-body imaging.

Keynote Speaker.
Art, Mind, and Science conference, **by FIRST-MD**. San Antonio, TX.
January 21.

2015 Rehabilitation Robotics: Innovations in Brain-Machine Interfaces.
Technical Presenter.
Course: The Future of Neuroscience, at Rice University. Houston TX.
October 15.

Exoskeleton Powered by Brainwaves, and Brain on Dance.
Presenter.
Innovation Festival - USPTO, at Smithsonian Museum of American History. Washington, DC.
September 25-27.

Innovation is STEAM-Powered.
Panelist.
Houston Arts Partners Conference, at Museum of Fine Arts Houston. Houston, TX.
September 11-12.

2014 Introduction to Brain-Computer Interfaces. Grandes Pasos del Patronato de Nutrición.
Keynote Speaker.
Panama City, Panama.
July 2014.

Brain-Computer Interfaces and applications in assistive rehabilitation technology.
Keynote Speaker.
Laboratorio de Robótica del Noreste y Centro de México, Tecnológico de Monterrey. Monterrey, NL, Mexico.
March 2014.

Outreach Activities

2019 Girls in Engineering. Chevron outreach events. University of Houston. April 1, 2019.
Your Brain on Wine. Hilton College of Hotel and Restaurant Management, University of Houston. January 2019.

2018 Lab tour for MakerSpace summer program, St. Stephen Episcopal school. July 13, 2018.
Your Brain on Art. Children's Museum Houston. June 26-30 2018.
Your Brain on Music. Houston Health Museum. June 2018.

2017 National Geographic documentary: The Exquisite Corpse. December 18, 2017.
Speaker. Pumps and Pipes Summer Academy. June 27, 2017
Guest speaker. Prepa Tec Campus Santa Catarina. Physical Systems Modeling: Machine Learning to classify and predict brain activity. Match 17, 2017.
Houston Community College Spring Branch Performing Arts Center. Your Brain on Art: Exquisite Corpse Music. .Feb 12 2017.
Indianapolis Museum of Art. Family Day: over 100 people reached. February 4, 2017.
Neuro-engineering workshop. Mars Rover Celebration. University of Houston. Jan 28, 2017
Neuro-engineering. Spring Branch ISD STEM Learning Lab Jan. 28, 2017

2016 Teaching Fellow Workshop for Graduate and Professional Student Association (GPSA).
Introduction to EEG and Neuroaesthetics. SPAN3308. University of Houston. Houston, TX.
IEEE representative for Student Organization Fair
UTHealth Stomp Out Stroke Festival, Brays Bayou, Houston, TX.
Your Brain on Art: The Exquisite Corpse. Children's Museum of Houston, Houston, TX.
CoTA Connects, College of the Arts, University of Houston.
Brain on Dance demonstration and explanation of neural mechanisms involved.
National Engineers Week, The Children's Museum Houston.
Brain imaging and rehabilitation robotics demonstration.

2014 – 2016 Lab tours for international high school students.
Conducted lab tours for visiting international high school students.

2015 Brain or Art international demonstrations. Houston, USA; Monterrey, Mex.
'Your Brain on Art' events in collaboration with the Blaffer Art Museum featuring renowned artists.

Becky Valls Red Square performances.
Implemented a real time neural decoder of conveyed emotional states for a live performance by Dr. Rebecca Valls at the Jose Quintero Theater in University of Houston. The decoder modulated the theater lights to connect the dancer with the audience through perceptible environment changes.

UTHealth Stomp Out Stroke Festival, Discovery Green, Houston, TX.

2014-2015 The Menil Collection
While collecting data from over 400 volunteers, we explained EEG and details about our research to museum visitors.

2014 Introduction to neuroscience, AIESEC, Cocle, Panama.
Talk about recent developments in neuroscience and brain-machine interfaces to motivate professional engineers interested in pursuing a graduate degree or more technical training in diverse fields.

Personal finance, Panama. AIESEC.
Personal finance seminars for remote rural communities in Panama. The talks introduced them to basic financial management, and creating assets.

The Setup, Tecnológico de Monterrey, Mexico.
Networking event for young entrepreneurs and researchers. Connected people to the topic of neuroscience and potential applications using non-invasive technologies such as EEG.

2013 Workshop on Diagnostic, Assistive and Therapeutical Uses of Brain-controlled Lower Extremity Gait Systems.-Zambrano-Hellion, Methodist Hospital System, Monterrey, Mexico.
Demonstrated and discussed the use of EEG to decode user intentions to control a robotic exoskeleton.

2012 Head Logistics Coordinator. XV International Physics Symposium. Tecnológico de Monterrey, Mexico.
Organized the symposium events, contacted and scheduled guest speakers, and led the poster session and site visits.

