Bruno De Araujo

Research Scientist • 3D User interfaces • Input techniques • Wearable sensing • AR/VR • Human AI interaction Toronto, ON, Canada | <u>bdearaujo@gmail.com</u> | <u>bdearaujo.com</u> | <u>linkedin.com/in/bdearaujo</u>

Innovative researcher and product developer with over 10 years of experience in 3D user interfaces, input technologies, and human-AI interaction. Expertise spans HCI, AI, computer vision, and wearable devices, with a proven track record leading R&D and product development at both startups and established consumer electronics companies. Passionate about transforming emerging technologies into intuitive, human-centered solutions that empower users and enhance everyday experiences.

EDUCATION

Instituto Superior Técnico (IST) – Technical University of Lisbon, Portugal

PhD in Information Systems and Computer Engineering

Direct Interactive 3D Modeling in a Semi-Immersive Environment

Master in Information Systems and Computer Engineering

Curvature Dependent Polygonization of Implicit Surfaces

BSc in Information Systems and Computer Engineering

APRIL 2007 - JULY 2013

SEPTEMBER 2003 - FEBRUARY 2008

SEPTEMBER 1997 - JULY 2003

PROFESSIONAL EXPERIENCE

Meta, Toronto — Research Scientist & Manager

APRIL 2022 - APRIL 2025

- Led and contributed to research on user input methods for AR/VR and smart glasses, exploring hand gestures, gaze tracking, and neural interfaces.
- **Designed and executed user studies** and data collection protocols to evaluate multimodal interaction techniques and conducted data analysis to derive actionable insights.
- **Collaborated with product and engineering teams** to integrate HCI research findings into product development, aligning design with user-centered research.
- **Developed human-AI interaction frameworks** leveraging large language models and computer vision to enhance AR/VR and smart glasses use cases.
- Built adaptive user interfaces for AR, MR, VR, and wearable systems, combining gaze and hand gestures with object recognition.
- **Developed predictive models** to optimize user interaction, adapting interfaces to user context and improving system performance.
- **Surveyed and evaluated computer vision models** for contextual AI applications, driving innovation in AR/VR and wearable tech.
- **Presented research findings to stakeholders**, influencing product strategy and engineering decisions with data-driven insights.
- **Proposed and led research projects**, defining initial plans, aligning with product needs, and mentoring interns to ensure successful project execution.
- **Mentored new team members**, fostering knowledge sharing and promoting team goals, while increasing the team's visibility within the research community.

Tactual Labs, Toronto — *VP Mixed Reality Director*

JANUARY 2015 -MARCH 2022

Started as GPU architect up to leading a team of 15 engineers and researchers on Multi-touch and wearable sensing R&D projects and contributed directly to 40 patents.

- Led end-to-end research and development of advanced sensing technologies, resulting in over 40 patents filed.

- Invented and prototyped novel sensor systems, with contributions spanning hardware and software integration.
- Created and launched three sensing SDKs with Android, Unity, C++/C# and Python integration for desktop, mobile and mixed reality platforms (VR/AR), enabling internal teams and external partners to build upon proprietary technologies.
- **Directed a multidisciplinary team of up to 15 engineers and researchers** (within a 25-person office), including software developers, electrical engineers, and applied researchers.
- **Mentored over seven interns and co-op students** through structured development programs (Waterloo Co-op and MScAC University of Toronto).
- **Defined the strategic and technical roadmap** for the company's mixed reality division, aligning R&D goals with long-term business objectives.
- Collaborated cross-functionally with C-suite leadership, finance, hardware labs, and external partners to support product development and organizational alignment.
- **Managed team budgets and resource planning** to support scalable research and software development initiatives.
- Led development of client-facing prototypes and demos; engaged directly with strategic partners and clients (e.g., Samsung, LG, HTC, Meta, Intel, Google, Faurecia) to present technical roadmaps, deliverables, and product vision.
- Represented the company at high-profile events (CES, GDC, CHI, UIST, job fairs), showcasing innovations and expanding brand visibility.
- **Participated in investor presentations and fundraising efforts**, demonstrating the value and direction of the mixed reality research program.

