

Alvaro CASSINELLI
School of Creative Media
Type of address: Visiting address.
CMC-M6028
Email: acassine@cityu.edu.hk
Phone: +852 34422429



Biography

Alvaro Cassinelli was born in Montevideo (Uruguay) in 1972. In 1990 he earns both a French and Uruguayan B.Sc., and a grant to pursue his studies in France. He obtains a Graduate Engineering diploma from the Ecole Nationale Supérieure des Télécom (now Télécom ParisTech) in 1996, completing the same year a Doctoral Qualifying Degree (DEA/Master) in Physics (Laser & Matter Interaction) from the University of Paris-XI, Telecom and Ecole Polytechnique. In 2000 he receives a Ph.D degree from the University of Paris-XI Orsay.

From 2001 to 2015 he works as Research Fellow, Research Assistant and then Assistant Professor at the Ishikawa-Watanabe Laboratory at the University of Tokyo, where he co-founds and leads the Meta-Perception group, a research unit specialized in developing novel mediums for HCI and the Media Arts.

He is also co-founder and organizer of the “Devices that Alter Perception” international workshop (from 2008-2011), and the first “Taller de Arte y Computación Física” in Uruguay (2008).

He is presently RCAST Research Fellow at the University of Tokyo, certified SNI Researcher in Uruguay, and Director of R&D at SinergiaTech, the first certified FABLAB and private Physical Computing Academy in Uruguay.

Alvaro is routinely invited at international conferences either as keynote, “visionnaire” speaker, PC member or Jury in areas related to HCI, AR/VR and forums about Science and its relation to the Arts. He has been Visiting Professor/Researcher at renowned institutions such as KAIST (Korean Advanced Institute of Science and Technology), NAIST (Nara Advanced Institute of Technology, Japan), ESPCI and LANGEVIN INSTITUTE (Paris), CEIBAL (OLPC Uruguay & IT R&D center). He has presented at MICROSOFT RESEARCH (Seattle), SAMSUNG THINK TANK (Mountain View), SCHOOL OF CREATIVE MEDIA (H.K.), WIRED NEXTFEST (N.Y.), as well as the MIT MEDIA LAB among other research centers and universities.

He maintains ties with the corporate world, as consultant and/or collaborator for medium and large firms (Art+Com, Electric Factory, Omron, Samsung Electronics, Hamamatsu Photonics, Nissan Research Center, Sony Labs, the Vision Chip Consortium in Japan, etc), as well as startups including EXVISION (a spin-off company from his former laboratory). His research and interests spans physics, fundamental aspects of computing, high-speed/slow-speed robotics/nanorobotics, augmented and virtual reality, cognitive sciences, artificial intelligence, wearables, augmented perception, prosthetics/rehabilitation, and in general human-machine interfaces using novel principles and custom technology – areas in which he holds five patents and one trademark.

Independently experimenting in the field of Media Arts, he has been awarded important international prizes, including the Panasonic Prize [2005], an Honorary Mention at Ars Electronica [2006], the Grand Prize [Art Division] at the 9th Japan Media Art Festival [2006], the Excellence Prize [Entertainment Division] at the 13th Japan Media Art Festival [2009], the NISSAN Innovative Concept Award [2010], the Jury Grand Prize at Laval Virtual [2011], the Digital Content EXPO Prize at SIGGRAPH Emerging Technologies [2016] among others.

Employment

School of Creative Media

City University of Hong Kong

3 Jun 2019 → present

Research outputs

WhisperCup: A Design Exploration for Improving the Remote Communication between Chinese Parents and Their Adult Children through Digitally-Augmented Everyday Objects

ZHANG, L., YUAN, Y., LI, J., CASSINELLI, A. & ZHU, K., Sept 2024, In: Proceedings of the ACM on Human-Computer Interaction. 8, MHCI, 287.

Frugal random exploration strategy for shape recognition using statistical geometry

Hidalgo-Caballero, S., Cassinelli, A., Fort, E. & Labousse, M., Apr 2024, In: Physical Review Research. 6, 2, 8 p., 023103.

Flourishing-Life-Of-Wish Virtual Reality Relaxation Therapy (FLOW-VRT-Relaxation) outperforms traditional relaxation therapy in palliative care: results from a randomized controlled trial

Woo, O. K. L., Lee, A. M., Ng, R., Eckhoff, D., Lo, R. & Cassinelli, A., 31 Jan 2024, (Online published) In: *Frontiers in Virtual Reality*. 4, 1304155.Scopus citations: 2

An Augmented Reality Installation to Metaphorically Represent the Causes, Manifestations, and Consequences of School Bullying in East Asia

Liu, C., Cheuk, C. S. & Cassinelli, A., 2024, (Online published) *Proceedings – ISEA 2024, International Symposium on Electronic Art*.

Editorial: Mixed Reality in Palliative Care

Ng, R., Cassinelli, A. & Eckhoff, D., 2024, In: *Frontiers in Virtual Reality*. 5, 1436986.

Participatory Design of a Virtual Reality Life Review Therapy System for Palliative Care

Ng, R., Woo, O. K. L., Eckhoff, D., Zhu, M., Lee, A. & Cassinelli, A., 2024, In: *Frontiers in Virtual Reality*. 5, 1304615.

