

**CV : 23.1.2012**

## Alvaro CASSINELLI (Researcher & Media Artist)

### Biography



Alvaro Cassinelli was born in Montevideo (Uruguay) in 1972. In 1990 he obtained both French and Uruguayan Bachelor degree, and a grant to pursue his studies in France. In 1996 he obtained a Graduate Engineering diploma from the Ecole Nationale Supérieure des Telecommunications (Télécom ParisTech). He completed the same year a Doctoral Qualifying Degree (DEA) in physics (laser and matter interaction) from the University of Paris-XI/ENST/EcolePolytechnique. In 2000 he received a Ph.D degree from the University of Paris-XI Orsay. Since 2001 he has been working as a Research Fellow, Research Assistant and since 2006 as Assistant Professor and leader of the Meta-Perception group at the Ishikawa-Komuro Laboratory, Department of Information Physics and Computing, University of Tokyo. His research interests included fundamental aspects of physical computing (optical computing, quantum computing) as well as optical telecommunications; more recently, he has been working on

artificial vision systems, interactive image processing, robotics, and novel human-machine interfaces using state-of-the-art optical technology. Since 2006 he has been actively involved in the creation and development of the Meta-Perception Group, a group specialized in human-computer interfaces. In parallel, he enjoys applying the results of this research to his more personal works as a Media Artist, and has been awarded several prizes in this field, including an Honorary Mention at ArsElectronica in 2006, the Grand Prize [Art Division] at the 9th Japan Media Art Festival, an Excellence Prize [Entertainment Division] at the 13th Japan Media Art Festival.

---

### Current affiliation

Assistant Professor / Group Leader  
Meta-Perception Group  
Ishikawa-Oku Laboratory  
Dept. of Information Physics and Computing,  
Graduate School of Inf. Science and Technology,  
The University of Tokyo  
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656, Japan

Phone: +81.3.5841.6937 (laboratory)  
Fax: +81.3.5841.6952  
Email: [cassinelli.alvaro@gmail.com](mailto:cassinelli.alvaro@gmail.com)



---

### Some relevant links:

- Ishikawa-Oku Lab: [www.k2.t.u-tokyo.ac.jp](http://www.k2.t.u-tokyo.ac.jp)
- Meta-Perception Group: [www.k2.t.u-tokyo.ac.jp/perception](http://www.k2.t.u-tokyo.ac.jp/perception)
- Web page (laboratory): [www.k2.t.u-tokyo.ac.jp/members/alvaro/](http://www.k2.t.u-tokyo.ac.jp/members/alvaro/)
- Archive of media-art works: [www.alvarocassinelli.com](http://www.alvarocassinelli.com)



**Meta-Perception Group**

## Publications

### In scientific journals:

- Yoshihiro Watanabe, Alvaro Cassinelli, Takashi Komuro, Masatoshi Ishikawa: **Interactive Display System based on Adaptive Image Projection to a Deformable Tangible Screen**, Transactions of the Virtual Reality Society of Japan, Vol. 15, No. 2, pp. 173-182, 2010 (Japanese). **[2010 Best Paper Award Virtual Reality Society Japan]**
- N. Ogawa, K. Kikuta, H. Oku, T. Hasegawa, A. Cassinelli and M. Ishikawa. **Proposal for Real-World-Oriented Interaction System with Microorganisms and Its Preliminary Study**. IPSJ Journal, Vol.49, No.10, Oct. (2008).
- A. Cassinelli, M. Naruse and M. Ishikawa, **Multistage Network with Globally Controlled Switching Stages and its implementation using Optical Multi-interconnection Modules**, IEEE/OSA Journal of Lightwave Technology, Vol.22, No.2, pp.315-328, February (2004).
- A. Cassinelli, P. Chavel and M. Desmulliez, **Dedicated Optoelectronic Stochastic Parallel Processor (OSPP) for real-time image processing: motion detection demonstration and design of a hybrid CMOS/SEED based prototype**, Applied Optics, Vol.40, No.35, pp.6479-6491, December (2001).
- A. Cassinelli, **Optoelectronic Stochastic Parallel Processors for real-time image processing**, full-length article submitted in 2000 to Annl.Phys. France.
- R. Pankoke, A. Cassinelli, P. Sillard, C. Dorrer, P. Leishing et R. Frey, **Generateurs et amplificateurs paramétriques optiques monomode transverse**, Ann.Phys.Fr. 20, pp.593-594 (1995).

