CURRICULUM VITAE FORMAT

A. GENERAL INFORMATION

1. Name

Alvaro Joffre Uribe Quevedo
Ontario Tech University
2000 Simcoe Street North
Oshawa, Ontario, Canada. L1G 0C5
Phone: 905-721-8668 x2615
Fax: 905-721-3167
alvaro.quevedo@ontariotechu.ca

2. Degrees – Designation, Institution, Department, Year

- PhD in Mechanical Engineering, Development of a Lower Limb with Reduced Mobility Perambulator VR Assistive System, Universidade Estadual de Campinas, São Paulo, Brazil. João Mauricio Rosário, 2011.
- Master's in mechanical engineering, Object Manipulation within a Virtual Environment using an Anthropomorphic Gripper coupled to an Industrial Robot, Universidade Estadual de Campinas, São Paulo, Brazil. João Mauricio Rosário, 2008.
- Bachelor in Mechatronics Engineering, Design and simulation of Sismigel packing, Universidad Militar Nueva Granada, Bogotá, Colombia, 2003.

3. Employment History- Dates, Rank/Position, Department, Institution

Faculty of Business and Information Technology
Director of Experimental Teaching – July 2020 – June 2022
Tenure-Track – Assistant Professor – September 15, 2017 – to present
University of Ontario Institute of Technology

Faculty of Engineering
Assistant Professor – July 2012- July 2017.
Tenured obtained in July 2013.
Engineering Graduate Director - November 2016 – June 2017
Engineering Research Centre Director – January- July 2014
Engineering Journal editorial committee member – January 2017- July 2017
Universidad Militar Nueva Granada

Postdoctoral Fellow
Games Institute – September 2015 – September 2016
University of Waterloo

Virtual Reality Course, Sessional 2005-2007
Virtual Reality Centre Engineer- September 2004- July 2007
Universidad Militar Nueva Granada

4. Professional Affiliations and Activities

- IEEE member.
- ACM member.
- MaxSimHealth research group member, Ontario Tech University.
- Autonomous and Intelligent Systems Research Group member, Ontario Tech University.
- Digital Life Institute member.
- Member of IEEE Consumer Technology Society Virtual Augmented Reality Technical Committee.

B. RESEARCH

1. Current Research Interests

- Virtual Reality: immersion and interactive devices, user experience, applications. Research on the effects of virtual reality scenarios in various applications mostly in the medical training and health care field.
- Simulation: design, implementation, analysis. Research on the effects of interactive simulations for user interactions based on mechanical models for visualization and haptics interaction.
- User interfaces: design, prototyping. Research on the effects of custom-made user input devices and the best practice to design, prototype, test and alter the user experience through interaction metrics.

2. Research Awards (grants, contracts, fellowships) including:

- Research Grants

  National Sciences and Engineering Research Council NSERC, Discovery Grant
  April 1, 2018, 5 years
  Development of a virtual reality usability framework that correlates physiological and qualitative assessment data
  $115,000
  PI: Alvaro Joffre Uribe Quevedo

  MITACS Accelerate
  October 2020, 2 years
  Empowering a Collaborative Service Robot Prototype for Long-term Care Facilities
  $90,000
  PI: Alvaro Joffre Uribe Quevedo
  Partner: JDQ Systems and Developmental Disabilities Association

  Ontario Tech University.
  January – April 2022
  Upskilling simulation technologists and educators with digital design and three-dimensional (3D) printing skills to create low cost, customizable simulation solutions.
  $25,000
  PI: Alvaro Joffre Uribe Quevedo
  Collaborators: Bill Kapralos, Adam Dubrowski, Peter Coppin
  Partners: maxSimHealth, Lakeridge Health, SIMCanada

  Ontario Micro-credentials Challenge Fund.
  January 2022 – July 2022.

Development of Micro-credential in Dementia Care to Support Capacity Building in Long-Term Care Using GEM-TECH (Gamified Educational Multimodal Technology Platform).
$300,000
PI: Winnie Sun
Collaborators: Alvaro Joffre Uribe Quevedo, Adam Dubrowski, Bill Kapralos.
Partners: Durham College, Georgian College, Long Term Care & Services for Seniors Division, The Regional Municipality of Durham, Ontario Shores Centre for Mental Health Sciences, Baycrest Geriatric Education Centre, Alzheimer's Society of Durham Region, Entity4 French Language Health Services Planning, maxSIMhealth (Ontario Tech University)

Digital Delivery XR Experimentation Project Grant eCampus Ontario.
July 2021 – March 2022.
Augmented Reality Accessible Tool for Developing Spatial Skills.
$192,275.2
PI: Alvaro Joffre Uribe Quevedo
Co-applicants: Peter Coppin, Mahadeo Sukhai, Teresa Lee, Sharman Perera, Adam Dubrowski, David Rojas. Industry Partner: SenseTech Solutions

Alithya.
April 2021 – March 2022.
A Literature Review of Immersive Technologies in the Nuclear Energy Sector.
$13,560
PI: Akira Tokuhiro.
Co-applicant: Alvaro Joffre Uribe Quevedo.

Nuclear Innovation Institute
September 2020 – June 2021
Net Zero Emissions by 2050 Serious Game
$21,311
PI: Alvaro Joffre Uribe Quevedo

Canadian Accessibility Standards Development Office, Advancing Accessibility Standards Research Grants and Contributions Program
November 2021 – October 2024
A Study of Accessible and Inclusive Virtual and Blended Service Provision Models for the Federal Public Service and Federally Regulated Industries in post-COVID-19 Canada
$750,000
PI: Patrick Hung
Co-applicants: Mahadeo Sukhai, Peter Coppin, Alvaro Joffre Uribe Quevedo

Canadian Accessibility Standards Development Office, Advancing Accessibility Standards Research Grants and Contributions Program
October 2020 – September 2023
Building an Evidence-Based Framework for Universal Design in Employment Standards in Canada
$501,515
PI: Mahadeo Sukhai, CNIB
Co-applicants: Yvonne Felix, Matisse Hamel-Nelis, Natalie Martiniello, Jon Callagher, Peter Coppin, Rebecca Gewurtz, Teresa Lee, Sall Lindsay, Valerie Lopes, Mary Ann

McColl, Alvaro Joffre Uribe Quevedo, J Treviranus, Wittich Walter, M Mcdonald, E Tompa, Brian Carrière, Shikha Gupta, E Krohn, Erin Lee, Dan Samosh, Patrick Hung, Danika Blackstock

Current community safety project grant, Government of Ontario
September 2021 – August 2022.
Playing with hate: Safe gaming and anti-hate gaming.
$108,139
PI: Barbara Perry
Co-applicants: Ricky Veerapan, David O'Brien, Tom Scholberg. Collaborators: Andrew Hogue, Alvaro Joffre Uribe Quevedo.
Partner: John Howard Society of Ottawa

eCampus Ontario
April 2021 – March 2022.
Capturing Volumetric Video Content for Remote Learning in the Studio Arts.
$40,000
PI: Andrew Hogue
Co-applicants: Alvaro Joffre Uribe Quevedo, Cindy Poremba, Veronika Szkudlarek, Nick Fox-Gieg

eCampus Ontario
April 2021 – March 2022.
Development of an XR-Art Studio Application to Enhance Remote Learning of the Traditional Arts.
$90,000
PI: Andrew Hogue
Co-applicants: Alvaro Joffre Uribe Quevedo, Veronika Szkudlarek, Roland van Oostveen

eCampus Ontario
April 2021 – March 2022.
Build a remotely accessible non-immersive Virtual Reality (VR) model and simulations of the CANDU nuclear reactor for online teaching and training.
$16,000
PI: Sharman Perera
Co-applicants: Alvaro Joffre Uribe Quevedo, Callan Brown, Akira Tokuhiro, Paul Walsh, Cliff Chan, Calin Zamfirescu, Shawn Lowe, Benjamin Rouben

NSERC PROMOSCIENCE
January 2021 – January 2023
Accessible Coding Camps for Youth with Visual Impairment
$90,000
PI: Patrick Hung
Co-applicants: Mahadeo Sukhai, Peter Coppin, Robert Ingino, Alvaro Joffre Uribe Quevedo, Anna McNicho.

Ontario Shores Centre for Mental Health Sciences. Social Sciences and Humanities Research Council
March 2021 – February 2022.
Virtual Reality Reminiscence Therapy Applications for Persons with Dementia.
$7,000
PI: Winnie Sun

Collaborators: Alvaro Joffre Uribe Quevedo, Manon Lemonde, Ramiro Liscano, Sheri Horsburgh. Partner: SSHRC

Ontario Shores Centre for Mental Health Sciences. Centre for Aging and Brain Health Innovation (Spark ON)
April 2021 – March 2022
The Development of Information Communication Technology (ICT) Training and Mobile App for Older Adults with Cognitive Impairment and Their Caregivers to Promote Social Connectedness in the Community
$49,994
PI: Winnie Sun
Collaborators: Alvaro Joffre Uribe Quevedo, Bill Kapralos, Manon Lemonde, Ramiro Liscano, Emma Bartfay, Sheri Horsburgh

University of Toronto
March 2020 – April 2023
Twin-Twin simulator
$20,000
PI: David Rojas Gualdron PhD
Collaborators: Rory Windrim. Collaborators: Bill Kapralos, Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Scientific Research Grant
March 2020 - February 2021.
Development of a serious game as a complementary tool to improve agriculture exporters access to information.
$20,000
PI: William Vargas MFin
Co-applicant: Enit Gomez MIRB, Byron Perez, Alvaro Joffre Uribe Quevedo

Ontario Tech University and Ontario Shores
October 2019 – June 2021
Advancing reminiscence therapy through virtual reality application to promote social connectedness of persons with dementia.
$25,000
PI: Winnie Sun
Co-applicant: Manon Lemonde, Bill Kapralos, Ramiro Liscano, Alvaro Joffre Uribe Quevedo, Akira Tokuhiro

Universidad Militar Nueva Granada, Scientific Research Grant
March 2019 - April 2020
Applied virtual reality for lower back pain physiotherapy as a tool to alter pain perception and its tracking through physiological measures and user interactions through non-invasive techniques Phase I
$28,000
PI: Lina Penuela
Co-applicants: Jorge Tolosa, Alexandra Velasco, Alvaro Joffre Uribe Quevedo

National Sciences and Engineering Research Council NSERC, Engage Grant
March 29 – September 30, 2019
VR framework as a non-literacy alternative to increase work readiness awareness for job seekers
$24.743

PI: Alvaro Joffre Uribe Quevedo
Industry partner: ORIGIN

Public Services Health and Safety Association Canada
April 2019
Virtual Reality Hands-On Evaluation PSHSA Working at Heights Training
$28.334
PI: Alvaro Joffre Uribe Quevedo
Industry partner: PSHSA

Innovation York and the National Research Council of Canada Industrial Research Assistance Program, Type: Industrial Research Assistance Program
Collaborative/competitive adaptive VR training environments
$10,000
PI: Michael Jenkin
Co-applicants: Bill Kapralos, Alvaro Joffre Uribe Quevedo
Industry partner Ocutherapy

UOIT SSHRC Small Grants Program
June 2018 - March 2019
Usability testing of a gamified educational network
$2,000
PI: Bill Kapralos
Co-applicant: Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Scientific Research Grant
March 2018 - February 2019
Design and development of a virtual reality simulator prototype for myocardial infarction treatment phase I
$35,000
PI: Byron Perez Gutierrez
Co-applicants: Norman Jaimes, Osmar Perez, Alvaro Joffre Uribe Quevedo, Bill Kapralos, David Rojas

Universidad Militar Nueva Granada, Scientific Research Grant
February 2017 – February 2018
Development of a monitoring posture exergame prototype based on occupational health exercises for maintenance workers phase I
$20,000
PI: Alvaro Joffre Uribe Quevedo
Co-applicants: Bill Kapralos, David Rojas, Lina Peñuela

Universidad Militar Nueva Granada, Scientific Research Grant
February 2017 – February 2018
Development of a multimodal tool for cardiac auscultation training phase I
$20,000
PI: Alvaro Joffre Uribe Quevedo
Co-applicants: Bill Kapralos, David Rojas, Byron Pérez.