2010-2011 Instructor. Educiencia.
Independently prepared lectures about physics, math and chemistry for high school teachers in low income communities.

Performances and Other Activities

2018	La transmisión infinita e invariante de información es imposible. El observador construye nuestra percepción del mundo. Aproximadamente. ("Infinite and invariant information transmisión is imposible. It is the observer who perceives the world. Approximately"). Poetry Composition. December 2018. Canal Press, Houston TX.
2016-2017	The Musicians of Bremen, Performer, Opera Leggera, The Nathaniel Center, Kingwood, TX
2013-2015	State-wide Dancesport competitions, representing University of Houston's Cougar Dancesport team. Standard- Bronze. Latin- Silver. Social- Advanced. Recipient of multiple podium awards for each category.
2009-Present	Volunteering and social development has been a core activity in my professional formation. Extensively involvement in national and international social development educational projects.
2009-2014	Salsa workshops and six performances at Auditorio Luis Elizondo, Tecnológico de Monterrey.
2009	Volunteer museum guide at Museo de Arte Contemporaneo (MARCO) in Monterrey, Mexico.
2009-2014	Three intramural Basketball Championships at Tecnológico de Monterrey.
1997	Youth championships in regional and national tournaments. U-17 Men's Basketball Team for the state of Nuevo Leon, Mexico.

Mentoring

2020	Julia Kan (NSF REU), Mikayla Fors, Ruofan Liu, Amirah Alam
2019	Abigail Turcheck (NSF REU-selected project for national presentation), Linnea Rives, Devon Bellman, Christian Alarcon, Martin Sillero (NSF REU), Akanksha Acharya
2018	Pamela Banner (NSF REU-selected project for national presentation), Austin Moreau, Samuel Henderson, Nupur Dave, Anika Patel
2017	Arsh Agarwal (NSF REU), Guillermo Herrera-Arcos, Pavan Agrawal, Aman Halawa, Rebeca Guillen (NSF REU), Samuel Akinwande, Lanvy Vu, Michelle Gale, Abidemi Awojuyigbe, Eric Todd, Rhema Ike, Girija Chatufale, Shroothi Ramesh, An Vu Thanh, Mofe Osanyintolu, David Arevalo (MFA).
2016	Sohan Gadkari, Dakota Grusak, Stephanie Andrieu, Aya Hassan, Mélanie Guirette, David G. Gonzalez-Sanchez, Aditya Garg, Aditya Dharap, Adam Wygant, Rangeet Pan (MS), Shruti Ray (MS).
2015	Wanxia Long, Carlos Armstrong, Rosario Diaz.
2014	Eunice Caducoy, Jesus Tamez-Duque, Teresa Tse.

Selected news articles (*Highlights)

Radio

What Do Our Brains Look Like When Art Gets Involved?, Houston Public Media, http://www.houstonpublicmedia.org/articles/news/2016/01/21/134834/what-do-our-brains-look-like-when-art-gets-involved/
January 21, 2016

University of Houston Brain Study Explores Intersection of Art and Science, Houston Public Media, http://www.houstonpublicmedia.org/articles/news/2016/01/20/134348/university-of-houston-brain-study-explores-intersection-of-art-and-science/
January 20, 2016

University of Houston Study Examines Relationship Between the Brain and Creativity, Houston Public Media, http://www.houstonpublicmedia.org/news/university-of-houston-study-examines-relationship-between-the-brain-and-creativity/
October 15, 2015

Journal (Periodical)

ECE Connections, Department of Electrical & Computer Engineering Magazine, University of Houston,
Spring 2016

Cracking the Brain Code, Parameters: Cullen College of Engineering Magazine
Fall 2015

Professor teams up with local artist to study aesthetic experiences in the brain, Parameters: Cullen College of Engineering Magazine.
Spring 2015

Art and Science come together on the dance floor. Parameters: Cullen College of Engineering Magazine.
Spring 2015

Newspaper

ВЕЧНЫЕ БРЕМЕНСКИЕ, Our Texas, http://www.ourtx.com/issue-423/14360
June 22, 2016

The Musicians of Bremen are coming to Kingwood, The Humble Observer, http://www.yourhoustonnews.com/humble/news/the-musicians-of-bremen-are-coming-to-kingwood/article_0d0cd425-d3fa-504c-a717-1f99c751ccce.html
June 17, 2016

El cerebro mostrara su arte. By Luis Lopez. El Norte: Vida.
April 5, 2016. Monterrey, Mexico.

Indagan los efectos del arte en el cerebro. El Porvenir, Cultural, Gerardo Duarte, Pág. C01; Milenio Monterrey, Primera, Gustavo Mendoza Lemus, Pág. 018; El Norte, Vida, Teresa Martínez, Pág. V07.
April 5, 2016. Monterrey, Mexico.