Temporal precision and accuracy of audio-visual stimuli in mixed reality systems

Eckhoff, D., Schnupp, J. & Cassinelli, A., 2024, In: *PLOS ONE*. 19, 1, e0295817.Scopus citations: 1

Cymatic Ground

Cassinelli, A. (Artist) & Klein, T. (Artist), Dec 2023

Surface-Based 3d Modelling Techniques On Touchscreen Device With Angle-Adjustable Touchscreen

CASSINELLI, A. (Inventor), LIU, C. (Inventor) & DAI, C. (Inventor), 9 Oct 2023, (Accepted/In press/Filed) Priority No. 18/483,249

Developing green hydrogen low-cost research and development platform for production, storage and transport in Bhutan

Jung-Harada, C., Zeng, J., Kyaw, O., Cassinelli, A., Pascual, P., Dwidiani, N. M. & Wangchu, K. & 4 others, Wee, A., Sim, R., Diez, T. & Huynh, D., 25 Jul 2023, *Proceedings of the Fab 23 Research Papers Stream, Hogeschool Rotterdam, Rotterdam, The Netherlands*. p. 63-79

Cymatic Ground

Cassinelli, A. (Artist) & Klein, T. (Artist), 18 May 2023

Balon Balon Ijo: Distant Gallery / Videotage Foundation Festival (Web3 Media Art Festival)

Jung-Harada, C. (Actor), Pascual, P. (Actor), Cassinelli, A. (Actor) & Dwidiani, N. M. (Actor), Mar 2023

Damping-driven time reversal for waves

Hidalgo-Caballero, S., Sreenivas, S. K., Bacot, V., Wildeman, S., Harazi, M., Jia, X. & Tourin, A. & 4 others, Fink, M., Cassinelli, A., Labousse, M. & Fort, E., 24 Feb 2023, In: *Physical Review Letters*. 138, 8, 087201.Scopus citations: 2

Chenrezig Sadhana VR: A Novel Arousal-Based Virtual Reality Neurofeedback Meditation System

Ng, R., Yuen, V. & Cassinelli, A., 2023, *Proceedings - 2023 IEEE International Symposium on Mixed and Augmented Reality Adjunct: ISMAR-Adjunct*. Institute of Electrical and Electronics Engineers, Inc., p. 345-349 5 p. (W9 – MARMH: Workshop on Mixed/Augmented Reality for Mental Health).Scopus citations: 1

The Zoetop: a kinesthetic-aware zoetrope

Cassinelli, A. & Saakes, D., 2023, *Proceedings - SIGGRAPH Asia 2023 Emerging Technologies*. Kim, J., Lam, M. L. & Minamizawa, K. (eds.). New York, NY: Association for Computing Machinery (ACM), 20

AngleCAD: Surface-Based 3D Modelling Techniques on Foldable Touchscreens

LIU, C., DAI, C., MA, Q., MEHRA, B. & CASSINELLI, A., Dec 2022, In: *Proceedings of the ACM on Human-Computer Interaction*. 6, ISS, p. 592-616 582.Scopus citations: 3

Too Good to Be True: An Art Project Using Machine Learning as A Metaphor of Failure

Liao, J. & Cassinelli, A., Sept 2022, In: *Journal of Global Pop Cultures*. 1

A Mixed Reality Installation to Elicit Reflexivity on Adverse Childhood Experiences

Liu, C., Sandor, C. & Cassinelli, A., Jun 2022, *PROCEEDINGS - ISEA2022 Barcelona: POSSIBLES, 27 International Symposium on Electronic Art*. Alsina, P., Vila, L., Tesconi, S., Soler-Adillon, J. & Mor, E. (eds.). Universitat Oberta de Catalunya, p. 423-430 8 p.

Radiant Soma: Visualization of Movement Through Motion Capture and Lasers

Kim, E. S., Haebich, J. & Cassinelli, A., Jun 2022, *MOCO'22: Proceedings of 2022 8th International Conference on Movement and Computing (MOCO 2022)*. New York: Association for Computing Machinery, 5 p. 4. (ACM International Conference Proceeding Series; vol. Par F180475).

Cymatic Ground

KLEIN, T. (Artist) & CASSINELLI, A. (Artist), 24 May 2022

Mean arc theorem for exploring domains with randomly distributed arbitrary closed trajectories

Hidalgo-Caballero, S., Cassinelli, A., Labousse, M. & Fort, E., Apr 2022, In: *European Physical Journal Plus*. 137, 4, 7 p., 501. Scopus citations: 3

Mean arc theorem for exploring domains with randomly distributed arbitrary closed trajectories

Hidalgo-Caballero, S., Cassinelli, A., Labousse, M. & Fort, E., 18 Jan 2022, arXiv, 14 p.

B-Handy: An Augmented Reality System for Biomechanical Measurement

Campbell, J., Cassinelli, A., Saakes, D. & Rompapas, D. C., 2022, *Proceedings - 2022 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops: VRW 2022*. Institute of Electrical and Electronics Engineers, Inc., p. 976-977 2 p. (Proceedings - IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops, VRW).

Radiant soma

Haebich, J., Kim, E. S. & Cassinelli, A., 2022, *Proceedings - SIGGRAPH 2022 - Art Gallery*. New York: Association for Computing Machinery, Inc, 5. (Proceedings - SIGGRAPH Art Gallery).

Thermal Pain and Detection Threshold Modulation in Augmented Reality

Eckhoff, D., Sandor, C., Cheing, G. L. Y., Schnupp, J. & Cassinelli, A., 2022, In: *Frontiers in Virtual Reality*. 3, 952637. Scopus citations: 3

Virtual Reality Therapy for the Psychological Well-being of Palliative Care Patients in Hong Kong

Eckhoff, D., Ng, R. & Cassinelli, A., 2022, *2022 IEEE International Symposium on Mixed and Augmented Reality Adjunct Proceedings: ISMAR-Adjunct 2022*. Institute of Electrical and Electronics Engineers, Inc., 5 p. Scopus citations: 1

Integration of stereoscopic laser-based geometry into 3D video using DLP Link synchronisation

Haebich, J., Sandor, C. & Cassinelli, A., 14 Dec 2021, *SA '21 Emerging Technologies: SIGGRAPH Asia 2021 Emerging Technologies*. Shiota, S. J., Kimura, A. & Minamizawa, K. (eds.). New York: Association for Computing Machinery, (Proceedings - SIGGRAPH Asia Emerging Technologies).