Universidad Militar Nueva Granada, Scientific Research Grant
February 2015 – February 2017
Central venous access pediatric simulator phase I

$95,000
PI: Byron Pérez
Co-applicants: Alvaro Uribe, Norman Jaimes

Universidad Militar Nueva Granada, Scientific Research Grant
February 2014 – April 2015
Neonatal Central Venous Access Simulator
$35,000
PI: Byron Pérez
Co-applicants: Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Scientific Research Grant
February 2014 – April 2015
Interactive tool for lower limb physical activity monitoring
$18,000
PI: Alvaro Joffre Uribe Quevedo
Co-applicants: Byron Pérez

Universidad Militar Nueva Granada, Innovation Grant
March 2014 – May 2015
Interactive defibrillator guide
$4,800
PI: Alvaro Joffre Uribe Quevedo
Co-applicants: Norman Jaimes, Byron Pérez

Universidad Militar Nueva Granada, Innovation Grant
March 2014 – May 2015
Virtual manikin for convulsive diagnosis based on facial symptoms
$4,800
PI: Alvaro Joffre Uribe Quevedo
Co-applicants: Norman Jaimes, Byron Pérez

Universidad Militar Nueva Granada, Scientific Research Grant
Design and Implementation of a motion capture system for3D animation based on an anthropomorphic humanoid robot
$13,000
PI: Alvaro Uribe Quevedo
Co-applicants: Hernando León, Byron Pérez

Universidad Militar Nueva Granada, Undergraduate Scientific Initiation Grant
July – December 2013
Serious game for upper limb exercising
$500
PI: Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Undergraduate Scientific Initiation Grant
July – December 2013
Manikin development for virtual avatar animation
$500
PI: Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Undergraduate Scientific Initiation Grant

February – July 2013
Development of an educational multimedia to use a carpenter's square in graphical expression
$500
PI: Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Undergraduate Scientific Initiation Grant
February – July 2013
Development of a face expression detection tool using Kinect
$400
PI: Alvaro Joffre Uribe Quevedo

Universidad Militar Nueva Granada, Undergraduate Scientific Initiation Grant
July – December 2012
Postures and gestures detection to monitor physical activity
$500
PI: Alvaro Joffre Uribe Quevedo

- Infrastructure and Equipment Grant

  UOIT Research and Infrastructure Funds RIF
  May 2018 – April 2019
  Upgrading the Human Machine Laboratory
  $40,217
  Main applicant: Miguel Vargas Martin
  Co-applicants: Patrick Hung, Amirali Salehi-Abari, Alvaro Joffre Uribe Quevedo

  UOIT Research and Infrastructure Funds RIF
  May 2018 – April 2019
  UOIT Computational Infrastructure for Artificial Intelligence
  $50,000
  Main applicant: Amirali Salehi-Abari PhD
  Co-applicants: alma Karray, Patrick Hung, Miguel Vargas Martin, Khalil El-Khatib, Shahram Heydari, Faisal Qureshi, Christopher Collins, Julie Thorpe, Alvaro Joffre Uribe Quevedo

- Undergraduate Summer Research Awards Program

  National Sciences and Engineering Research Council NSERC, Discovery Grant
  April - August 2019
  Prototyping of a virtual reality walking user interface
  $6,500
  Student: Marco Valdez Balderas
  Main applicant: Alvaro Joffre Uribe Quevedo

  National Sciences and Engineering Research Council NSERC, Discovery Grant
  April - August 2018
  Development of an interactive dialogue system prototype for VR in medical applications, based on motion and gesture user inputs
  $6,000
  Student: Jacky Yang
  Main applicant: Alvaro Joffre Uribe Quevedo

- MITACS Globalink Program

  July 2022 - October 2022
  Robot assisted epilepsy virtual reality surgery,
  Main applicant: Alvaro Joffre Uribe Quevedo
  Student awarded: Kalyan Kumar Paramehwaran

  June 2022 - September 2022
  Robot assisted epilepsy virtual reality surgery,
  Main applicant: Alvaro Joffre Uribe Quevedo
  Student awarded: Akshay Sharma

  May 2022 - August 2022
  Prototyping a smart mirror for polypharmacy,
  Main applicant: Alvaro Joffre Uribe Quevedo
  Student awarded: Safa Ben Zouari

  May 2019 - August 2019
  Extending user interactions in virtual, augmented and mixed reality,
  Main applicant: Alvaro Joffre Uribe Quevedo
  Student awarded: Juan Rodrigo Ponce

  Canceled due to COVID-19
  JSPS Internship Program
  Virtual reality (VR) and its customization for improving task completion effectiveness
  Student Awarded: Kody Wood

- Emerging Leaders in the Americas Program Scholarship

  September 2018 – January 2019.
  Development of a lower limb interactive VR scene employing motion data from a smartwatch
  Student awarded Alvaro Hernandez

  September 2018 – January 2019.
  Biomechanical human gait motion capture employing a smartwatch
  Student awarded: Alix Angarita

  October 2017 - February 2018
  Development of an eye examination VR tool for training
  Student Awarded: David Acosta.

  January-April 2017
  Development of a cardiac auscultation game
  Student awarded: Sergio Prada

3. Patents

- 16 degrees of freedom anthropomorphic humanoid robot for motion capture through electro-mechanic sensors, Superintendencia de Industria y Comercio, Bogotá, Colombia. Authors:

Hernando Leon, Alvaro Uribe, Byron Pérez, Lizeth Vega. Patent Number 14283140 awarded December 15, 2017.

C. SCHOLARLY AND PROFESSIONAL WORK

1. Refereed publications (List published work or work accepted for publication in chronological order)

(i) Articles in refereed journals

- B. Kapralos, A. Quevedo, C. Da Silva, E. Peisachovich, K.C. Collins, K. Kanev, A. Dubrowski. "Revisiting Pseudo-Haptics for Psychomotor Skills Development in Online Teaching". Cureus, 14(3), pp..2 – 4, March 2022.
- A. Uribe-Quevedo. "Immersive Technologies for Accessible User Experiences." Encyclopedia of Computer Graphics and Games (ECG), pp.1 – 19, 2022. In-Press.
- M. Chan, A. Uribe-Quevedo, B. Kapralos, M. Jenkin, N. Jaimes, K. Kanev. "Virtual and Augmented Reality Direct Ophthalmoscopy Tool: A Comparison between Interactions Methods." Multimodal Technologies and Interaction, Vol.5, no.11, pp,2 – 17, October 2021.
- J. Smith, M. Nguyen, N. Allison, B. Carr, K. Wood, A. Uribe Quevedo, S. Perera, A. Tokuhiro, E. Waller. "Seeing the Invisible: A VR Approach to Radiation Attenuation Visualization for Nuclear Engineering Laboratory Practice." IEEE Transactions on Games. In press.
- K. Wilcocks, B. Kapralos, A. Quevedo, F. Alam, F., A. Dubrowski. "The Anesthesia Crisis Scenario Builder for Authoring Anesthesia Crisis-Based Simulations." IEEE Transactions on Games, Vol.12, n.4, pp.361 – 366, December 2020.
- J. Moo-Young, T. M. Weber, B. Kapralos, A. Quevedo, F. Alam. "Development of Unity Simulator for Epidural Insertion Training for Replacing Current Lumbar Puncture Simulators." Cureus, Vol.13, n.2, pp.1 – 9, February 2021.
- K. M. Clarke, B. Kapralos, A. Quevedo, A. Dubrowski. "Constructing a Multidisciplinary Network That Relies on Disruptive Technologies to Design, Test, and Implement Simulation Training." Cureus, Vol.12, n.4, pp.1 -4, May 2020.
- B. Kapralos, A. Uribe-Quevedo, K. Collins, A. Dubrowski. "Intelligent avatars and emotion in medical-based virtual learning environments." Intelligent Decision Technologies, Vol.13, n.4, pp.407 - 416, February 2020
- M. Melaisi,D. Rojas, B. Kapralos, A. Uribe-Quevedo, K. Collins. "Multimodal Interaction of Contextual and Non-Contextual Sound and Haptics in Virtual Simulations", Informatics,3.36) 2018, Vol.5, n.43, pp.1 – 13, November 2018
- S. Valdivia, R. Blanco, A. Quevedo-Uribe, L. Penuela, D. Rojas, B. Kapralos. "Development and Comparison of two Posture Tracking User Interfaces for Occupational Health Care." Advances in Mechanical Engineering. Vol 10, n.6, pp.1 – 12, June 2018.
- R. Shewaga, A. Uribe-Quevedo, B. Kapralos, K. Lee, F. Alam. "A Serious Game for Anesthesia-Based Crisis Resource Management Training." Computers in Entertainment (CIE) Vol.16, n.2, pp.1 - 16, April 2018.
- M. Nguyen, A. Quevedo-Uribe, B. Kapralos, M. Jenkin, K. Kanev, N. Jaimes. "An experimental training support framework for eye fundus examination skill development." Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization. Vol.7, n.1, pp.26 – 36. October 2017.
- R. Shewaga, A. Uribe, B. Kapralos, F. Alam, K. Lee. "A comparison of seated and room-scale virtual reality in a serious game for epidural preparation." IEEE Transactions on Emerging Topics in Computing Special Issue on Innovation in Technologies for Educational Computing, Vol.8, n.1, pp.218 – 232. August 2017.
- Y. Valbuena, A. Uribe, A. Velasco. "Audio effects on haptics perception during drilling simulation." Revista Ingeniería Investigación y Desarrollo. Vol.17, n.2, pp.6 -15. September 2017.