University of Toronto, DGP Labs — Postdoctoral Research Fellow

MARCH 2014 - JANUARY 2018

Conducted research on sketch based and multi-touch user interfaces and mentored PhD students.

INRIA LILLE EUROPE, Mint, France — Postdoctoral Research Fellow

APRIL 2013 - FEBRUARY 2014

Conducted research on multimodal and gestural interfaces and co-advised students

INESC-ID, VIMMI Group, Portugal — Researcher

APRIL 2013 - FEBRUARY 2014

Conducted research in multi-year European projects (<u>SmartSketches</u>, <u>IMPROVE SATIN</u>, <u>MAXIMUS</u>) and national projects on 3D modeling, sketch based interfaces and virtual reality design tools.

INRIA LILLE & BORDEAUX, Mint Iparla, France — Research Engineer

JULY 2011 - DECEMBRE 2011

Conducted research in ANR Project **INSTINCT** (Supervisors: Martin Hachet & Géry Casiez) on 3D user interfaces.

Technical University of Lisbon, CS Department — *Teaching Assistant*

OCTOBER 2001 - JULY 2008

3D Programming and Game Simulation (Spring 2008), Advanced Computer Graphics (2003–2007), Animation and 3D Visualization (2003–2007), Computer Graphics (2003–2005), 3D Modelling and Visualization (Fall 2003), User Centered Design (Fall 2003), Compilers (Fall 2001)

E.S.G Direct Insurance, Portugal — IT Manager & Software developer

OCTOBER 2000 - DECEMBRE 2002

Manage Windows NT workstations and servers and develop Java Web management system for Santogal car loans

PUBLICATIONS

Conference Articles

Sensing Hand Interactions with Everyday Objects by Profiling Wrist Topography, Julius Rudolph, David Holman, Bruno De Araujo, Ricardo Jota, Daniel Wigdor and Valkyrie Savage, Proceedings of the ACM Sixteenth International Conference on Tangible, Embedded, and Embodied Interaction, TEI '22, February 13–16, 2022, Daejeon, Republic of Korea. DOI: 10.1145/3490149.3501320

DataInk: Direct and Creative Data-Oriented Drawing, Haijun Xia, Nathalie Riche Fanny Chevalier, **Bruno De Araujo**, and Daniel Wigdor, Proceedings of the ACM annual conference on Human Factors in Computing Systems. CHI. 2018. ACM, New York, NY. **Honorable Mention Paper**, DOI: 10.1145/3173574.3173797

Collection Objects: Enabling Fluid Formation and Manipulation of Aggregate Selections, Haijun Xia, Bruno Araujo, and Daniel Wigdor, Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17). ACM, New York, NY, USA, 5592-5604. 2017. Honorable Mention Paper, DOI: 10.1145/3025453.3025554

GhostID: Enabling Non-Persistent User Differentiation in Frequency-Division Capacitive Multi-Touch Sensors, Sidharth Sahdev, Clifton Forlines, Ricardo Jota, Bruno De Araujo, Braon Moseley, Jonathan Deber, Steven Sanders, Darren Leigh, and Daniel Wigdor, Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17). ACM, New York, NY, USA, 15-27. 2017. DOI: 10.1145/3025453.3025719

Next-Point Prediction Metrics for Perceived Spatial Errors, Mathieu Nancel, Daniel Vogel, Bruno De Araujo, Ricardo Jota, and Géry Casiez, Proceedings of the 29th Annual Symposium on User Interface Software and Technology (UIST '16). ACM, New York, NY, USA, 271-285. 2016. DOI: 10.1145/2984511.2984590

Multi-Device Storyboards for Cinematic Narratives in VR, Rorik Henrikson, Bruno Araujo, Fanny Chevalier, Karan Singh, and Ravin Balakrishnan, Proceedings of the 29th Annual Symposium on User Interface Software and Technology (UIST '16). ACM, New York, NY, USA, 787-796. 2016. DOI: 10.1145/2984511.2984539