Recognition of Gestures over Textiles with Acoustic Signatures

Wong, P. C., Sandor, C. & Cassinelli, A., Dec 2021, *Proceedings SIGGRAPH Asia 2021 Emerging Technologies*. Association for Computing Machinery (ACM), 14. (Proceedings - SIGGRAPH Asia Emerging Technologies, SA). Scopus citations: 1

MOVE ON, NOTHING TO SEE (SHY BOT) (2015-2021)

Cassinelli, A. (Actor), 30 Oct 2021

The Toro-bots and the Generative Garden (2014 – 2021)

Cassinelli, A., 30 Oct 2021

The Beautiful Encounters

Canet Sola, M., Guljajeva, V. & Cassinelli, A., Oct 2021, *Proceedings of the 10th International Conference on Digital and Interactive Arts*. Lopes, M. M., Lopes, P. B., Araújo, A., Olivero, L. F. & Fernandes-Marcos, A. (eds.). New York: Association for Computing Machinery, 97. (ACM International Conference Proceeding Series).

Horizon: a stereoscopic panorama exploration

Rodriguez, A. (Artist), CASSINELLI, A. (Artist) & SANDOR, C. (Other), Jul 2021

Time reversal of waves and selective spectral hole burning by dissipation pulses

Hidalgo, S., Kottigegollahalli, S., Harazi, M., Bacot, V., Fink, M., Cassinelli, A. & Fort, E. & 1 others, Labousse, M., 30 Jun 2021.

A Polyphonus Avatar: Live Art Festival #11 & Claiming Common Spaces III

Ng, R. (Artist) & Cassinelli, A. (Performer), 4 Jun 2021

Playing with Soma: Speculating on the Physical Body and Somatic Practice of AI

Kim, E. S., Sandor, C., Haebich, J. & Cassinelli, A., Jun 2021, *Art Machines 2: International Symposium on Machine Learning and Art 2021 Proceedings*. Allen, R. W. (ed.). Hong Kong: School of Creative Media, City University of Hong Kong, p. 31-38 8 p.

Cymatic Ground meets Bug

KLEIN, T. (Artist), CASSINELLI, A. (Artist) & IKESHIRO, R. (Composer), 25 Apr 2021

Classifying Cycling Hazards in Egocentric Data: Computer Vision and Pattern Recognition (cs.CV)

Haebich, J., Sandor, C. & Cassinelli, A., 15 Mar 2021, 3 p. (arXiv).

Investigation of Microcirculatory Effects of Experiencing Burning Hands in Augmented Reality

Eckhoff, D., Li-Tsang, C., Cheing, G., Cassinelli, A. & Sandor, C., Mar 2021, *Proceedings - 2021 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops*. Institute of Electrical and Electronics Engineers, Inc., p. 569-570 2 p. 9419295. (Proceedings - IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops, VRW).Scopus citations: 4

Heat Pain Threshold Modulation By Experiencing Burning Hands in Augmented Reality

Eckhoff, D., Cassinelli, A. & Sandor, C., 2021, *2021 IEEE International Symposium on Mixed and Augmented Reality Adjunct Proceedings: ISMAR-Adjunct 2021*. Institute of Electrical and Electronics Engineers, Inc., p. 352-353 (Proceedings - 2021 IEEE International Symposium on Mixed and Augmented Reality Adjunct, ISMAR-Adjunct 2021).

Project Ariel: An Open Source Augmented Reality Headset for Industrial Applications

Campbell, J., Ta, V., Cassinelli, A. & Constantine, R. D., 2021, *UbiComp '21: Adjunct Proceedings of the 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2021 ACM International Symposium on Wearable Computers*. Association for Computing Machinery, p. 462-466 5 p. (UbiComp/ISWC - Adjunct Proceedings of the ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the ACM International Symposium on Wearable Computers).Scopus citations: 4

Project Esky: an Open Source Software Framework for High Fidelity Extended Reality

Rompapas, D. C., Rodda, C., Brown, B. C., Zerkin, N. B. & Cassinelli, A., 2021, *CHI'21 - Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*. New York: Association for Computing Machinery, 6 p. 365 Scopus citations: 4

Project Esky: Enabling High Fidelity Extended Reality on an Open Source Platform

Constantine, R. D., Rodda, C., Brown, B. C., Zerkin, N. B. & Cassinelli, A., 2021, *CHI'21 - Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*. New York: Association for Computing Machinery, 180. (Conference on Human Factors in Computing Systems - Proceedings).Scopus citations: 1

Back and Forth - pneumatic anadrome [Serial Painting 1]

Cassinelli, A., Sandor, C. & Saakes, D., 4 Dec 2020, *SA '20: SIGGRAPH Asia 2020 Art Gallery*. Association for Computing Machinery, 7

Interactive Minimal Latency Laser Graphics Pipeline

Haebich, J., Sandor, C. & Cassinelli, A., Dec 2020, *SA '20: SIGGRAPH Asia 2020 Emerging Technologies*. Association for Computing Machinery, Inc, 16. (SIGGRAPH Asia Emerging Technologies, SA).Scopus citations: 2

Loki's Pain

Lindborg, P. (Artist) & CASSINELLI, A. (Artist), 24 Nov 2020

Viva Voce: Mixed Digital Media

LIU, C. (Artist) & CASSINELLI, A. (Artist), 24 Nov 2020

Augmented Reality Narratives for Post-Traumatic Stress Disorder Treatment

Chang, L., Cassinelli, A. & Sandor, C., Nov 2020, *Adjunct Proceedings of the 2020 IEEE International Symposium on Mixed and Augmented Reality: ISMAR-Adjunct 2020*. Institute of Electrical and Electronics Engineers, Inc., p. 306-309 9288433. (Adjunct Proceedings of the IEEE International Symposium on Mixed and Augmented Reality, ISMAR-Adjunct). Scopus citations: 1

Project Esky: Enabling High Fidelity Augmented Reality on an Open Source Platform

Constantine, R. D., Quiros, D. F., Rodda, C., Brown, B. C., Zerk, N. B. & Cassinelli, A., Nov 2020, *ISS '20: Companion Proceedings of the 2020 Conference on Interactive Surfaces and Spaces*. Association for Computing Machinery, p. 61-63 (ISS - Companion - Proceedings of the 2020 Conference on Interactive Surfaces and Spaces).Scopus citations: 8

Preface

Willemsen, P., Kuhl, S., Bruder, G., Serafin, S., Cassinelli, A., Kim, K. & Cho, I. & 1 others, Piumsomboon, T., 31 Oct 2020, *Proceedings SUI 2020: ACM Symposium on Spatial User Interaction*. Association for Computing Machinery (ACM), p. vi-vii (Proceedings - SUI: ACM Symposium on Spatial User Interaction).