- K. Collins, B. Kapralos, A. Uribe. “The senses and virtual environments.” Senses and Society. Vol.12, n.1, pp.96 - 75, March 2017.
- M. Nguyen, M. Melaisi, B. Cowan, A. Uribe, B. Kapralos. “Low end haptic devices for surgical drilling in a serious game.” World Journal of Science Technology and Sustainable Development, special issue on Gamification, Serious Games, Simulations, and Immersive Learning Environments in Knowledge Management. Vol. 14, n.3, pp.241-253, March 2017.
- S. Valdivia, E. Prada, E. Ramos, A. Uribe. “Development of a lower limb tracking flexion/extension virtual reality system.” International Review of Mechanical Engineering (I.RE.M.E.). Impact factor 0.83. Vol.9, n.6, pp.600 - 606, November 2015.
- A. Uribe, O. Aviles, J. Rosario. “Development of a human hand-based anthropomorphic gripper for prehensile tasks.” International Review of Mechanical Engineering (I.RE.M.E.). Impact factor 0.83. Vol.9, n.5, pp.484 - 489, September2015.
- A. Uribe, S. dos Reis Alves. “Rastreamento de rosto como ferramenta interativa e de monitoramento do estado emocional do usuário.” Revista Científica "General José María Córdova". Vol.13, N.15, pp.245-255, July 2015.
- A. Uribe, J. Rosario, L. Frezzatto. “Modeling, control and analysis of a serial and parallelogram lower member mechanism.” International Review of Mechanical Engineering (I.RE.M.E.). Vol.5, n.5, pp.952 - 960, July 2011.
- B. Pérez, A. Uribe. “Herramienta multimedial para el estudio de la anatomía del oído a través de modelos virtuales.” Ciencia e Ingeniería Neogranadina, Vol.19, n.2, pp.29- 44, December 2009.
- A. Uribe, J. Rosario, O. Aviles. “Anthropomorphic gripper virtual environment for automation grasping task.” International Review of Mechanical Engineering (I.RE.M.E.). Vol.3, n.5, pp.574 - 552, September 2009.
- O. Aviles, J. Rosario, A. Uribe, P. Niño, R. Gutierrez. “Anthropomorphic grippers - modelling, analysis and implementation.” International Journal of Factory Automation, Robotics and Soft Computing, Vol.1, pp.96 - 101, 2009.
- A. Uribe, J. Rosario, O. Aviles, P. Niño. “Virtual environment for visualization and movement control of an anthropomorphic gripper.” International Journal of Factory Automation, Robotics and Soft Computing, Vol.1, pp.84 - 89, 2009.

(ii) Articles in refereed conference proceedings

Full Paper

- S. Alves, A. Uribe-Quevedo, D. Chen, J. Morris, S. Radmard, “Developing a VR Simulator for Robotics Navigation and Human Robot Interactions Employing Digital Twins.” IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR), pp.1 – 5, March 12-16, 2022. Virtual. Accepted.
- M. Kamat, A. Uribe Quevedo, P. Coppin, “Tangible Construction Kit for Blind and Partially Sighted Drawers.” ACM International Conference on Tangible, Embedded and Embodied Interaction (TEI), pp.1 – 6, February 13-16, 2022. Virtual.
- G. Hollaender, J. Jandu, A. Uribe-Quevedo, A. Dubrowski. (January, 2022) “Prototyping an Augmented Reality Makerspace Microscope for Histology Education: Pilot Usability.” The International Meeting on Simulation in Healthcare (IMSH). Accepted.
- G. Ning, Q. Daggett, A. Perivolaris, B. Kapralos, A. Quevedo, KC Collins, K. Kanev, A. Dubrowski. “Rethinking audio-haptic perceptual immersion from in person to remote testing during COVID-19.” 14th International Conference on Interactive Mobile Communication Technologies and Learning, IMCL2021, pp.967 - 975, November 4-5, 2021. Virtual.
- R. Brown, S. Habibi-Luevano, Gil Robern, K. Wood, S. Perera, A. Uribe-Quevedo, C. Brown, K. Rizk, F. Genco, J. McKellar. K. Atkinson, A. Tokuhiro. (November, 2021) “Employing Mozilla Hubs as an Alternative Tool for Student Outreach: A Design Challenge Use Case.” 14th

International Conference on Interactive Mobile Communication Technologies and Learning, IMCL2021, pp.1041 - 1050, November 4-5, 2021. Virtual.

- S. Alves, A. Uribe Quevedo, D. Chen, J. Morris, S. Radmard. “Leveraging Simulation and Virtual Reality for a Long Term Care Facility Service Robot During COVID-19”. Symposium on Virtual and Augmented Reality, pp.187 – 191, October 18-21, 2021. Virtual.
- K. Wood, A. Uribe Quevedo, L. Penuela, S. Perera, B. Kapralos. “Virtual Reality Assessment and Customization Using Physiological Measures: A Literature Analysis.” In Symposium on Virtual and Augmented Reality, pp.64 – 73, October 18-21, 2021. Virtual.
- A. Uribe-Quevedo, B. Kapralos, D. Gualdron, A. Dubrowski, S. Perera, F. Alam, S. Xu. “Physical and Physiological Data for Customizing Immersive VR Training.” 2021 IEEE/ACIS 20th International Fall Conference on Computer and Information Science (ICIS Fall), pp.156 – 160, October 13-15, 2021. Virtual.
- F. Lillian, K. Wood, A. Uribe-Quevedo, S. Perera. "Development of a Physiological Responsive CANDU (CANada Deuterium Uranium) Fuel Channel Assembly VR Tool Prototype." 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), pp.1 - 6. August 4-6, 2021. Virtual.
- G. Federico, P. Hung, B. Kapralos, A. Quevedo, M. Jenkin, A. Tokuhiro, K. Kanev, H. Makoto, H. Mimura. "Specialized CNT-based Sensor Framework for Advanced Motion Tracking." Proceedings of the 54th Hawaii International Conference on System Sciences, pp.1898 – 1905, January 4-8, 2021. Virtual.
- T. Ortegon-Sarmiento, M. Vargas-Orjuela, A. Uribe-Quevedo, D. Rojas, B. Kapralos, N. Jaimes, B. Perez-Gutierrez. Developing Stethoscope Replicas for Cardiac Auscultation Training: A Comparison Between Virtual Reality, Mobile, and Makerspace. In International Conference on Games and Learning Alliance, pp.435 – 440, December 9-10, 2020. Virtual.
- Z. Fan, K. Brown, S. Nistor, K. Seepaul, K. Wood, A. Uribe-Quevedo, S. Perera, E. Waller. S. Lowe. “Use of Virtual Reality Technology for CANDU 6 Reactor Fuel Channel Operation Training.” International Conference on Games and Learning Alliance, pp.91 – 101, December 9-10, 2020. Virtual.
- A. Stevão, A. Quevedo, F.Nunes, M. Delamaro. "Understanding VR Software Testing Needs from Stakeholders’ Points of View." 2020 22nd Symposium on Virtual and Augmented Reality (SVR), pp.57-66. IEEE, November 7-10, 2020. Virtual.
- J. Yang, M. Chan, A. Uribe-Quevedo, B. Kapralos, N. Jaimes, A. Dubrowski. “Prototyping Virtual Reality Interactions in Medical Simulation Employing Speech Recognition.” 2020 22nd Symposium on Virtual and Augmented Reality (SVR), pp.351 – 355, November 7-10. Virtual.
- S. Matthews, A. Uribe-Quevedo, A. Theodorou. Rendering Optimizations for Virtual Reality Using Eye-Tracking. In 2020 22nd Symposium on Virtual and Augmented Reality (SVR), pp.398 – 405, November 7-10. Virtual
- T. Ortegon-Sarmiento, L. Penuela, A. Uribe-Quevedo. “Low Back Pain Attenuation Employing Virtual Reality Physiotherapy.” 2020 22nd Symposium on Virtual and Augmented Reality (SVR), pp.169 – 173, November 7-10. Virtual.
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- G. Tibamoso, B. Pérez, A. Uribe. “3D liver volume reconstructed for palpation training.” Studies in Health Technology and Informatics. Vol.184, pp.450 - 452, ISSN0926-9630, February 2013.
- A. Uribe, B. Pérez, S. Alves. “Video game interfaces for interactive lower- and upper-member therapy.” Studies in Health Technology and Informatics. v.184, pp.465 - 467, ISSN 0926-9630, February 2013.
- A. Uribe, B. Pérez. “3DUI assisted lower- and upper-member therapy.” Studies in Health Technology and Informatics. v.173, pp.521 - 523, ISSN 0926-9630, February 2012.
- D. Araque, R. Diaz, B. Pérez-Gutiérrez, A. Uribe. “Augmented reality motion-based robotics off-line programming.” IEEE Virtual Reality 2011, Singapore, March 1-3, 2011.

Extended Abstracts

- S. Valdivia, R. Blanco, A. Uribe, L. Penuela, D. Rojas, B. Kapralos. “Manikin 3DUI to demo spinal column flexion.” 12 Congreso Colombiano en Computación, Manizales, Colombia, September 20-22, 2017.
- A. Uribe, D. Rojas, M. Usman, A. Dubrowski, F. Moussa, B. Kapralos, N. Jaimes. “Cardiac auscultation serious game approach.” 4th International Conference on Serious Games and Applications for Health, Orlando, FL, USA, May 11-13, 2016.
- A. Uribe, B. Kapralos, A. Hogue, K. Kamen Kanev, M. Jenkin, and R. P. Barneva. “A multi-user tabletop display with enhanced mobile visuals for teaching and collaborative training.” Consortium for Computing Sciences in Colleges — Northeastern Region2016 Conference, Clinton, NY, USA, April 29-30, 2016.
- A. Uribe, D. Rojas, A. Dubrowski, B. Kapralos. “How can haptics realism be “gamed” to learn technical medical skills.” Medicine meets Virtual Reality, Los Angeles, CA, USA, April 7-9, 2016.
- B. Pérez-Gutiérrez, A. Uribe. “Ear anatomy and eye pathology virtual reality frame-work for educational purposes.” 1er Congreso Internacional de Simulación en Ciencias de la Salud 2011, Bogotá, Colombia, May 12-14, 2011.
- A. Uribe, B. Pérez-Gutiérrez, J. Rosario, L. Solaque. “Virtual reality motion-based framework for monitoring and distracting patients during lower member rehabilitation.” 1er Congreso Internacional de Simulación en Ciencias de la Salud 2011, Bogotá, Colombia, May 12-14, 2011.