Storeoboard: Sketching Stereoscopic Storyboards, Rorik Henrikson, Bruno De Araujo, Fanny Chevalier, Karan Singh, and Ravin Balakrishnan, Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16). ACM, New York, NY, USA, 4587-4598. 2016. DOI: 10.1145/2858036.2858079

Hammer Time!: A Low-Cost, High Precision, High Accuracy Tool to Measure the Latency of Touchscreen Devices, Jonathan Deber, Bruno Araujo, Ricardo Jota, Clifton Forlines, Darren Leigh, Steven Sanders, and Daniel Wigdor, Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16). ACM, New York, NY, USA, 2857-2868. 2016. DOI: 10.1145/2858036.2858394

Object-Oriented Drawing, Haijun Xia, Bruno Araujo, Tovi Grossman, and Daniel Wigdor, Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16). ACM, New York, NY, USA, 4610-4621. 2016. Best Paper, DOI: 10.1145/2858036.2858075

Snake Charmer: Physically Enabling Virtual Objects, *Bruno Araujo*, *Ricardo Jota, Varun Perumal, Jia Xian Yao, Karan Singh, and Daniel Wigdor*, Proceedings of the TEI '16: Tenth International Conference on Tangible, Embedded, and Embodied Interaction (TEI '16). ACM, New York, NY, USA, 218-226. 2016. DOI: 10.1145/2839462.2839484

Interaction events in contactless gestural systems: from motion to interaction, *Nicolas Bremard, Laurent Grisoni, and Bruno De Araujo,* Proceedings of the 2014 International Workshop on Movement and Computing (MOCO '14). ACM, New York, NY, USA, Pages 166, 4 pages. 2014. DOI: 10.1145/2617995.2618027

Interactive Tabletops for Architectural Visualization: Combining Stereoscopy and Touch Interfaces for Cultural Heritage, Figueiredo, B., Castro e Costa, E., Araújo, B., Fonseca, F., Mendes, D., Jorge, J., & Duarte, J. P., Proceedings of the 32nd eCAADe Conference. Northumbria University, Newcastle, United Kingdom. 2014.

Exploring tablet surrounding interaction spaces for medical imaging, Hanaë Rateau, Laurent Grisoni, and Bruno Araujo, Proceedings of the 2nd ACM symposium on Spatial user interaction (SUI '14). ACM. New York. NY. USA. 150-150. 2014. DOI: 10.1145/2659766.2661215

Mimetic Interaction Spaces: Controlling Distant Displays in Pervasive Environments, Hanaë Rateau, Bruno De Araujo and Laurent Grisoni, Proceedings of the 19th ACM International Conference on Intelligent User Interfaces, IUI '14, ACM, New York, USA, Feb 2014.DOI: 10.1145/2557500.2557545

3D mid-air manipulation techniques above stereoscopic, Fernando Fonseca, Daniel Mendes, **Bruno Araujo**, Alfredo Ferreira and Joaquim Jorge, In ACM ITS Workshop on Interactive Surfaces for Interaction with Stereoscopic 3D (ISIS3D), Saint Andrews, Scotland, Oct, 2013

Designing a Mobile Collaborative System for Navigating and Reviewing Oil Industry CAD Models, Hildegardo Noronha, Pedro Campos, Joaquim Jorge, Bruno de Araujo, Luciano Soares, Alberto Raposo, Nordic Conference on Human-Computer Interaction (NordiCHI 2012), Copenhagen, Denmark, pp. 189-198. October 14-17, 2012

Combining Virtual Environments and Direct Manipulation for Architectural Modeling, *Araujo, B.; Jorge, J.; Duarte, J.,* Digital Physicality - Proceedings of the 30th eCAADe Conference - Volume 2 / ISBN 978-9-4912070-3-7, pp. 419-428, Prague, Czech Republic, 12-14 September, 2012. Ivan Petrovic Award for Best Presentation by a Young Researcher.