Context-Based 3D Grids for Augmented Reality User Interfaces

Barrera-Machuca, M. D., Cassinelli, A. & Sandor, C., Oct 2020, *UIST '20 Adjunct: Adjunct Publication of the 33rd Annual ACM Symposium on User Interface Software and Technology*. Association for Computing Machinery, p. 73-76 (UIST - Adjunct Publication of the Annual ACM Symposium on User Interface Software and Technology).Scopus citations: 7

Psychophysical Effects of Experiencing Burning Hands in Augmented Reality

Eckhoff, D., Cassinelli, A., Liu, T. & Sandor, C., 2020, *Virtual Reality and Augmented Reality: 17th EuroVR International Conference, EuroVR 2020 - Proceedings*. Bourdot, P., Interrante, V., Kopper, R., Olivier, A.-H., Saito, H. & Zachmann, G. (eds.). Springer, Cham, p. 83-95 (Lecture Notes in Computer Science; vol. 12499).Scopus citations: 8

Exploring Perceptual and Cognitive Effects of Extreme Augmented Reality Experiences

Eckhoff, D., Cassinelli, A. & Sandor, C., 14 Oct 2019, (Presented).

The analogue notebook: A forgotten exercise?

Cassinelli, A. (Artist), 20 Sept 2019

Radar Tátil: Experimentando um jogo digital com um dispositivo de entrada para pessoas com deficiência visual
Kastrup, V., Cassinelli, A., Paulo, Q., Bergstrom, N. & Sampaio, E., Sept 2018, *TECNOLOGIA ASSISTIVA: PESQUISA E CONHECIMENTO - II*. Bauru: Canal 6 Editora, p. 249-259 11 p.

A-me and braincloud: Art-science interrogations of localization in neuroscience

Puig, J., Carusi, A., Cassinelli, A., Pinel, P. & Hoel, A. S., Apr 2018, In: *Leonardo*. 51, 2, p. 111-117Scopus citations: 4

Tactile Radar: experimenting a computer game with visually disabled

Kastrup, V., Cassinelli, A., Quérette, P., Bergstrom, N. & Sampaio, E., 2018, In: Disability and Rehabilitation: Assistive Technology. 13, 8, p. 777-784 Scopus citations: 3

Furniture that Learns to Move Itself

Parshakova, T., Cho, M., Cassinelli, A. & Saakes, D., May 2017, *CHI EA'17: Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. New York, NY, USA: Association for Computing Machinery, p. 457 1 p. (CHI EA '17).

Data flow, spatial physical computing

Cassinelli, A. & Saakes, D., Mar 2017, *Proceedings of the 11th International Conference on Tangible, Embedded, and Embodied Interaction*. Association for Computing Machinery (ACM), p. 253-259 (TEI - Proceedings of the International Conference on Tangible, Embedded, and Embodied Interaction). Scopus citations: 10

Ratchair: Furniture learns to move itself with vibration

Parshakova, T., Cho, M., Cassinelli, A. & Saakes, D., Jul 2016, *SIGGRAPH '16: ACM SIGGRAPH 2016 Emerging Technologies*. 978-1-4503-4372-5: Association for Computing Machinery (ACM), 2 p. 19 Scopus citations: 6

Breaking the Barriers to True Augmented Reality

Sandor, C., Fuchs, M., Cassinelli, A., Li, H., Newcombe, R., Yamamoto, G. & Feiner, S., 17 Dec 2015, arXiv, 13 p.

特徴音による無線無電源インタフェースの実現

安宅佑樹, カシネリ アルバロ, 渡辺義浩 & 石川正俊, 9 Sept 2015, p. 50-53. 4 p.

残像による動体軌跡上情報投影手法の提案とその実現にむけた残像特性の基礎的研究

Yasui, M., Cassinelli, A., Okumura, K., Oku, H. & Ishikawa, M., 2015, In: Transactions of the Virtual Reality Society of Japan. 20, 1, p. 55-64 10 p.

仮想コンテナ重畳システムを用いた拡張現実感ユーザインタフェースの評価手法の検討

高橋彩, 岩崎健一郎, Cassinelli, A., 渡辺義浩 & 石川正俊, 18 Sept 2014.

A pair of diopter-adjustable eyeglasses for presbyopia correction

Wang, L., Cassinelli, A., Oku, H. & Ishikawa, M., Aug 2014, *Proceedings of SPIE: Novel Optical Systems Design and Optimization XVII*. Gregory, G. G. & Davis, A. J. (eds.). SPIE, Vol. 9193. 91931G. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 9193). Scopus citations: 7

Generic Method for Crafting Deformable Interfaces to Physically Augment Smartphones

Watanabe, C., Cassinelli, A., Watanabe, Y. & Ishikawa, M., Apr 2014, *CHI 2014: One of a CHInd - Extended Abstracts, The 32nd Annual ACM Conference on Human Factors in Computing Systems*. Association for Computing Machinery, p. 1309-1314 (Conference on Human Factors in Computing Systems - Proceedings). Scopus citations: 12

Do blind people move more confidently with the Tactile Radar?