Abstracts

- B.C.M. Fung, P.K. Hung, A. Tokuhiro, A. Uribe-Quevedo, K. Knev, H. Mimura, AI Data Glove Enhancements for Advanced Hand and Finger Motion Tracking and Analysis, Joint Research Center for Biomedical and Dental Engineering, Research Result Meeting, Reiwa, Year 4. March 4 (2022) , Tokyo Institute of Technology, Tokyo, Japan.
- G. Hollaender, A. Uribe-Quevedo, J. Abbass-Dick, A. Dubrowski, “Usability Gaps in Virtual Reality Health Education: A Scoping Review.” The 5th International Conference on The Future of Women (Future of Women 2022), February 24-25, 2022. Virtual. Accepted.
- H. Cameron Peters, K. Ihtesham, I. Amin, H. Awale, S. Perera, A. Quevedo, S. Lowe, “Conceptual Model of a CANDU Fuel Channel with Improved Axial Temperature Distribution.” Annual Canadian Nuclear Society Conference, June 5, 2022. Virtual. Accepted.
- A. Robinson, S. Perera, L. Travalja, A. Tokuhiro, R. Brown, N. Emanuel, A. Uribe-Quevedo, F. Genco, C. Brown, S. Lowe, K. Brown, P. Walsh, C. Chan, C. Zamfirescu, M. Hutt. “Building A VR Model of The CANDU Calandria For the Purpose of Teaching and Training.” Annual Canadian Nuclear Society Conference, June 5, 2022. Virtual. Accepted.
- A. Uribe-Quevedo, M. Sukhai, P. Coppin, T. Lee, R. Ingino. (March, 2022) “Immersive Technologies for Accessible User Experiences.” CSUN Assistive Technology Conference. Accepted and withdrew because of in person requirement despite current travel restrictions in Canada.
- J. Rushing, P. Kartick, A. Uribe-Quevedo, N. Jaimes, B. Kapralos, F. Alam, A. Dubrowski (March, 2022) “Customizing Virtual Reality Cardiac Auscultation Training Employing Upper Limb Ergonomics.” 2022 ACS Surgeons and Engineers. Accepted.
- D. Montero, A. Quevedo, B. Ko, B. Kapralos, R. Windrim, D. Rojas, “Development of a 3D User Interface for Twin to Twin Transfusion Syndrome Surgical Simulator.” 2022 ACS Surgeons and Engineers meeting
- G, Ning, B. Grant, B. Kapralos, A. Uribe-Quevedo, KC. Collins, K. Kanev, A, Dubrowski. (March, 2022). “Simulating a drilling task using audio, video, and simple kinesthetic cues.” Surgeons and Engineers. Accepted and withdrew because of in person requirement despite current travel restrictions in Canada.

- K. Wilcocks, B. Kapralos, A. Quevedo, A. Dubrowski, F. Alam. (March, 2022) "The ACSB (Anesthesia Crisis Scenario Builder) for Virtual Training." Surgeons and Engineers. Accepted and withdrew because of in person requirement despite current travel restrictions in Canada.
- D. Montero, D. Rojas, A. Uribe-Quevedo, B. Kapralos, "Twin-to-Twin Transfusion Syndrome Surgical Simulator: A makerspace prototype." Simulation Summit 2021, November 4-5, 2021. Virtual.
- F. Khan, A. Quevedo, B. Gino, A. Benson, A. Dubrowski. "CPR Simulator-Retrofitting a CPR Manikin by Developing an Add-on Device for Interactive Simulations." Cureus Journal of Medical Science. Poster, 2021.
- K. Brown, K. Seepaul, S. Nistor, A, Rezapoor, K. Wood, L. Fan, S. Perera, A. Uribe-Quevedo, S. Lowe, E. Waller, A. Tokuhiro. "Modifying the CANDU 6 Fuel Channel Assembly to Reduce Pressure Tube Sag Deformation by 10% at Fuel Channel Mid-life: Neutronics Analysis of Proposed Design Modifications." 2021 Women in Nuclear Canada Conference, October 17-21. Virtual.
- W. Sun, A. Uribe-Quevedo, R. Shewaga. "Co-Designing a Virtual Reality Framework to Enhance Reminiscence Therapy for Persons with Dementia", 4th International Conference on Medical Education Informatics, July 13, 2021. Virtual.
- A. Uribe Quevedo, K. Wilcocks, "Customizing Serious Play with Makerspace." Serious Play Conference, Montreal, QC, Canada, July 10-12, 2019
- B. Kapralos, J. Moo-Young, A. Uribe-Quevedo, F. Alam, C. Matava, A. Dubrowski. "Development of a Consumer-level Haptic Epidural Simulator." SimOne Expo 2019, Montreal, QC, October 21-22, 2019.
- A. Torres, B. Kapralos, A. Uribe-Quevedo, E. Zea, A. Dubrowski. "A Gamified Educational Network for Collaborative Learning." SimOne Expo 2019, Montreal, QC, October 21-22, 2019.
- T. Ortegon-Sarmiento, A. Uribe Quevedo, N. Jaimes, D.Rojas Gualdron, B. Kapralos, B. Perez-Gutierrez, "A Makerspace Stethoscope Replica for Cardiac Auscultation Mobile Practices." SimOne Expo 2019, Montreal, QC, October 21-22, 2019.
- M. Nguyen, D. Acosta, D. Gu, A. Uribe, B. Kapralos, M. Jenkin and K. Kanev, "Virtual Eye Fundus Examination". SimOne Expo 2017, Mississauga, ON, Canada, November 30 - December 1, 2017.
- M. Vargas, A. Uribe, B. Kapralos, D. Rojas and B. Perez, "Virtual Cardiac Auscultation: A Room-Scale and Mobile VR Approach". SimOne Expo 2017, Mississauga, ON, Canada, November 30 - December 1, 2017.
- K. Wilcocks, N. Halabi, P. Kartick, A. Uribe, B. Kapralos, and C. Chow, "The Angiogram Procedure Through Virtual Reality Patient Education". SimOne Expo 2017, Mississauga, ON, Canada, November 30 - December 1, 2017.
- M. Melaisi, A. Uribe and B. Kapralos, "The effect of sound on haptic fidelity perception for technical skills development in virtual simulations". Realities in Medicine 2018, Toronto, ON, Canada, April 6-7, 2018.
- D. Acosta, D. Gu, M. Chan, A. Uribe, B. Kapralos, M. Jenkin, N. Jaimes and K. Kanev, "An augmented and mixed reality approach to eye fundus Training". Realities in Medicine 2018, Toronto, ON, Canada, April 6-7, 2018.

(iii) Books - None

(iv) Book chapters

- G. Gaudi, B. Kapralos, K. Collins, A. Quevedo. Advances in Artificial Intelligence-based Technologies, chapter 2, "Affective Computing: An Introduction to the Detection,

Measurement, and Current Applications.", pp.25 – 43, October 2021. Editor: Maria Virvou, George A. Tsihrintzis, Lefteri H. Tsoukalas, Lakhmi C. Jain.

- M. Chan, A. Uribe-Quevedo, B. Kapralos, M. Jenkin, K. Kanev, N. Jaimes. Recent Advances in Technologies for Inclusive Well-Being: Virtual Patients, Gamification and Simulation, chapter 5, "A Review of Virtual Reality-Based Eye Examination Simulators", Vol.196, pp.83 - 102. Editors: Anthony Lewis Brooks, Sheryl Brahman, Bill Kapralos, Amy Nakajima, Jane Tyerman, Lakhmi C. Jain.
- E. Zea, M. Valez-Balderas, A. Uribe-Quevedo. A discussion. Recent Advances in Technologies for Inclusive Well-Being, chapter 8, "Serious Games and Multiple Intelligences for Customized Learning: A Discussion", Vol.196, pp.177 - 189. Editors: Anthony Lewis Brooks, Sheryl Brahman, Bill Kapralos, Amy Nakajima, Jane Tyerman, Lakhmi C. Jain.
- E. Vera, M. Orjuela, A. Uribe-Quevedo, B. Perez-Gutierrez, N. Jaimes. Recent Advances in Technologies for Inclusive Well-Being: Virtual Patients, Gamification and Simulation, chapter 9, "A Virtual Patient Mobile Application for Convulsive and Automated External Defibrillator Practices" Vol.196, pp.191 – 210, March 2021. Editors: Anthony Lewis Brooks, Sheryl Brahman, Bill Kapralos, Amy Nakajima, Jane Tyerman, Lakhmi C. Jain.
- maxSIMhealth, Recent Advances in Technologies for Inclusive Well-being virtual Patients, Gamification and Simulation, chapter 7, "maxSIMhealth: An Interconnected Collective of Manufacturing, Design, and Simulation Labs to Advance Medical Simulation Training", Vol.196, pp.141 – 176, March 2021. Editors: Anthony Lewis Brooks, Sheryl Brahman, Bill Kapralos, Amy Nakajima, Jane Tyerman, Lakhmi C. Jain.
- B. Kapralos, A. Uribe, A. Dubrowski. Encyclopedia of Computer Graphics and Games, "Immersive technologies for medical education", pp.1-8. Springer, December 2017. Editor: Lee Newton.
- S. Ortiz, A. Uribe, B. Kapralos. Computing in Smart Toys, chapter 3, "Designing hand tracked exergames with virtual toys", pp.35-54. Springer, August 2017. Editors: Jeff K.T. Tang, Patrick C. K. Hung.
- A. Uribe, B. Kapralos. Recent Advances in Technologies of Inclusive Well-Being: Wearables, Virtual Interactive Spaces (VIS)/Virtual Reality, Emotional Robots, Authoring tools, and Games (Serious/Gamification), chapter 7, "Exergaming for shoulder-based exercise and rehabilitation", pp.127-146. Springer, February 2017. Editors: Anthony Lewis Brooks, Sheryl Brahman, Bill Kapralos, Amy Nakajima, Jane Tyerman, Lakhmi C. Jain.
- A. Uribe, S. Valdivia, E. Prada, M. Navia, C. Rincon, E. Ramos, S. Ortiz, B. Pérez. Recent Advances in Technologies of Inclusive Well-Being: Wearables, Virtual Interactive Spaces (VIS)/Virtual Reality, Emotional Robots, Authoring tools, and Games (Serious/Gamification), chapter 6, "Development of an Occupational Health Care Exergaming Prototype Suite", pp.105-126. Springer, February 2017. Editors: Anthony Lewis Brooks, Sheryl Brahman, Bill Kapralos, Amy Nakajima, Jane Tyerman, Lakhmi C. Jain.
- A. Uribe, J. Rosario, J. Machado. Analysis and Design of Biological Materials and Structures, chapter 16, "Human gait: kinematics analysis and mechatronic simulation", pp.201–219 Springer, 2012. Editors: Andreas Öchsner, Lucas F. M. da Silva, Holm Altenbach.
- J. M. Rosario, D. Dumur, M. Moretti, F. Lara, A. Uribe. Advanced Strategies for Robot Manipulator, chapter 8, "Supervision and control strategies of a 6-DOF parallel manipulator using a mechatronic approach", 173–196. InTech, 2010. Editor: S. Ehsan Shafiei.