Modeling On and Above a Stereoscopic Multitouch Display, *De Araujo B., Casiez G., Jorge J. and Hachet M.,* In ACM CHI Workshop on The 3rd Dimension of CHI (3DCHI): Touching and Designing 3D User Interfaces, Austin, United States, May, 2012.

Mockup Builder: Direct 3D Modeling On and Above the Surface in a Continuous Interaction Space, *De Araujo B., Casiez G. and Jorge J.*, In Proceedings of Graphics Interface (Gl'2012), Toronto, Ontario, Canada, May 28 - May 30, 2012.

Combining bimanual manipulation and pen-based input for 3D modelling, Pedro Lopes, Daniel Mendes, Bruno Araújo and Joaquim Jorge, SBIM '11 Proceedings of the Eighth Eurographics Symposium on Sketch-Based Interfaces and Modeling, Vancouver, Canada, 05/08/2011

An Efficient Collision Detection Algorithm for Point Cloud Models, Mauro Figueiredo, João Fradinho Oliveira, Bruno De Araújo e João António Madeiras Pereira, GraphiCon International Conference on Computer Graphics & Vision, Russia, 20/09/2010

Style Nodes for Hierarchical Tree-Based Implicit Surface Modelling, Pauline Jepp, Bruno Rodrigues De Araujo, Joaquim Jorge, Brian Wyvill, Mario Costa Sousa, 5th Intl Symposium on Computational Aesthetics in Graphics, Visualization and Imaging (CAe '09), 05/2009

Extensible Middleware Framework for Multimodal Interfaces in Distributed Environments, Vitor Fernandes, Tiago Guerreiro, Bruno Araújo, Joaquim Jorge, João Pereira, ACM ICMI2007 - International Conference on Multimodal Interfaces 2007. Nagoya, Japan, November 2007

IMPROVE: Collaborative Design Review in Mobile Mixed Reality, P. Santos, A. Stork, T. Gierlinger, A. Pagani, B. Araujo, R. Jota, L. Bruno, J. Jorge, J. Pereira, M. Witzel, G. Conti, R. DeAmicis, I. Barandarian, C. ,Paloc, O. Machui, G. Bodammer, J. Jiménez, D. McIntyre, HCII 2007 - 12th International Conference on Human-Computer Interaction, Pequim, China, 07/2007

IMPROVE: Designing Effective Interaction for Virtual and Mixed Reality Environments, Pedro Santos, André Stork, Thomas Gierlinger, Alain Pagani, Bruno Araujo, Ricardo Jota, Luis Bruno, Joaquim Jorge, João Madeiras Pereira, Martin Witzel, Giuseppe Conti, Raffaele DeAmicis, Inigo Barandarian, Celine Paloc, Maylu Hafner, Don McIntyre, HCII 2007 - 12th International Conference on Human-Computer Interaction, Pequim, China, 07/2007

Automatic Color Calibration for Commodity Multi-projection Display Walls, *Luciano P Soares, Ricardo Jota, Joaquim Jorge,* **Bruno Araújo,** X Symposium on Virtual and Augmented Reality – SVR 2007, Petrópolis, RJ, Brasil, 06/2007

Collaborative Visualization of Sensor Data Through a Subscription based Architecture, M. Witzel, M. Andreolli, G. Conti, R. De Amicis, B. De Araújo, R. Jota e J. Jorge, Eurographics Italian Chapter annual event, 02/2007

IMPROVE: An innovative application for collaborative mobile mixed reality design review, André Stork, Pedro Santos, Thomas Gierlinger, Alain Pagani, Céline Paloc, Iñigo Barandarian, Giuseppe Conti, Raffaele de Amicis, Martin Witzel, Oliver Machui, Jose M. Jiménez, Bruno Araújo, Joaquim Jorge, Georg Bodammer, Virtual Concept 2006, Playa Del Carmen, México, 11/2006

Emf: Extensible Middleware Framework, Tiago Guerreiro, Vitor Fernandes, Bruno Araújo, Joaquim Jorge, João Pereira, Proceedings of HCII 2007 - 12th International Conference on Human-Computer Interaction