Cassinelli, A., Sampaio, E., Joffily, S. B., Lima, H. R. S. & Gusmão, B. P. G. R., 2014, In: Technology and Disability. 26, 2-3, p. 161-170 Scopus citations: 8

The neuroscience social network project

Puig, J., Perkis, A., Pinel, P., Cassinelli, A. & Ishikawa, M., 19 Nov 2013, *SIGGRAPH Asia 2013 Posters*. Association for Computing Machinery (ACM), 20. (SIGGRAPH Asia ... Posters, SA). Scopus citations: 1

A-me: Augmented memories

Puig, J., Perkis, A., Hoel, A. S. & Cassinelli, A., Nov 2013, *SIGGRAPH Asia 2013 Art Gallery, SA 2013*. Association for Computing Machinery (ACM), 25. (SIGGRAPH Asia 2013 Art Gallery, SA 2013). Scopus citations: 1

追跡的光線投影による残像を用いた大空間情報提示手法の提案と基礎検討
安井雅彦, カシネリ アルバロ, 奥村光平, 奥寛雅 & 石川正俊, 20 Sept 2013.

Displays Take New Shape: An Agenda for Future Interactive Surfaces

Steimle, J., Benko, H., Cassinelli, A., Ishii, H., Leithinger, D., Maes, P. & Poupyrev, I., Apr 2013, *CHI 2013 - CHANGING PERSPECTIVES: EXTENDED ABSTRACTS: The 31st Annual CHI Conference on Human Factors in Computing Systems*. Baudisch, P., Beaudouin-Lafon, M. & Mackay, W. E. (eds.). Association for Computing Machinery, p. 3283-3286 (Conference on Human Factors in Computing Systems - Proceedings; vol. 2013-April).Scopus citations: 6

Experiencing Interactivity in Public Spaces

Väänänen-Vainio-Mattila, K., Häkkinen, J., Cassinelli, A., Müller, J., Rukzio, E. & Schmidt, A., Apr 2013, *CHI 2013 - CHANGING PERSPECTIVES: EXTENDED ABSTRACTS: The 31st Annual CHI Conference on Human Factors in Computing Systems*. Baudisch, P., Beaudouin-Lafon, M. & Mackay, W. E. (eds.). Association for Computing Machinery, p. 3275-3278 (Conference on Human Factors in Computing Systems - Proceedings; vol. 2013-April).Scopus citations: 4

Skin games

Cassinelli, A., Angeseva, J., Watanabe, Y., Frasca, G. & Ishikawa, M., 11 Nov 2012, *ITS'12 - Proceedings of the 2012 ACM Conference on Interactive Tabletops and Surfaces*. Association for Computing Machinery (ACM), p. 323-326 (ITS - Proceedings of the ACM Conference on Interactive Tabletops and Surfaces).Scopus citations: 6

scoreLight & scoreBots

Cassinelli, A., Manabe, D., Perrin, S., Zerroug, A. & Ishikawa, M., 5 May 2012, *Extended Abstracts on Human Factors in Computing Systems*. Association for Computing Machinery (ACM), p. 1011-1014 (Conference on Human Factors in Computing Systems - Proceedings).

Light arrays

Wilde, D., Cassinelli, A. & Zerroug, A., May 2012, *CHI '12 Extended Abstracts on Human Factors in Computing Systems*. Association for Computing Machinery (ACM), p. 987-990 (Conference on Human Factors in Computing Systems - Proceedings).Scopus citations: 17

The Laser Aura: a prosthesis for emotional expression

Cassinelli, A., Zhou, Y., Zerroug, A. & Ishikawa, M., 12 Dec 2011, *SIGGRAPH Asia 2011 Posters, SA'11*. Association for Computing Machinery (ACM), 24. (SIGGRAPH Asia ... Posters, SA).Scopus citations: 1

The Volume Slicing Display: a tangible interface for slicing and annotation of volumetric data

Cassinelli, A., Watanabe, Y. & Ishikawa, M., Nov 2011, *Optics & Photonics Japan 2011 Proceedings*. 29pCS4

マウスチェア —restless-interface—

宮下令央, Cassinelli, A. & 石川正俊, 7 Oct 2011.

EXTROVERTING INTERFACE

藏悠子, Cassinelli, A. & 石川正俊, Oct 2011.

The Light Arrays project: The invisible skirt and other imaginary things

Wilde, D. & CASSINELLI, A., 17 Sept 2011, (Presented).

Invoked computing: Spatial audio and video AR invoked through miming

Zerroug, A., Cassinelli, A. & Ishikawa, M., 7 Apr 2011.

EARLIDS & entacoustic performance

CASSINELLI, A., Oct 2010, *Devices that Alter Perception 2010*. Reynolds, C. (ed.). CreateSpace Independent Publishing Platform, p. 50-55

To Blink or Not To Blink

CASSINELLI, A. & Perrin, S., Oct 2010, *Devices that Alter Perception 2010*. Reynolds, C. (ed.). CreateSpace Independent Publishing Platform, p. 46-49

Light Arrays: a system for extended engagement

Wilde, D., Cassinelli, A., Zerroug, A., Helmer, R. J. N. & Ishikawa, M., Aug 2010, *Proceedings of the 8th International Conference on Disability, Virtual Reality & Associated Technologies (ICDVRAT 2010)*. Sharkey, P. & Sánchez, J. (eds.). Valparaiso, Chile: The University of Reading, p. 157-164 8 p.