(v) Books edited - None

2. Non-Refereed Publications

- D. Moreno, M. Melaisi, A. Uribe, M. Vargas Martin, B. Kapralos. BCI Haptics Multimodal Interactions in Virtual Drilling. IMMERSe Meeting 2017, Carleton University, Ottawa, ON, Canada, June 2017.

- L. Garcia, A. Uribe, B. Kapralos. A Heart-Beat Sound Generator for Cardiac Auscultation Training. IMMERSe Meeting 2017, Carleton University, Ottawa, ON, Canada, June 2017.
- A. Uribe, B. Kapralos, M. Jenkin, K. Kanev, D. D. Rojas Acosta, S. Prada, M. Vargas, M. Nguyen, D. Gu. Developing Experiences on VR for Cardiac Auscultation and Eye Examination. IMMERSe Meeting 2017, Carleton University, Ottawa, ON, Canada, June 2017.
- A. Uribe, D. Rojas, A. Dubrowski, B. Kapralos. Closing the gap between game-related technologies and health professions education. IMMERSe Meeting 2015, the Games Institute at the University of Waterloo, Waterloo, ON, Canada, November 2015.
- A. Uribe, D. Rojas, B. Kapralos, A. Dubrowski. Serious games and multimodality: visual, haptics, and sound cues on learning medical skills. IMMERSe Meeting 2015, the Games Institute at the University of Waterloo, Waterloo, ON, Canada, November 2015.

3. Manuscripts/publications etc. in preparation and submitted to publishers but not yet accepted.

- Journal
  - G. Ning, B. Grant, B. Kapralos, A. Quevedo. KC Collins, K. Kanev, A. Dubrowski. "Understanding Virtual Drilling Perception Using Sound, and Kinesthetic Cues Obtained with a Mouse and Keyboard." Journal on Multimodal User Interfaces, pp.1 - 17. Submitted November 2021.
- Conference:
  - T. Tsiliopoulos, A. Uribe-Quevedo, M. Vargas Martin. "Effects of Virtual Reality Password Input on Usability, Memorability and Cognitive Load." International Conference on Human-Computer Interaction. Springer, Cham. S. June 25 – July 1, 2022. **Submitted**
  - T. Tsiliopoulos, M. Vargas Martin, A. Uribe-Quevedo. "A Novel Virtual Reality Spatial User Interface for Ease of Input and Password Memorability." ACM Conference on Computer and Communications Security (CCS). In preparation.
  - B. Ko, D. Montero, A. Uribe-Quevedo, R. Windrim, D. Rojas. "Development of a Novel Virtual Reality Twin-to-Twin Transfusion Simulator Syndrome Surgical Simulator." IEEE Serious Games and Applications for health (SeGAH). In preparation.
  - S. Valdivia, R. Blanco, L. Penuela, A. Uribe-Quevedo, B. Kapralos, D. Rojas. "Lower Back Standing Hamstring Exergame: A Computational Cost Comparison Employing Open Electronics." IEEE Serious Games and Applications for health (SeGAH). In preparation.

4. Invited Lectures

- Engineering Week, "User-Based Metrics Customization for Improving Task Completion Virtual User-Based Metrics Customization for Improving Task Completion Virtual", Universidad Militar Nueva Granada, September 27, 2021. Virtual.
- Integrated Studies Week, "Design Thinking for Custom-made User Interfaces", FAGAMMON, May 13, 2021, Minas Gerais, Brazil. Virtual
- Science Odyssey 2021, "Immersive Technologies for Accessible User Experiences", (http://www.sciod.ca/event/2385/) – May 1, 2021. Virtual.
- IEEE EMB Series, "Extended Reality in Simulation and Training: Challenges, Opportunities and Trends", November 12, 2020.
- Robotics and AI presentation at CNIB's Connecting the Dots Conference, October 23, 2019, Toronto, ON, Canada
- Customizing Serious Play with Makerspace – Workshop, Serious Play Conference, July 10-12, 2019.

- A. Uribe. Developing VR/AR experiences for training. Ontario Power Generation Suppliers Day 2018, Darlington, ON, Canada, September19, 2018
- A. Uribe. Custom-made User Input Devices in Serious Game Design. Serious Play Conference 2018, Buffalo, NY, USA, July 16-17, 2018.
- Cardiac Auscultation with Virtual Reality: from the Sim Lab to Home, A. Uribe, M. Vargas, D. Rojas, B. Kapralos B. Perez, II International Symposium on ITC in Education and Sustainable Development, Universidad de Manizales, Manizales, Colombia. October 5, 2017.
- State of the art and challenges for developing immersive VR and mixed reality games, IV Regional Science and Technology Meeting, Universidad de Cundinamarca, Fusagasugá, Cundinamarca, Colombia. September 14, 2017.
- A Cardiac Auscultation and Eye Examination Training: A Serious Game Approach. Alvaro Uribe, Bill Kapralos, Jairo Correa Gregory Lecture, Universidad Pontificia de Bucaramanga, Bucaramanga, Colombia. February 23, 2017
- Videogames and medical training, an interdisciplinary work. Alvaro Uribe, Engineering Week, Universidad Militar Nueva Granada, Bogotá, Colombia. September 14, 2016.
- Serious gaming for medical education: overview, multi-modal interactions, and open problems. Bill Kapralos, Alvaro Uribe, NSERC CREATE Collaborative Learning in Usability Experiences (CLUE) Seminar Series, Carleton University, Ottawa, Canada. April 27, 2016.
- Occupational health exergames applications, Computer Science Seminar Series, Ryerson University, Toronto, Canada. November 5, 2015.
- Virtual reality, I Regional Science and Technology Meeting, Universidad de Cundinamarca, Fusagasugá, Cundinamarca, Colombia. October 15, 2014.
- Lower limb device integrated to a virtual reality system as a physical therapy tool, Engineering Week, Multimedia Engineering day, Universidad Militar Nueva Granada, Bogotá, Colombia. October 2011.
- Lower member rehabilitation device integrated with a perambulator, Colombian Workshop in Robotics and Automation, CWRA 09, Universidad Militar Nueva Granada, Bogotá, Colombia. September 14, 2009.
- Virtual environment object manipulation, using an anthropomorphic gripper with an industrial robot, Robocontrol 08, 3rd Applied Robotics and Collaborative Systems Engineering with emphasis in Industrial Applications and Educational Environments Workshop, UNESP, Bauru, São Paulo, Brazil. December 3, 2008.
- Virtual reality and industry, CogniCiencia 06, Bogotá, Colombia. June 8, 2006.

5. Editorial positions for scholarly journals

- Science and Engineering Journal, Universidad Militar Nueva Granada. Journal editorial committee member – January 2017- July 2017
- Editors: A. Uribe, Newton Lee, Patrick Hung. Special issue on Deep Learning, Ubiquitous and Toy Computing. ACM Computers in Entertainment Journal. Published April 2018

6. Event Organization

- Organizing committee, Workshop on Best Practices of Serious Games Testing, 2021 IEEE/ACIS 21st International Fall Conference on Computer and Information Science, October 13-15. Virtual.
- 5th Electronics Games Congress, Jorge Tadeo Lozano University, Central University, Universidad Militar Nueva Granada, SR Producciones Ltda., Bogotá, Colombia, May 13-15, 2017.
- 2nd Workshop in Engineering Medical Applications, Universidad Militar Nueva Granada, Bogotá, Colombia, September 14-15, 2016.

- 1st Workshop in Engineering Medical Applications, Universidad Militar Nueva Granada, Bogotá, Colombia, June 5-6, 2015.
- Serious Games = Serious Business Workshop, University of Shizuoka, Hamamatsu, Japan, March 5-6, 2015.
- LARC-LARS-CCAC & IASCW 2011, XI Latin American Robotics Competition & Colombian Conference on Automatic Control & II Industry Applications Society Colombian Workshop, October 1-4, 2011.
- Robocontrol 08, 3rd Applied Robotics and Collaborative Systems Engineering with emphasis in Industrial Applications and Educational Environments Workshop, December 1-2, 2008.
- 23rd ISPE International Conference on CAD/CAM, Robotics & Factories of the Future - CARS & FOF'07, August 7-10, 2007.

7. Awards

- Best Poster Award, Nguyen M., Smith J., Alison N., Rushing J., Lindo T., Shamon T., Perera S., A. Uribe Quevedo, Waller E., Tokuhiro A., Development of a Model for Attenuating Radiation in VR for Nuclear Safety Awareness. IEEE Serious Games and Applications for Health Conference 2019, August 2019. Kyoto, Japan.
- Best Paper Award, IEEE Information, Intelligence, Systems and Applications Conference 2018, L. Micelli, D. Acosta, F. Lamberti, A. Uribe, B. Kapralos. "Extending upper limb user interactions in AR, VR and MR headsets employing a custom-made wearable device." The International Conference on Information, Intelligence, Systems and Applications 2018, Zakynthos, Greece, July 23-25, 2018.

D. TEACHING ACTIVITIES

1. Undergraduate courses taught

- Industrial Design for Game Hardware – Winter 2022 – Major responsibility.
- Intermediate Computer Graphics – Winter 2022 – Major responsibility.
- Game Engine Design & Implementation Fall 2021 – Major responsibility.
- Industrial Design for Game Hardware – Fall 2020 – Major responsibility.
- Technical Elective Industrial Design for Game Hardware – Winter 2020 – Major responsibility.
- Intermediate Computer Graphics – Winter 2020.
- Direct Studies in IT (Joint course with the Shizuoka University, Hamamatsu, Japan) – Winter 2020 – Major responsibility.
- Game Engine Design & Implementation – Fall 2019.
- Special Topics – Emerging Technology – Fall 2019 – Major responsibility.
- Special Topics in IT – Summer 2019 – Major responsibility.
- Direct Studies in IT (Joint course with the Shizuoka University, Hamamatsu, Japan) – Winter 2019 – Major responsibility.
- Special Topics – Emerging Technology – Winter 2019 – Major responsibility.
- Game Engine Design & Implementation – Fall 2018.
- Technical Elective Industrial Design for Game Hardware – Fall 2018 – Major responsibility.
- Special Topics – Emerging Technology – Winter 2018 – Major responsibility.
- Intermediate Computer Graphics – Winter 2018.
- Direct Studies in IT (Joint course with the Shizuoka University, Hamamatsu, Japan) – Winter 2018.
- Game Engine Design & Implementation – Fall 2017.