A Calligraphic interface for interactive free-form modeling with large datasets, *Bruno Araujo* e Joaquim Jorge, Proceedings of the XVIII Brazilian Symposium on Computer Graphics and Image Processing (SIBGRAPI 2005), Natal, Brazil, Oct 2005

Curvature Dependent Polygonization of Implicit Surfaces, *Bruno Araujo* e *Joaquim Jorge*, Proceedings of the XVII Brazilian Symposium on Computer Graphics and Image Processing (SIBGRAPI 2004/SIACG 2004), Curitiba, Brazil, Oct 2004

MIKE: a Multimodal Cinematographic Editor for Virtual Worlds, Bruno Araujo e Joaquim Jorge, DSV-IS 2003, Jun. 2003, Springer Verlag 2003

Journal Publications

A Survey on Implicit Surface Polygonization, B. R. de Araújo, Daniel S. Lopes, Pauline Jepp, Joaquim A. Jorge, and Brian Wyvill, ACM Computing Surveys. 47, 4, Article 60 (May 2015), 39 pages, 2015.DOI=10.1145/2732197

Mockup Builder: 3D Modeling On and Above the Surface, *De Araujo B.*, Casiez G., Jorge J. and Hachet M., International Journal of Systems & Applications in Computers & Graphics (C&G), Elsevier B.V., Volume 37, Issue 3, May 2013, p. 165-178, 2013

3D modelling of laser scanned and photogrammetric data for digital documentation: the Mosteiro da Batalha case study, Oliveira A., Oliveira J. F., Pereira J. M., **De** Araujo **B.** and Boavida J.Journal of Real-Time Image Processing, ISSN: 1861-8200, Springer. Special Issue on Improving Display and Rendering Technology for Virtual Environments, p. 1-16, 03/2012

IMMIVIEW: A multi-user solution for design review in real-time, Ricardo Jota, Bruno Araújo, Luís Bruno, Joaquim Jorge, João Pereira, Journal of Real-Time Image Processing, ISSN: 1861-8200, Springer. Special Issue on Improving Display and Rendering Technology for Virtual Environments, 10/2009

An Haptic based Immersive Environment for Shape Analysis and Modeling, Bruno Rodrigues de Araújo, Tiago Guerreiro, Manuel J. Fonseca, João Madeiras Pereira, Joaquim Jorge, Monica Bordegoni, Francesco Ferrise, Mario Covarrubias, Michele Antolini, Journal of Real-Time Image Processing, ISSN: 1861-8200, Springer. Special Issue on Improving Display and Rendering Technology for Virtual Environments, 10/2009

IMPROVE: An innovative application for collaborative mobile mixed reality design review, Pedro Santos, André Stork, Thomas Gierlinger, Alain Pagani, Céline Paloc, Iñigo Barandarian, Giuseppe Conti, Raffaele de Amicis, Martin Witzel, Oliver Machui, José M. Jiménez, Bruno Araujo, Joaquim Jorge e Georg Bodammer, International Journal on Interactive Design and Manufacturing, Springer Paris, ISSN 1955-2513 (Print) 1955-2505 (Online), DOI 10.1007/s12008-007-0010-8, 05/2007

Adaptive Polygonization of Implicit Surfaces, *Bruno Araujo* and Joaquim Jorge, "State of the Art in Computer Graphics in Ibero-American Countries", International Journal of Systems & Applications in Computers & Graphics (C&G), Elsevier B.V., vol. 29, n° 5, 2005

BlobMaker: Free-Form Modelling with Variational Implicit Surfaces, *Bruno Araujo* and Joaquim Jorge, Revista VIRTual (ISSN: 0873-1837)- Special edition "Advances in Computer Graphics in Portugal", Adérito Marcos and Miguel Salles Dias (eds.), 2004

WEARABLE MULTIMODAL-SENSING DEVICE, <u>US 20200367820</u> - Issued Nov 26, 2020

MATRIX SENSORS FOR USE WITH A CONTROLLER, US 20190227624 · Issued Jul 25, 2019

MATRIX SENSOR WITH RECEIVE ISOLATION, <u>US 20190227625</u> · Issued Jul 25, 2019, <u>US 20190227665</u> · Issued Jan 18, 2019