Live wire: Mapping babies' brain activity. By Marle D. De Jesus. Houston Chronicle: Health Zone. Wearable Technology. November 23, 2014.

Web Media

Graduate students want more University protections
The Cougar.
Alyssa Letts. February 6, 2019.
http://thedailycougar.com/2019/02/06/calling-graduate-students/

Neuroscience and the Arts – an a2ru Partner Spotlight
Alliance for the Arts in Research Universities (A2RU).
A2RU Blog.
December 12, 2017.
https://www.a2ru.org/neuroscience-and-the-arts-an-a2ru-partner-spotlight/

Texas college leaders worry about impact of federal tax overhaul
Lindsay Ellis | November 15, 2017
https://m.chron.com/local/education/campus-chronicles/article/Texas-college-leaders-worry-about-impact-of-12357632.php

Your Brain on Art concert. Houston Community College Media Room. http://www.hccs.edu/district/about-us/mediaroom/
Feb 17, 2017

Critical Thought. University of Houston Powerhouse Blog. https://uh.edu/powerhouse/#critical-thought
Jan 31, 2017

VIDEO: UH Engineering Study Opens Doors To Understanding The Creative Brain 'In Action And In Context'. University of Houston, Cullen College of Engineering. https://www.egr.uh.edu/news/201701/video-uh-engineering-study-opens-doors-understanding-creative-brain-action-and-context
January 6, 2017

Your Brain On Art. University of Houston, Cullen College of Engineering. https://youtu.be/fgh0m1uLXvI
Nov 28, 2016

***This Is Your Brain on Picasso: The Human Brain on Art.** The Wall Street Journal. http://www.wsj.com/video/this-is-your-brain-on-picasso-the-human-brain-on-art/0173398C-33C7-45A6-8472-D2D0EEABB010.html
December 7, 2016

UH Engineering Students Earn IEEE Travel Grants To Attend Future Leaders Forum, Cullen College of Engineering, https://www.egr.uh.edu/news/201607/uh-engineering-students-earn-ieee-travel-grants-attend-future-leaders-forum
July 27, 2016

Presentan "Your Brain on Art", Hospital Zambrano Hellion, Tecnológico de Monterrey, http://www.cmzh.com.mx/noticias/presentan-your-brain-on-art.aspx
April 8, 2016

Your Brain On Art es la investigación neuroestética que se está llevando a cabo en el Museo MARCO, Tiempo regio: Innovación Informativa, http://tiemporegio.com/your-brain-on-art-en-museo-marco/
April 7, 2016

Arranca en MARCO la investigación "Your Brain on Art", eitmedia, http://eitmedia.mx/index.php/politica/mamotreto/item/36969-arranca-en-marco-la-investigacion-your-brain-on-art

Museo Marco anuncia "Your Brain on Art", La Rereda, Periodismo Cultural en Linea, IAMORE THAN HUMAN, http://lavereda.com.mx/index.php/artes-visuales/985 -museo-marco-anuncia-your-brain-on-art
April 2016

What Do Our Brains Look Like When Art Gets Involved?, Texas Standard, http://www.texasstandard.org/stories/what-do-our-brains-look-like-when-art-gets-involved/
January 26, 2016

***Doctoral student awarded fellowship to explore neuroengineering.** UH Cullen College of Engineering
September 29, 2015.

***Scientists & artists team up to explore our brain on art**. National Science Foundation: Science Now episode 38. https://youtu.be/9IDGsUqzH3A
Nov 13, 2015

The dancer. The neuroscientist. The skull cap. Houston Chronicle.
February 24, 2015.

At the Intersection of Science and Art. National Science Foundation.
http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=136954
November 17, 2015

Your Brain On Art. UH Moment.
http://www.uh.edu/news-events/stories/2015/November/111715UHMBrainOnArt.php
Nov 17, 2015

University Of Houston Study Examines Relationship Between The Brain And Creativity. Houston Public Media. http://www.houstonpublicmedia.org/articles/news/2015/10/15/124623/univer...
October 15, 2015

Minecraft-Playing Kids Contribute to Groundbreaking Brain Research at UH Engineering, Cullen College of Engineering, https://www.egr.uh.edu/news/201508/video-minecraft-playing-kids-contribute-groundbreaking-brain-research-uh-engineering
August 21, 2015

UH study measures babies' brain signals as start of autism research, Houston Chronicle.
November 14, 2014

Baby see, baby do? UH research targets youngest subjects, UH Cullen College of Engineering.
October 7, 2014

ECE brain-machine interface expert teams up with artist at [The] Menil Collection, UH Cullen College of Engineering.
August 29, 2014

Artpace visits Dario Robleto's latest exhibition,
Artpace. September 2014

This is your brain on art, Houstonia Magazine.
August 26, 2014

How dancers think when they dance, TERP Unversity of Maryland.
April 29, 2014