Universidad Militar Nueva Granada

- Computer Graphics, January – May 2017 – Major responsibility.
- Industrial Design, January – May 2015, July – September 2015 – Major responsibility.
- 3D Applications, July – September 201– Major responsibility.
- Virtual Environments, July – November 2013, January – May 2014, July – November 2014, January – May 2015, July – September 2015 – Major responsibility.
- Animatronics, January – May 2013. Multimedia Engineering – Major responsibility.
- Technical Design, January – May 2013. Industrial Engineering – Major responsibility.
- Research Seminar, Technical Design, Automation Control and Robotics, July – November 2012. Industrial Engineering – Major responsibility.
- Introduction to Engineering, Introduction to Computer Graphics, Computer Graphics, Simulation, January – May 2012. Multimedia Engineering – Major responsibility.
- Virtual Reality, July - November 2005, January – May 2006, July – November 2006, January – May 2007. Multimedia Engineering – Major responsibility.
- Virtual Reality, July – November 2006, January – May 2007. Mechatronics Engineering – Major responsibility.

2. Graduate courses taught

- Advanced Topics in Multimedia, Computer Science, Fall 2021 – Major responsibility.
- Direct Studies in Computer Interfaces Media stream, Computer Science, Fall 2018 – Major responsibility.
- Direct Studies in Advanced Topics in Digital Media, Computer Science, Winter 2019 – Major responsibility.

Universidad Militar Nueva Granada

- Master's Research Seminar (Major responsibility). Mechatronics Engineering. 2014-2017.

Universidad El Bosque

- Information and Communication Technologies in Education Seminar. Education Master's. 2012-2015.

3. Thesis/Projects supervised.

(i) Masters Students:

- Colin, Volumetric, September 2021 – August 2023. Thesis. Supervisor: Andrew Hogue. Co-supervisor: Alvaro Uribe Quevedo.
- Julia, Augmented Reality Training Tool for Needle Insertion, September 2021 – August 2023. Thesis. Supervisor: Andrew Hogue. Co-supervisor: Alvaro Uribe Quevedo.
- Stephen, Immersive Adaptive Hand Exergame to Support Care Givers in Long Term Care Facilities, September 2021 – August 2023. Thesis. Principal supervisor: Alvaro Uribe Quevedo.
- Bill K. Immersive Vs. non-immersive Usability Effects on the Twin-Twin Transfusion Syndrome Medical Simulator. May 2021 – April 2023. Thesis. Principal supervisor: Alvaro Uribe Quevedo. Co-supervisor: Bill Kapralos, David Rojas
- Gabrielle Hollaender, Virtual Reality Immersive Breastfeeding Latching Simulator. September 2019 – August 2021. Thesis. Supervisor: Adam Dubrowski. Co-supervisor: Alvaro Uribe Quevedo.
- Tom Tsiliopoulos, Effects of Virtual Reality Password Input on Usability, Memorability and Cognitive Load, May 2020 – December 2022. Thesis. Principal supervisor: Alvaro Uribe Quevedo. Co-supervisor: Miguel Vargas Martin.
- Kurtis Ning, Auditory Cues in the Simulation of Haptic-Based Tasks Using Standard Computer Hardware, May 2019 - June 2021. Thesis. Supervisor: Bill Kapralos. Co-supervisor: Alvaro Uribe Quevedo.

- Kody Wood, A physiological measures framework for VR usability. September 2019 – April 2022. Thesis. Principal supervisor: Alvaro Uribe Quevedo. Co-supervisor: Bill Kapralos.
- Sage Matthews, Eye tracking usability framework for improving VR task completion. September 2019 – Incomplete due to COVID-19. Thesis. Principal supervisor: Alvaro Uribe Quevedo. Co-supervisor: Bill Kapralos
- Kyle Wilcocks, The Development of an Anesthesia Crisis Scenario builder for Virtual Reality Training. September 2018 - August 2019. Thesis. Supervisor: Bill Kapralos. Co-supervisor: Alvaro Uribe Quevedo.
- Christopher Carmichael, William Wang, VR framework as a non-literacy alternative to increase work readiness awareness for job seekers, NSERC Engage. March – August 2019. Supervisor: Alvaro Uribe Quevedo. Industry Partner: Origin.
- Saverio Cinieri, Eye Tracking to Detect Mood and Emotions to Allow Intelligent Human-Avatar Communication, Mobilit Extra-UE/Non ERASMUS+ scholarship October 2018 to January 2019. Thesis. Supervisor: Fabrizio Lamberti, Bill Kapralos. Co-supervisor: Alvaro Uribe Quevedo.
- Priya Kartick, Development of a virtual reality usability framework, September 2018 to present. Thesis. Supervisor: Alvaro Uribe Quevedo.
- Christopher Carmichael, Development of a walking user interface for virtual reality, January 2018 – December 2019. Thesis. Supervisor: Alvaro Uribe Quevedo.
- Michael Chan, Development of an eye examination virtual reality framework, January 2018 – March 2020. Thesis. Supervisor: Alvaro Uribe Quevedo. Co-supervisor: Bill Kapralos.
- Robin Blanco, Biometric data acquisition for autonomous vehicles passenger's experience, January 2018 – June 2018. Emerging Leaders in the Americas scholarship. Université du Québec à Trois Rivières UQTR. Supervisor: Sousso Kelowani. Co-supervisor: Alvaro Uribe Quevedo.
- Mohamed Melaisi, Multimodal interactions (audio + haptic) and the effects of audio + haptic cues in serious games, January 2016 – December 2018. Secondary supervisor. Thesis.
- Thomas Gaudi, Application and development of serious games to assist children with autism, September 2015 – November 2019. Part-time. Thesis. Supervisor: Bill Kapralos. Co-supervisor: Alvaro Uribe Quevedo.
- Luca Micelli, Extending upper limb user interactions in AR, VR and MR headsets employing a custom-made wearable device, October 2017 – January 2018. Mobilit Extra-UE/Non ERASMUS+ scholarship. Thesis. upervisor: Fabrizio Lamberti, Bill Kapralos. Co-supervisor: Alvaro Uribe Quevedo.
- Rob Shewaga, A comparison of seated and room-scale VR on medical-based serious games and virtual simulation, September 2015 – December 2016. Thesis. Supervisor: Bill Kapralos. Co-supervisor: Alvaro Uribe Quevedo.

OCAD University

- Mitali Kamat, Co-Designing a Cross-Sensory 3D Drawing Interface for and with Blind and Partially Sighted Drawers during COVID-19, June 2020 – December 2021. Primary supervisor: Peter Coppin, OCAD U. Co-supervisor: Alvaro Joffre Uribe Quevedo.

Universidad Militar Nueva Granada

- Tatiana Ortegon, Design and development of a user interface prototype for VR cardiac auscultation training, January 2017 - February 2019. Thesis, Primary supervisor.
- Ricardo Guerrero, Design and implementation of a virtual reality device to monitor flexion/extension movements of the human hand, February 2014 – July 2017. Thesis. Primary supervisor.
- Julian Davila, Modeling of a flexible manufacturing system to automate pro-duction programming, November 2013 – May 2016. Thesis. Primary supervisor.

Universidad El Bosque

- Monica Patiño, Natalia Parra, Pedagogic guidelines to use and appropriate ICT in teaching practices, July 2012 – December 2013. Thesis. Primary supervisor.
- Lina Gamboa, Design of a strategy to analyze didactic contents in digital osteo-muscular anatomy, December 2012 – July 2014. Thesis. Primary supervisor.

(ii) Doctoral Students:

- Tatiana Ortegon, Enhancing Lane Detection and Driver's Responses in Emergency Scenarios employing Virtual Reality. January 2021 – December 2025. Primary supervisor: Sousso Kelowani. Co-supervisor: Alvaro Joffre Uribe Quevedo.
- Thomas Gaudi, Factoring emotion in serious games for customized user interactions. Thesis. Secondary supervisor. January 2020 – December 2026. Primary supervisor: Bill Kapralos. Co-supervisor: Alvaro Joffre Uribe Quevedo.
- Andrei Torres, VR framework as a non-literacy alternative to increase work readiness awareness for job seekers, NSERC Engage. March – August 2019. Primary supervisor.

(iii) Undergraduate Students:

- Craig Holder, Dylan Brush, Maija Kinnunen, Hao Tian Guan, Improving Aether's Virtual Reality Simulation for Fall Detection and Human Robot Interactions with Elderly Avatars. January – April 2022. Primary supervisor: Jon Morris, JDQ Systems. Co-supervisors: Alvaro Joffre Uribe Quevedo, Silas Alves.
- Pious Joseph, Development of Virtual Laboratory Replicas for Student Outreach. September 2021 – April 2022.
- Robson Basha, Development of a VR prototype sandbox. May 2021 – April 2022.
- Logan Soulliere, Adam Kahil, Development of Virtual Reality Car Simulation for the Automotive Center of Excellence. September – December 2021. Co-supervisor. Partnership: ACE, Ontario Tech University.
- Ibrahim Amin, Ihtesham Khan, Hayden Peters, Hassan Awale, Conceptual Model of a CANDU Fuel Channel with Improved Axial Temperature Distribution. September 2021 – April 2022. Capstone. Co-supervisor. Partnership with the Faculty of Energy Systems and Nuclear Sciences.
- Jeremy Kan, Nathaniel Moore, Developing a Virtual Gathering room for the Durham Region Rural Challenge. July – October 2021. Primary supervisor. Partnership: Brilliant Catalyst, Ontario Tech University.
- Anthony Smiderle, Jonathan Jay, Samuel Canonaco, Kimberly Hansuwan, Seshawn Suresh, Hamraj Rai, Development of Virtual Reality Car Simulation for the Automotive Center of Excellence. Capstone. July – August 2021. Co-supervisor. Partnership: ACE, Ontario Tech University.
- Daniel Presas, Development of a Facial Tracking Tool for Virtual Reminiscence Therapy. March 2021 – February 2022. Primary supervisor.
- Jessica Le, Ziqi Fan, Net zero energy serious game, May - June 2021. Primary supervisor.
- Gil Robern, Jessica Le, Zachary Allen, Logan Soulliere, Rowan Luckhurst, Ziqi Fan, Net zero energy serious game, October 2020. Primary supervisor.
- Robson Basha, Mozilla Hubs development for student outreach, September – December 2020. Primary supervisor.
- Esam Uddin, Experimental teaching tools for online teaching, September – December 2020. Primary supervisor.
- Gil Robern, Web-based immersive and non-immersive VR for pick and place remote interactions. May – July 2020. Primary supervisor.
- Samin Habib-Luevano, Ryan Brown, Mozilla Hubs Design Challenge 2020 Faculty of Energy Systems and Nuclear Sciences, May-June 2020. Co-supervisor
- Lillian Fan, VR Serious Game for CANDU assembly, March – July 2020. Primary supervisor.