Camera-less Smart Laser Projector

Cassinelli, A., Zerroug, A., Watanabe, Y., Ishikawa, M. & Angeseva, J., Jul 2010, *ACM SIGGRAPH 2010 Emerging Technologies*. Association for Computing Machinery (ACM), 9. (ACM SIGGRAPH 2010 Emerging Technologies, SIGGRAPH '10).Scopus citations: 9

In-air typing interface for mobile devices with vibration feedback

Niikura, T., Hirobe, Y., Cassinelli, A., Watanabe, Y., Komuro, T. & Ishikawa, M., Jul 2010, *ACM SIGGRAPH 2010 Emerging Technologies*. Association for Computing Machinery (ACM), 15. (ACM SIGGRAPH ... Emerging Technologies, SIGGRAPH).Scopus citations: 31

Scorelight: Playing with a human-sized laser pick-up

Cassinelli, A., Kuribara, Y., Zerroug, A., Ishikawa, M. & Manabe, D., 2010, In: *Proceedings of the International Conference on New Interfaces for Musical Expression*. p. 144-149Scopus citations: 5

scoreLight

Cassinelli, Á., Kuribara, Y., Ishikawa, M. & Manabe, D., Dec 2009, *Proceedings - SIGGRAPH ASIA '09: ACM SIGGRAPH ASIA 2009 Art Gallery & Emerging Technologies: Adaptation*. Association for Computing Machinery, p. 15 1 p.

Virtual Haptic Radar

Zerroug, A., Cassinelli, A. & Ishikawa, M., Dec 2009, *ACM SIGGRAPH ASIA 2009 Sketches, SIGGRAPH ASIA '09*. Association for Computing Machinery (ACM), 1667158. (ACM SIGGRAPH ASIA Sketches, SIGGRAPH ASIA).Scopus citations: 3

Volume Slicing Display

Cassinelli, A. & Ishikawa, M., Dec 2009, *Proceedings - SIGGRAPH ASIA '09: ACM SIGGRAPH ASIA 2009 Art Gallery & Emerging Technologies: Adaptation*. p. 86

Machine Self-Sacrifice

Reynolds, C. J. & Cassinelli, A., Jun 2009, *Proceedings of the Eighth International Conference on Computer Ethics – Philosophical Enquiry: CEPE 2009*. Bottis, M. (ed.). NOMIKI BIBLIOTHIKI, p. 625-635

I am near my navel: learning mappings between location and skin

Reynolds, C., Cassinelli, A., Watanabe, Y. & Ishikawa, M., Mar 2009, *Proceedings of Key Issues in Sensory Augmentation*.

Ghostly Images Appearing in Moving Human Eyes and Still Machine Eyes

Ando, H., Cassinelli, A. & Watanabe, J., Dec 2008, *ACM SIGGRAPH ASIA 2008 Artgallery: Emerging Technologies, SIGGRAPH Asia '08*. Association for Computing Machinery, p. 52 (ACM SIGGRAPH ASIA Artgallery: Emerging Technologies, SIGGRAPH Asia).

The deformable workspace: a membrane between real and virtual space

Watanabe, Y., Cassinelli, A., Komuro, T. & Ishikawa, M., Oct 2008, *2008 3rd IEEE International Workshop on Horizontal Interactive Human Computer Systems*. Institute of Electrical and Electronics Engineers, Inc., p. 145-152 4660197. (IEEE International Workshop on Horizontal Interactive Human Computer System, TABLETOP).Scopus citations: 33

Boxed Ego

CASSINELLI, A. & ISHIKAWA, M., 21 Sept 2008, *Proceedings of the 10th Ubicomp 2008 Workshop Programs*. p. 10-13

Aural Antennae

Reynolds, C., Cassinelli, A. & Ishikawa, M., Sept 2008, *Proceedings of the 10th Ubicomp 2008 Workshop Programs* . p. 26-29

Creation of Sympathetic Media Content

Perrin, S., Riva, G. & Cassinelli, A., Sept 2008, *Proceedings of the 10th Ubicomp 2008 Workshop Programs*. p. 22-25

Spatial coverage vs. sensorial fidelity in VR

Zerroug, A., Cassinelli, A. & Ishikawa, M., Sept 2008, *Proceedings of the 10th Ubicomp 2008 Workshop Programs*. p. 33-36

Manipulating Perception

Reynolds, C., Cassinelli, A., Watanabe, Y. & Ishikawa, M., Jun 2008. 5 p.

Meta-perception: Reflexes and bodies as part of the interface

Reynolds, C., Cassinelli, A. & Ishikawa, M., Apr 2008, *CHI '08 Extended Abstracts on Human Factors in Computing Systems* . Association for Computing Machinery (ACM), p. 3669-3674 (Conference on Human Factors in Computing Systems - Proceedings).Scopus citations: 3

メタ・パーセプション

石川正俊, Cassinelli, A. & Reynolds, C., Jan 2008, *レーザー研究*. Vol. 36, Suppl.. p. 199-200

Economically Autonomous Robotic Entities

Reynolds, C., Cassinelli, A. & Ishikawa, M., 14 Apr 2007.

タンジブルスクリーンを用いた3次元物体表現

伊藤 崇仁, Cassinelli, A., 小室 孝 & 石川 正俊, Dec 2006, p. 774-775. 2 p.

Augmenting spatial awareness with Haptic Radar

Cassinelli, A., Reynolds, C. & Ishikawa, M., Oct 2006, *Proceedings - Tenth IEEE International Symposium on Wearable Computers (ISWC 2006)*. Institute of Electrical and Electronics Engineers, Inc., p. 61-64 4067727. (Proceedings - International Symposium on Wearable Computers, ISWC).Scopus citations: 113

Haptic Radar / Extended Skin Project

Cassinelli, A., Reynolds, C. & Ishikawa, M., Jul 2006, *SIGGRAPH '06: ACM SIGGRAPH 2006: Sketches* . 1179892. (ACM SIGGRAPH: Sketches, SIGGRAPH).Scopus citations: 3

Khronos Projector

Cassinelli, A. & Ishikawa, M., Jul 2005, *SIGGRAPH '05 ACM SIGGRAPH 2005 Emerging technologies*. Cox, D. (ed.). Association for Computing Machinery (ACM), 10. (ACM SIGGRAPH Emerging Technologies).Scopus citations: 54

Smart laser-scanner for 3D human-machine interface

Cassinelli, A., Perrin, S. & Ishikawa, M., 2 Apr 2005, *CHI'05 Extended Abstracts on Human Factors in Computing Systems*. Association for Computing Machinery (ACM), p. 1138-1139 (Conference on Human Factors in Computing Systems - Proceedings).Scopus citations: 27

Load-balanced optical packet switching using two-stage time-slot interchangers

Cassinelli, A., Goulet, A., Naruse, M., Kubota, F. & Ishikawa, M., 23 Sept 2004. 2 p.