SYSTEM AND METHODS FOR INFUSION RANGE SENSOR, US 20190155373 · Issued May 23, 2019

SIX DEGREES OF FREEDOM TRACKING OF OBJECTS USING SENSORS , US 20180364814 · Issued Jun 12, 2018

HAND SENSING CONTROLLER, <u>US 20190339810</u> · Issued Nov 7, 2019, <u>US D860202</u> · Issued Sep 17, 2019, <u>US 10353515</u> · Issued Jul 16, 2019, <u>US 20180267667</u> · Issued Sep 20, 2018

TOUCH SENSITIVE KEYBOARD, <u>US 20180004305</u> Issued Jan 4, 2018, <u>US 20180004304</u> Issued Jan 4, 2018

SENSING CONTROLLER, <u>US 20180267653</u> · Issued Sep 20, 2018

FLEXIBLE DEFORMATION SENSOR, <u>US 20180306568</u> · Issued Oct 25, 2018

APPARATUS AND METHOD FOR SENSING DEFORMATION, US 20180267599 · Issued Sep 20, 2018

TOOL TO MEASURE THE LATENCY OF TOUCHSCREEN DEVICES, <u>US 10216602</u> · Issued Feb 26, 2019, <u>US 20170132105</u> · Issued May 11, 2017

MULTITOUCH FRAME MATCHING WITH DISTANCE FIELDS, US 20170024051 · Issued Jan 26, 2017

DECIMATION SUPPLEMENTATION STRATEGIES FOR INPUT EVENT PROCESSING, <u>US 20190220139</u> · Issued Jul 18, 2019, <u>US 10241612</u> · Issued Mar 26, 2019, <u>US 20170235410</u> · Issued Aug 17, 2017

AREA FILTERING FOR LOW-LATENCY AND HIGH-LATENCY INPUT EVENT PATHS FROM A SINGLE TOUCH SENSOR, <u>US 20190220145</u> · Issued Jul 18, 2019, <u>US 10241620</u> · Issued Mar 26, 2019, <u>US 20170235424</u> · Issued Aug 17, 2017

SYSTEM AND METHOD FOR TIMING INPUT SENSING, RENDERING, AND DISPLAY TO MINIMIZE LATENCY, <u>US</u> 20190384448 · Issued Dec 19, 2019, <u>US 10402009</u> · Issued Sep 3, 2019, <u>US 20180260074</u> · Issued Sep 13, 2018, <u>US 9971443</u> · Issued May 5, 2018, <u>US 9946398</u> · Issued Apr 17, 2018, <u>US 20170235411</u> · Issued Aug 17, 2017, <u>US 20160188088</u> · Issued Jun 30, 2016

SYSTEM AND METHOD FOR PERFORMING HIT TESTING IN A GRAPHICAL USER INTERFACE, <u>US 20190220256</u> · Issued Jul 18, 2019, <u>US 10241760</u> · Issued Mar 26, 2019, <u>US 20160188303</u> · Issued Jun 30, 2016

SYSTEM AND METHOD FOR INTER-MODULE COMMUNICATION, US 20160189331 · Issued Jun 30, 2016

TUTORIALS AND COURSES

Designing immersive VR systems: From bits to bolts, Luciano P. Soares, Joaquim A. Jorge, Luciano P. Soares, Joaquim A. Jorge, Luciano P. Soares, Joaquim A. Jorge, José Miguel Salles Dias, Alberto Raposo, Bruno Rodrigues de Araújo, Leonel Valbom, Filipe Gaspar, Tutorial presenter at the IEEE Virtual Reality, VR 2012, Costa Mesa, CA, USA. March 4-8, 2012.