- Angela Tabafunda, Twin-Twin simulator makerspace prototyping, July – December 2020. Primary supervisor.
- Angela Tabafunda, Non-immersive media navigation for reminiscence therapy, March -December 2020. Primary supervisor.
- Amtoj Uppal, Josh Sankarlal, Friendship Lab, University of Toronto, June – December 2020. Co-supervisor.
- Kaitlyn Brown, Karishma Seepaul, Stephane Nistor, Alborz Rezapoor, Redesigning the CANDU 6 fuel channel assembly to reduce pressure tube sag deformation by 10% at fuel channel mid-life, September 2019 – April 2020. Secondary supervisor. Partnership Faculty of Energy Systems and Nuclear Sciences, Ontario Tech University.
- Nathan Alphonse, Jon Waaler, Jake Jandu, Rishab Jain, Development of a Virtual Autonomous Vehicle for Comparing Steering and Breaking Responses on Ice Road Conditions between a Human and a Fuzzy Logic Driver. January – April 2020. Partnership with Université du Québec à Trois Rivières.
- Christopher Brown, Zachary Labas, Aidan Fallis, Jason Chau, VR Chem Lab. January – April 2020. Secondary supervisor. Partnership with A Square Quality Training.
- Gabrielle Hollaender, Breastfeeding online multimedia, December 2019 – April 2020. Secondary supervisor. Partnership Faculty of Health Sciences, Ontario Tech University.
- Saran Krishnaraja, Development of an Ontario Tech U themed makerspace controller. October 2019. Primary supervisor.
- Matthew Paraskevakos, Developing Mozilla Hubs Environments for Inclusive Design. April 2020-August 2020, Ontario Tech U – OCAD U collaboration. Co-supervisor.
- Matthew Paraskevakos, VR framework as a non-literacy alternative to increase work readiness awareness for job seekers, NSERC Engage. July – September 2019. Primary supervisor.
- Juan Ponce, Extending user interactions in virtual, augmented and mixed reality, MITACS Globalink. May – August 2019. Primary supervisor.
- Marco Valdez-Balderas, Prototyping of a virtual reality walking user interface, Undergraduate Summer Research Award. May – August 2019. Primary supervisor.
- Tom Tsiliopoulus, Joss Moo-Young, Mattew Demoe, Regan Tran, Julia Smith, Minh Nguyen, Development of a Model for Attenuating Radiation in VR for Nuclear Safety Awareness 2.0. June – August 2019. Partnership Faculty of Energy Systems and Nuclear Sciences, Ontario Tech University. Primary supervisor.
- Jon Ben Oliver, Saran Krishnaraja, Matthew Paraskevakos, Bill Ko, Virtual Reality Hands-On Evaluation PSHSA Working at Heights Training, April 2019. Primary supervisor.
- Leon Mohorovic, Alex Asaro, Laurence Gemmel-Brown, Kody Wood, Talib Rashdi, Yiren Cao, Katie Sebele, Development of a Model of Radioactive Plume Path Program for Accident Scenario Response Readiness. September 2018 – April 2019. Secondary supervisor. Partnership Faculty of Energy Systems and Nuclear Sciences, Ontario Tech University.
- Minh Nguyen, Julia Smith, Nicole Alison, Jackson Rushing, Thomas Lindo, Tyler Shamon, Development of a Model for Attenuating Radiation in VR for Nuclear Safety Awareness. September 2018 – April 2019. Secondary supervisor. Partnership Faculty of Energy Systems and Nuclear Sciences, Ontario Tech University.
- Wen Bo Yu, Connor Smiley, Collaborative/competitive adaptive VR training environments, October 2018 – January 2019. Primary supervisor.
- Alvaro Hernandez, Development of a lower limb interactive VR scene employing motion data from a smartwatch, Emerging Leaders in the Americas scholarship. September 2018 – January 2019. Primary supervisor.
- Alix Angarita, Biomechanical human gait motion capture employing a smartwatch, Emerging Leaders in the Americas scholarship. September 2018 – January 2019. Primary supervisor.
- Jackson Rushing, Development of VR usability framework, May 2018 – April 2019. Research Assistant. Primary supervisor.

- Joss Moo-Young, Development of USEIT – A new epidural simulator, Undergraduate Summer Research Award. April 2018 – August 2018. Secondary supervisor.
- Jacky Yang, Prototyping immersive interactions with artificial avatars in virtual reality, Undergraduate Summer Research Award. April 2018 – August 2018. Primary supervisor.
- Ana Espinosa, Development of method for comparing positive and negative non-verbal communication cues on medical-patient simulated interactions, MITACS Globalink scholarship. May 2018 – August 2018. Secondary supervisor.
- David Zhao, A BCI framework for virtual Reality applications. April 2018 – August 2018. Capstone.
- Andrew Aultman, Spencer Dowie, Nelly Hamid, Augmented Reality Tabletop Game, September 2017 – April 2018. Capstone Project. Primary supervisor.

Universidade Federal de Minas Gerais, Minas Gerais, Brazil

- Diego Santos, Voice Assisted Keyboard for Web Browsing Tasks, June 2021 -February 2022. Co-supervisor.

Universidad Militar Nueva Granada

- Erikson Romero, Santiago Reina, Design and Implementation of an Artificial Intelligence Plugin for Unreal Engine 4. December 2019 – July 2021. Co-supervisor.
- David Acosta, Development of an eye examination VR tool for training, November 2016 – April 2018. Awarded with the Emerging Leaders in the Americas Scholarship, October 2017 - February 2018 to visit the University of Ontario Institute of Technology. Primary supervisor.
- Sergio Prada, Development of a cardiac auscultation game, March 2016 – April 2017. warded with the Emerging Leaders in the Americas Scholarship, January-April 2017 to visit the University of Ontario Institute of Technology. Primary supervisor.
- Saskia Ortiz, Development of a hand tracking exergame, June 2015 – June 2016. Primary supervisor.
- Juan Garay, Development of an informative geocaching augmented reality game, April 2015 – May 2016. Primary supervisor.
- Juan Parra, Characterization and development of a first-person shooter urban scene simulator, May 2015 – March 2016. Capstone. Primary supervisor.
- Diego Zornoza, Characterization and development of a first-person shooter jungle scene simulator, May 2015 – March 2016. Capstone. Primary supervisor.
- Camilo Zambrano, Ccharacterization and development of a first-person shooter rural scene simulator, May 2015 – March 2016. Capstone. Primary supervisor.
- Jeferson Pardo, Characterization and development of a first-person shooter training scene simulator, May 2015 – March 2016. Capstone. Primary supervisor.
- Robinson Díaz, Characterization and development of a first-person shooter haptics simulator, February 2015 – September 2015. Capstone. Primary supervisor.
- John Prada, Characterization and development of an optical tracking system for aiming in a first-person shooter simulator, February 2015 – September 2015. Capstone. Primary supervisor.
- Estefania Ramos, Development of motion capture device for lower limb exercising, November 2014 – September 2015. Primary supervisor.
- Santiago Torres, Development of 3D hack and slash game level, November 2013 – February 2015. Primary supervisor.
- Wilson Nava, Cesar Ramos, Development of a serious game prototype to exercise the shoulder and elbow, March 2014 – February 2015. Primary supervisor.
- Armed Díaz, Informative multimedia to identify eye pathologies through haptic devices, March 2014 – October 2014. Capstone. Primary supervisor.
- Cristian Fraile, Development of an interactive surgery room, February 2014 -November 2014. Capstone. Primary supervisor.

- Pedro Fuentes, Virtual tour of the Universidad Militar Nueva Granada, March 2014 – October 2014. Capstone. Primary supervisor.
- Nichole Dzeka, Natalie Higuera, Development of a multimedia too to learn the execution of the clavicle central venous access on neonate, March 2014 – October 2014. Capstone. Primary supervisor.
- Juan Castro, Development of an interactive virtual mannequin to perform the central venous access, September 2013 – September 2014. Secondary supervisor.
- Santiago Bedoya, Cristian Gómez, Pattern recognition system for an RPG augmented reality card game, February 2013 – February 2014. Secondary supervisor.
- Camila Ballesteros, Diego Vidal, Development of a virtual laboratory to study free fall objects in ideal conditions with uniform and non-uniform atmospheres, August 2013 – March 2014. Primary supervisor.
- Camila Melo, Development of virtual ear anatomy multimedia tool, September 2013 – July 2014. Capstone. Primary supervisor.
- David Ballesteros, Reflex measurement when driving using a car simulator, February 2013 – August 2013. Capstone. Primary supervisor.
- David Velandia, Interactive multimedia to visualize various eye pathologies, February 2013 – September 2013. Primary supervisor.
- Juan González, Functional design of an immersion laboratory for the Multi-media Engineering Program, February 2013 – January 2014. Capstone. Primary supervisor.
- Camilo Rincón, Development of a multimedia tool for active pauses using motion capture, February 2013 – August 2013. Capstone.
- Eduardo Camelo, Characterization and implementation of a driving simulator, February 2013 – August 2013. Capstone. Primary supervisor.
- Sergio Valdivia, Design document for the development of a serious game aimed to lower limb physical therapy with limited motion, January 2013 – August 2013. Capstone. Primary supervisor.
- Engie Ruge, Development of a child interactive tale using augmented reality, December 2012 – July 2013. Primary supervisor.
- Eliana Prada, Development and implementation of an interactive multimedia using augmented reality as a complement in mechanical physics laboratory, July 2012 – July 2013. Primary supervisor.

(iii) Post-Doctoral Fellow

- Silas Alves, Empowering a Collaborative Service Robot Prototype for Long-term Care Facilities. October 2020 – September 2022. Primary supervisor.

4. Other Teaching and Lectures Given

- A. Dubrowski, A. Uribe-Quevedo, Graduate Seminar, Faculty of Health Sciences, Ontario Tech U. “Knowledge Translation and Media”, February 9, 2022.
- Faculty of Health Sciences, Ontario Tech U. “How to run an immersive environment for online classes using low tech”, November 10, 2021.
- A. Dubrowski, A. Uribe-Quevedo, maxSIMhealth, “Scientific writing workshop”, May 28, 2021.
- Graduate Seminar, Faculty of Health Sciences, Ontario Tech U. “User-Based Metrics Customization for Improving Task Completion in Virtual Reality”, November 18, 2020.
- Inclusive Design, “Accessibility in Virtual Reality”, OCAD U, June 16, 2021. Virtual.
- Small and Medium Reactors Design Faculty of Engineering and Nuclear Sciences Design Challenge. “Introduction to mobile VR”, Ontario Tech University, June 6, 2020. Virtual.
- Faculty of Health Sciences, Ontario Tech U. “User-based metrics customiza”
- Augmented Reality Summer AR Intensive, “Developing VR and AR strategies to include remote students in hands-on design prototyping for an online project course (with implications for interconnected makerspaces in local communities of remote learners)” project funded by the

Human Digital Experience Ontario Tech University – OCAD University Partnership, June 03-10, 2019.