Markerless laser-based tracking for real-time 3D gesture acquisition
Cassinelli, A., Perrin, S. & Ishikawa, M., Aug 2004, *SIGGRAPH '04 ACM SIGGRAPH 2004 Posters*. Association for Computing Machinery (ACM), (ACM SIGGRAPH 2004 Posters, SIGGRAPH 2004).

Gesture Recognition Using Laser-Based Tracking System

Perrin, S., Cassinelli, A. & Ishikawa, M., May 2004, *Proceedings - Sixth IEEE International Conference on Automatic Face and Gesture Recognition - FGR 2004*. p. 541-546 (Proceedings - IEEE International Conference on Automatic Face and Gesture Recognition).Scopus citations: 41

Multistage network with globally controlled switching stages and its implementation using optical multi-interconnection modules

Cassinelli, A., Naruse, M. & Ishikawa, M., Feb 2004, In: *Journal of Lightwave Technology*. 22, 2, p. 315-328Scopus citations: 9

Arbitration-free Time-Division Permutation Switching suitable for All-Optical Implementation

Cassinelli, A., Naruse, M., Goulet, A. & Ishikawa, M., 18 Dec 2003.

Laser-Based Finger Tracking System Suitable for MOEMS Integration

Perrin, S., Cassinelli, A. & Ishikawa, M., Nov 2003, *Proceedings of the Image and Vision Computing New Zealand 2003*. Bailey, D. G. (ed.). Massey University, p. 131-136 6 p.

Stage-distributed time-division permutation routing in a multistage optically interconnected switching fabric

Cassinelli, A., Naruse, M. & Ishikawa, M., Sept 2003, *ECOC-IOOC 2003: Proceedings*. Vol. 3. p. 830-831

Reconfigurable optical interconnections using multi-permutation-integrated fiber modules

Cassinelli, A., Naruse, M., Ishikawa, M. & Kubota, F., Mar 2003, *Extended Abstracts of the 50th Spring Meeting of the Japan Society of Applied Physics and Related Societies*. Kanagawa, Tokyo: Japan Society of Applied Physics, p. 1256 1 p.

A modular, guided-wave approach to plane-to-plane optical interconnects for multistage interconnection networks

Cassinelli, A., Naruse, M., Ishikawa, M. & Kubota, F., Nov 2002, *Optics Japan 2002 Conference, Japanese Society of Applied Physics (JSAP): Extended Abstracts*. Koganei, Tokyo: JSAP, p. 124-125 2 p.

Two-dimensional fiber array with integrated topology for short-distance optical interconnections

Naruse, M., Cassinelli, A. & Ishikawa, M., Nov 2002, In: *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*. p. 722-723Scopus citations: 1

Real-time Active Alignment Using Mechanical Dynamics of Optical Interconnection Systems

Naruse, M., CASSINELLI, A. & Ishikawa, M., Oct 2002, p. 77. 1 p.

Quad-tree Image compression using reconfigurable free-space optical interconnections and pipelined parallel processors

CASSINELLI, A., Ishikawa, M. & Naruse, M., Apr 2002, p. 23-25. 3 p.

Elemental optical fiber-based blocks for building modular computing parallel architectures

Cassinelli, A., Naruse, M. & Ishikawa, M., Mar 2002, p. 1204.

Dedicated optoelectronic stochastic parallel processor for real-time image processing: motion-detection demonstration and design of a hybrid complementary-metal-oxide semiconductor-self-electro-optic-device-based prototype

Cassinelli, A., Chavel, P. & Desmulliez, M. P. Y., 10 Dec 2001, In: *Applied Optics*. 40, 35, p. 6479-6491Scopus citations: 5

Optoelectronic implementation of cellular automata for complex vision algorithms

Chavel, P., Cassinelli, A. & Glaser, I., Sept 2000, *Proceedings of SPIE : ROMOPTO 2000: Sixth Conference on Optics*. Vlad, V. I. (ed.). SPIE, Vol. 4430. p. 442-450 (Proceedings of SPIE - The International Society for Optical Engineering).

Optoelectronic cellular automata for video real time vision

Chavel, P., Cassinelli, A. & Glaser, I., Jun 2000, *Proceedings of SPIE: Optics in Computing 2000*. Lessard, R. A. & Galstian, T. V. (eds.). SPIE, Vol. 4089. p. 374-381 (Proceedings of SPIE - The International Society for Optical Engineering). Scopus citations: 1

Demonstration of video-rate optoelectronic parallel processors for noise cleaning in binary images by simulated annealing
Cassinelli, A., Lalanne, P., Chavel, P. & Glaser, I., Jun 1998, *Proceedings of SPIE: Optics in Computing '98*. SPIE, Vol. 3490. p. 163-166 4 p. (Proceedings of SPIE - The International Society for Optical Engineering).

Activities

8th Computer Art Congress

CASSINELLI, A. (Advisory Chair)

30 Oct 2024 → 2 Nov 2024

Institut Langevin

CASSINELLI, A. (Visiting Researcher)

1 Jul 2024 → 25 Jul 2024

External PhD examiner

CASSINELLI, A. (Examiner)

10 May 2024

Leonardo/ISAST LASER Talks

CASSINELLI, A. (Chair) & PARK, L. S. Y. (Advisory Chair)

3 Apr 2024

Opportunities for Knowledge Transfer (SCM/HUAWEI)

CASSINELLI, A. (Speaker)

19 Mar 2024

Open Challenge: Robots, AI & Creativity

CASSINELLI, A. (Member of Award Committee)

17 Feb 2024 → 18 Feb 2024

Panelist, On Virtual Reality, Society and Death

CASSINELLI, A. (Speaker)

6 Jan 2024

Development neuromodulator BRAINMOD (startup)

CASSINELLI, A. (Consultant)

Jan 2024 → ...