Designing multi-Projector VR systems: from bits to bolts, *Luciano P. Soares, Miguel S. Dias, Joaquim A. Jorge, Alberto B. Raposo, Bruno R. de Araujo,* Tutorial presenter at the 31th annual Conference of the European Association for Computer Graphics (EUROGRAPHICS '10), Norskopping, Sweden, May 2010

Designing multi-Projector VR systems: from bits to bolts, Luciano P. Soares, Miguel S. Dias, Joaquim A. Jorge, Alberto B. Raposo, Bruno R. de Araujo, Tutorial presenter at the IEEE Conference on Virtual Reality (VR2010), Boston, U.S.A., April 2010

Tutorial 1: Designing multi-Projector VR systems: from bits to bolts, *Luciano P. Soares, Miguel S. Dias, Joaquim A. Jorge, Alberto B. Raposo, Bruno R. de Araujo,* Tutorial presenter at the 29th annual Conference of the European Association for Computer Graphics (EUROGRAPHICS '08), Crete, Greece, April 2008

Tutorial 3: Designing multi-Projector VR systems: from bits to bolts, *Luciano P. Soares, Miguel S. Dias, Joaquim A. Jorge, Alberto B. Raposo, Bruno R. de Araujo,* Tutorial presenter at the IEEE Conference on Virtual Reality (VR2008), Reno NV, U.S.A., March 2008

HONORS & AWARDS

2017 Honorable Mention Paper, CHI '17

2016 Best Paper, CHI '16

2012 Ivan Petrovic Award for Best Presentation by a Young Researcher, eCAADe Conference

TECHNICAL SKILLS

Programming C/C++ , C#, Python, Java

Dev Tools Unity, Android, OpenCV, OpenGL

Language English, French, Portuguese

ACADEMIC SERVICE

Program Committee

ACM ITS Workshop on Collaborative Interactive Surfaces (CIS) 2013

ACM ITS Workshop on Interactive Surfaces for Interaction with Stereoscopic 3D (ISIS3D) 2013

IEEE Symposium on 3D User Interfaces (3DUI) 2013

Conference Reviewer

ACM Conference on Human Factors in Computing Systems CHI '13, '14, '15, '16, '17, '18, '19, '21

IEEE Virtual Reality Conference VR '10, '11, '15, '17, '18

ACM Symposium on User Interface Software and Technology UIST '12, '15, '16, '17, '18, '19, '22

ACM Symposium on Virtual Reality Software and Technology VRST '16, '20

ACM International Conference on Intelligent User Interfaces IUI 2015

ACM Special Interest Group on GRAPHics and Interactive Techniques SIGGRAPH '06, '10, '15

ACM Symposium on Spatial User Interaction SUI '13, '14

Computer Graphics International Conference CGI 2013

IEEE Symposium on 3D User Interfaces 3DUI 2013

International Conference on Computer-Aided Design and Computer Graphics CAD/Graphics 2013

ACM Interactive Tabletops and Surfaces 2013 Conference ITS 2012

EG/ACM Symposium on Sketch-Based Interfaces and Modeling SBIM '04, '05, '06

Annual Conference of the European Association for Computer Graphics EG '05, '06

International Conference on Human-Computer Interaction HCII 2005

Journal Reviewer

Frontiers in Robotics and AI, section Virtual Environments 2019

ACM Journal on Computing and Cultural Heritage (JOCCH) 2013

Elsevier Computer-Aided Design 2012

Elsevier Computer & Graphics 2008, 2009, 2010, 2013, 2018

Springer Journal of Real-Time Image Processing (JRTIP) 2010

STUDENT ADVISING

Internships

Johann Wentzel (Meta | PhD U. of Waterloo – 2022), Jianda Chen (Tactual Labs | MScAC U. of Toronto – 2020), Shihang Zhu (Tactual Labs | MScAC U. of Toronto – 2019), Yanjun Jiang (Tactual Labs | MScAC U. of Toronto – 2018), Daniel Lopes (INRIA, 2013), Mathias De Bie (INRIA, 2013), Pierre-Jean Petitprez (INRIA, 2013)

Luis Lopes (Technical U. of Lisbon, 2009), Ricardo Jose Cadete (Technical University of MSc

Lisbon, 2008),

AFFILIATIONS

ACM Professional Member