- Developing VR/AR experiences for training, Lecture for the Inclusive Design Program on the Cognitive Semiotics Summer Intensive Course, OCAD University, August 13, 2019.
- Virtual Reality + IoT: Trends and Challenges, Lecture to Information Security Management, and Internet of Things students from Duale Hochschule Baden-Württemberg (DHBW), July 30, 2019.
- International Course on Virtual reality, Universidad Militar Nueva Granada, Bogota, Colombia, August 27-31, 2018.
- Lecture on Custom-made User Input Devices in Serious Game Design, Duale Hochschule Baden-Württenberg (DHBW), Summer program. August 1, 2018.
- Virtual Reality and Simulation, Institut de recherche sur l'hydrogène, Université du Québec à Trois Rivières, May 29-30, 2018
- Matlab basics, Mechatronics Engineer IEEE student branch, Universidad Militar Nueva Granada, Bogotá, Colombia. April 4-11, 2011.
- Virtual reality introduction, Central University, Bogotá, Colombia. July 2009.

E. SERVICE AND ADMINISTRATIVE POSITIONS

1. University Service

University of Ontario Institute of Technology

- FBIT Director of Experimental Teaching, July 2020 – October 2021.
- FBIT International Committee, September 2019 – August 2020.
- FBIT Research Committee. September 2018 – August 2019.
- Computer Science Master Committee. February 2018 – present.

Universidad Militar Nueva Granada

- Graduate Studies Director, Faculty of Engineering, November 2016 – June 2017.
- Research Center Director, Faculty of Engineering, January 2014 – June 2014.
- Editorial board member, Science and Engineering Journal, January 2017 – June 2017.

2. Other Service Activities

- Faculty of Business and IT Faculty Councils. University of Ontario Institute of Technology
- Game Development and Entrepreneurship program meetings. University of Ontario Institute of Technology
- Reviewer:
    - Journal:
        - Applied Sciences MDPI Journal.
        - Artificial Intelligence in Medicine Journal.
        - Computers and Electrical Engineering.
        - Cureus.
        - Elsevier Digital Communications and Networks.
        - Future Internet MDPI Journal.
        - IEEE Access Journal.
        - IEEE Consumer Electronics Magazine.
        - IEEE Transactions in Games.
        - IEEE Transactions on Learning Technologies.
        - IEEE Transactions on Vehicular Technology.
        - International Journal of Human - Computer Studies.
        - MDPI Encyclopedia.
        - SPRS International Journal of Geo-Information, MDPI Journal.
        - Sustainability MDPI Journal.
        - Transactions on Learning Technologies.

- Conferences:
  - Computer Human Interactions CHI.
  - Conference on Computer and Robot Vision CRV.
  - EEE International Conference on Information, Intelligence, Systems and Applications.
  - IEEE ACIS International Fall Virtual Conference on Computer and Information Science.
  - IEEE Games, Entertainment and Media.
  - IEEE Immersive Learning Networks iLRN.
  - IEEE Serious Games and Applications for Health SeGAH.
  - IEEE VR.
  - International Conference on Human Computer Interaction Theory and Applications HUCCAP.
  - International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications.
  - Symposium on Virtual and Augmented Reality 2021.

F. OTHER RELEVANT INFORMATION

- Other presentations at events:
  - CNIB Connecting the Dots 2020, "Virtual Reality Consumer-Level Research and Applications", October 15, 2020.
  - Game Jam at Trinity College School in Port Hope, February 2, 2019.
  - A. Uribe. Developing VR/AR experiences for training. Ontario Power Generation Suppliers Day 2018, Darlington, ON, Canada, September 17, 2018.
  - A. Uribe. Virtual Reality and Simulation. VR Open house at Lakeridge Health, Oshawa, ON, Canada, August 17, 2017.
  - D. Moreno, M. Melaisi, A. Uribe, M. Vargas Martin, B. Kapralos. BCI Haptics Multimodal Interactions in Virtual Drilling. IMMERSe Meeting 2017, Carleton University, Ottawa, ON, Canada, June 2017.
  - L. Garcia, A. Uribe, B. Kapralos. A Heart-Beat Sound Generator for Cardiac Auscultation Training. IMMERSe Meeting 2017, Carleton University, Ottawa, ON, Canada, June 2017.
  - A. Uribe, B. Kapralos, M. Jenkin, K. Kanev, D. D. Rojas Acosta, S. Prada, M. Vargas, M. Nguyen, D. Gu. Developing Experiences on VR for Cardiac Auscultation and Eye Examination. IMMERSe Meeting 2017, Carleton University, Ottawa, ON, Canada, June 2017.
  - A. Uribe, D. Rojas, B. Kapralos. Diseño e implementación de un prototipo multimodal para el entrenamiento de auscultación cardiaca. XI Research Meeting, Universidad Militar Nueva Granada, Bogotá, Colombia, November 27-28, 2016.
  - A. Uribe, D. Rojas, A. Dubrowski, B. Kapralos. Closing the gap between game-related technologies and health professions education. IMMERSe Meeting 2015, the Games Institute at the University of Waterloo, Waterloo, ON, Canada, November 2015.
  - A. Uribe, D. Rojas, B. Kapralos, A. Dubrowski. Serious games and multimodality: visual, haptics, and sound cues on learning medical skills. IMMERSe Meeting 2015, the Games Institute at the University of Waterloo, Waterloo, ON, Canada, November 2015.
- Research Demos
  - M. Nguyen, J. Smith, N. Alison, J. Rushing, T. Lindo, T. Shamon, Tom Tsioliopoulus, Joss Moo-Young, Matthew Demoe, Regan Tran, S. Perera, A. A. Uribe Quevedo Tokuhiro, E. Waller, "Model for Attenuating Radiation in VR." Japan Atomic Industrial Forum, Kyoto, Japan, August 6, 2019.

- M. Nguyen, J. Smith, N. Alison, J. Rushing, T. Lindo, T. Shamon, S. Perera, A. A. Uribe Quevedo Tokuhiro, E. Waller, “Model for Attenuating Radiation in VR.” 2019 Innovation Showcase, Nuclear Innovation Institute, Toronto, ON, Canada, May 11, 2019.
- L. Mohorovic, A. Asaro, L. Gemmel-Brown, K. Wood, T. Rashdi, Y. Cao, K. Sebele, S. Perera, A. A. Uribe Quevedo Tokuhiro, E. Waller, “Development of a Model of Radioactive Plume Path Program for Accident Scenario Response Readiness.” 2019 Innovation Showcase, Nuclear Innovation Institute, Toronto, ON, Canada, May 11, 2019.
- M. Nguyen, J. Smith, N. Alison, J. Rushing, T. Lindo, T. Shamon, S. Perera, A. A. Uribe-Quevedo Tokuhiro, E. Waller, “Model for Attenuating Radiation in VR” at the Robert McLaughlin Gallery RMG Fridays event, March 1, 2019, Oshawa, ON.
- K. Wilcocks, B. Kapralos, A. Uribe Quevedo “Virtual Catheterization Lab for Patient Education” NightShift at Lakeridge Health. NightShift is a fundraising event on the evening of April 11, 2019.
- J. Moo-Young, A. Uribe, F. Alam, B. Kapralos. Development of USEIT – A new epidural simulator, Ontario Economic Summit, October 25, 2018, Niagara on the Lake, ON.
- M. Chan, K. Wilcocks, C. Carmichael, J. J. Rushing Yang, J. Moo-Young, N. Halabi, A. Uribe, B. Kapralos. VR Catheter Lab, Mixed Reality eye fundus examination, Virtual avatar gesture-based interactions, Seated VR locomotion, Epidural haptics simulation, VR usability framework. VR Open house Lakeridge Health, Oshawa, ON, Canada, August 17, 2017.
- M. Chan, D. Acosta, D. Gu, A. Uribe, B. Kapralos, M. Jenkin and K. Kanev.AR Eye Fundus Examination. Realities in Medicine 2018, Toronto, ON, Canada, April 7-8, 2018.
- K. Wilcocks, F. Alam, B. Kapralos, A. Uribe. VR Catheter Lab. Realities in Medicine 2018, Toronto, ON, Canada, April 7-8, 2018.
- M. Nguyen, D. Acosta, D. Gu, A. Uribe, B. Kapralos, M. Jenkin and K. Kanev. Virtual Eye Fundus Examination. SimOne Expo 2017, Mississauga, ON, Canada, November 30 - December 1, 2017.
- M. Vargas, A. Uribe, B. Kapralos, D. Rojas and B. Perez. Virtual Cardiac Auscultation: a Room-Scale and Mobile VR Approach. SimOne Expo 2017, Mississauga, ON, Canada, November 30 - December 1, 2017.
- K. Wilcocks, N. Halabi, P. Kartick, A. Uribe, B. Kapralos, and C. Chow. The Angiogram Procedure Through Virtual Reality Patient Education. SimOne Expo2017, Mississauga, ON, Canada, November 30 - December 1, 2017.
- A. Uribe, D. Rojas, B. Kapralos. Cardiac auscultation serious game demo. IGDA Spring Showcase at the Games Institute at the University of Waterloo, March 10, 2016.
- A. Uribe, D. Rojas, B. Kapralos, F. Moussa, A. Dubrowski, N. Jaimes. A virtual simulation for cardiac auscultation training. SimOne Expo 2016, Toronto, ON, Canada, October 6-7, 2016.

- Other studies
  - 2021-How to Design for Augmented and Virtual Reality - Interaction Design Foundation- Online.
  - 2019-Active Learning - Ontario Tech University - Online.
  - 2019-Teaching Squares - Ontario Tech University - Online.
  - 2018-Incorporating Experiential Learning into Your Class - Ontario Tech University - Online.
  - 2018-Certificate of University Teaching - Ontario Tech University - Online.
  - 2017-Engagement Workshop-University of California, San Diego - Online.

- 2017-Video for Student Engagement Workshop - University of California, San Diego - Online.
- 2017-Interaction Design Specialization - University of California, San Diego - Online.
- 2016-Game Design and Development Specialization - Michigan State University - Online.
- 2017-Interactive Computer Graphics - The University of Tokyo - Online.
- 2017-Fundamentals of Computer Architecture - EIT Digital - Online.
- 2017-Initiating and Planning Projects - UCI - Online.
- 2017-Budgeting and Scheduling Projects – UCI - Online.
- 2017-Managing Project Risks and Changes - UCI- Online.
- 2017-English for Teaching Purposes - Universitat Autònoma de Barcelona - Online.
- 2016-Serious Gaming - Erasmus University Rotterdam - Online.
- 2016-Ethical Conduct for Research Involving Humans Course on Research Ethics - Tri-Council Policy Statement - Online.
- 2015-Adobe Generation Professional: Game Design - Adobe-Online.
- 2015-Use and appropriation of ICT for Education - Universidad Militar Nueva Granada - Online.
- 2015-Pedagogic Model for Education - Universidad Militar Nueva Granada.
- 2013-Gamification - University of Pennsylvania - Online.
- 2012-University Teaching Didactics - Universidad Militar Nueva Granada- Bogotá, Colombia.
- 2012-Videogame Development - Andes University - Bogotá, Colombia.