Frontiers in Virtual Reality (Journal)

CASSINELLI, A. (Co-Editor)

2 Jul 2023 → 30 May 2024

Bali Fab Fest (Fab17)

CASSINELLI, A. (Participant)

12 Oct 2022 → 22 Oct 2022

FOUNDATION - A WEB3 MEDIA ART FESTIVAL

CASSINELLI, A. (Participant)

22 Sept 2022

27th International Symposium on Electronic Art (ISEA 2022)

CASSINELLI, A. (Member of Programme Committee)
10 Jun 2022 → 16 Jun 2022

16th ACM Annual Conference on Tangible, Embedded and Embodied Interaction

CASSINELLI, A. (Co-Chair)
13 Feb 2022 → 16 Feb 2022

Frontiers in Virtual Reality (Journal)

CASSINELLI, A. (Co-Editor)
2022 → 2023

Ars Electronica Garden HK: Artificial Intentionalities

CASSINELLI, A. (Moderator)
9 Sept 2021

On the importance of keeping reinventing the wheel - an art and science perspective

CASSINELLI, A. (Invited Speaker)
27 Jun 2021

Art Machines: Past/Present (Event)

CASSINELLI, A. (Reviewer)
Jun 2021

Being-in-the-World in the Times of Virtuality: An Art and Science Perspective

CASSINELLI, A. (Keynote Speaker)
3 Dec 2020

Fourteenth International Conference on Tangible, Embedded, and Embodied Interaction 2020 (Event)

CASSINELLI, A. (Reviewer)
Sept 2020

8th ACM Symposium on Spatial User Interaction (SUI 2020)

CASSINELLI, A. (Co-Chair)
30 Aug 2020 → 1 Nov 2020

2020 ACM Conference on Designing Interactive Systems (DIS 2020) (Event)

CASSINELLI, A. (Reviewer)
Jul 2020

27th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2020) (Event)

CASSINELLI, A. (Reviewer)
Mar 2020

8th ACM Symposium on Spatial User Interaction (SUI 2020) (Event)

CASSINELLI, A. (Reviewer)
2020

Prizes

Best Paper Award

CASSINELLI, A. (Recipient), 2010

Digital Content Expo Special Proze (DCEXPO)

Parshakova, T. (Recipient), CASSINELLI, A. (Recipient) & Saakes, D. (Recipient), 2016

Excellence Prize at the 13th Japan Media Arts Festival (JMAF)

CASSINELLI, A. (Recipient) & Manabe, D. (Recipient), 2009

Grand Prize [Art] @ 9th Japan Media Art Festival (JMAF)

CASSINELLI, A. (Recipient), 2005

Honorary Mention Ars Electronica

CASSINELLI, A. (Recipient), 2006

Honorary Mention / Hydropods

Harada, C. (Recipient), CASSINELLI, A. (Recipient) & Pascual, P. (Recipient), 22 Oct 2022

Jury Grand Prize at Laval Virtual

CASSINELLI, A. (Recipient) & Zerroug, A. (Recipient), 2011

Moonshot Prize - Venture Catalyst Challenge 2024.

CASSINELLI, A. (Recipient), CAPPOTTO, D. (Recipient), Zilberberg, M. (Recipient), Lazaro, C. (Recipient), Suarez, A. (Recipient) & Watson, J. (Recipient), 12 Apr 2024

MTurk Funds for Egocentric Datasets

HAEBICH, J. K. (Recipient), CASSINELLI, A. (Recipient) & SANDOR, C. (Recipient), 2 Jun 2020

NHK Digital Stadium, Best Selection Award

CASSINELLI, A. (Recipient), 2005

NHK Digital Stadium, Finalist Award

CASSINELLI, A. (Recipient), 2006

NISSAN Research Challenge Innovative Concept Award

CASSINELLI, A. (Recipient), 2010

Panasonic Prize, Digital Art Festival (DAF)

CASSINELLI, A. (Recipient), 2005

Prix category Medicine and Health, Laval Virtual

CASSINELLI, A. (Recipient) & Zerroug, A. (Recipient), 2009

ReVolution Demos Award (SIGGRAPH E-tech at Laval Virtual)

CASSINELLI, A. (Recipient), 2010

Grants

Projects

ResCtrs: Centre for Applied Computing and Interactive Media (ACIM)

ALLEN, R. W. (Principal Investigator / Project Coordinator), CASSINELLI, A. (Co-Investigator), CHAN, H. M. (Co-Investigator), FU, H. (Co-Investigator), LAM, M. L. (Co-Investigator), LC, R. (Co-Investigator) & ZHU, K. (Co-Investigator)
1/07/05 → ...

ITF: Future Cinema Systems: Next-Generation Art Technologies

Shaw, J. (Main Project Coordinator [External]), ALLEN, R. W. (Principal Investigator / Project Coordinator), CASSINELLI, A. (Co-Investigator), CHAN, H. M. (Co-Investigator), LAM, M. L. (Co-Investigator), LIU, C. (Co-Investigator) & ZHU, K. (Co-Investigator)

1/11/22 → ...

TDG(CityU): Simulating One-on-One Teaching in Large Online Lectures with the Thousand Faces Avatar

CASSINELLI, A. (Principal Investigator / Project Coordinator)

1/01/22 → ...

Impacts

Uses of XR in Palliative Care

CASSINELLI, A. (Participant)

Datasets

Classifying Cycling Hazards in Egocentric Data

HAEBICH, J. K. (Creator), CASSINELLI, A. (Creator) & SANDOR, C. (Creator), School of Creative Media, City University of Hong Kong, 2020

<https://xr-lab.org/project/cycling/>