### Books:

- Alvaro Cassinelli, **Kicked up from Flatland: some examples of 2.5 dimensional interactive displays**, Appears in: **Augmented Reality Urban Design** (도시공간에 개입하는 미디어아트와 확장공간 프로젝트증강현실 도시디자인), JooYon Kim Ed., Publisher: Gimjuyeon deungjeo | Design Flux, 224 pages, ISBN: ISBN (13 digit): 9788992214964
- Alvaro Cassinelli, **EARLIDS &entacoustic performance** and **To Blink or Not To Blink** in Reynolds, C. (Ed.) (2011). Devices that Alter Perception 2010. ISBN-10: 1463664249. Charleston, SC: CreateSpace. (Also contributed images, and was one of the organizers of the workshop).
- Alvaro Cassinelli, Khronos Projector in **Area N16 Caprices de Ville** (French Edition) [Paperback]. ISBN-13: 978-2352760368.
- Alvaro Cassinelli, introductory essay in **Swing That Thing : moving to move. The poetics of embodied engagement**, Danielle Wilde PhD thesis and catalogue, 2011.

### In proceedings:

- Cassinelli, A., Watanabe, Y., and Masatoshi, I.: **The Volume Slicing Display: a tangible interface for slicing and annotation of volumetric data**, (invited paper), Optics & Photonics Japan 2011 (OPJ 2011) Symposium (Recent Advance of Digital Opto-electronic Systems and Their Great Applications), Osaka, Nov. 29, (2011).
- Cassinelli, A., Zhou, Y., Zerroug .A and Ishikawa, M.: **The Laser Aura: a prosthesis for emotional expression**, SIGGRAPH ASIA 2011, Tech. Sketches and Posters, Hong Kong, 12-15 Dec. (2011).
- 宮下令央, Cassinelli Alvaro, 石川正俊: **マウスチエア –restless-interface–**, エンタテインメントコンピューティング 2011, (EC2011), セッション 6B 測, 06B-01, Oct. 7-10 (2011), (non peer-reviewed).
- 藏悠子, Alvaro Cassinelli, 石川正俊: **Extroverting Interface**, エンタテインメントコンピューティング 2011, (EC2011), セッション 6B 測, 06B-07, Oct. 7-10 (2011), (non peer-reviewed).
- Wilde, D., Cassinelli, A. **The Light Arrays project: The in-visible skirt and other imaginary things**. SEAM Symposium: Spacing Movements Outside in. (SEAM2011). Sydney, September (2011).
- Zerroug, A., Cassinelli, A., Ishikawa, M. **Invoked computing: Spatial audio and video AR invoked through miming**, Proceedings of Virtual Reality International Conference (VRIC 2011), pp. 31-32 (04-2011), Laval, France. **[2011 Jury Grand Prize Laval Virtual]**
- A. Cassinelli and S. Perrin, **To Blink or Not To Blink**, Third Workshop on Devices that Alter Perception (DAP 2010) in conjunction with ISMAR 2010, October 13th, 2010, Seoul, South Korea.
- A. Cassinelli, **EARLIDS &entacoustic performance**, Third Workshop on Devices that Alter Perception (DAP 2010) in conjunction with ISMAR 2010, October 13th, 2010, Seoul, South Korea.
- Wilde, D., Cassinelli, A., Zerroug, A., Helmer, R J N., Ishikawa, M. **Light Arrays: a system for extended engagement**. Proc. ICDVRAT with ArtAbilitationViña del Mar/Valparaíso, Chile. September (2010).

- Takehiro Niikura, Yuki Hirobe, Alvaro Cassinelli, Yoshihiro Watanabe, Takashi Komuro, Masatoshi Ishikawa: **In-air Typing Interface for Mobile Devices with Vibration Feedback**, ACM International Conference on Computer Graphics and Interactive Techniques, SIGGRAPH 2010 Proceedings, Los Angeles, (2010).
- A. Cassinelli, A. Zerroug, Y. Watanabe, J. Angeseva and M. Ishikawa, **Camera-less Smart Laser Projector**, SIGGRAPH 2010 (invited to Emerging Technologies). July 25-29 2010, Los Angeles. One paper abstract.
- A. Cassinelli, Y. Kuribara, A. Zerroug, D. Manabe and M. Ishikawa, scoreLight: **playing with a human sized laser pickup**, International Conference on New Instruments for Musical Expression (NIME2010), 15-18th June 2010 Sydney, Australia, pp:144-149, (2010).
- Reynolds C., Hertrich, S., Cassinelli, A., Ishikawa, M. and Smith, M. (2010) **Ethical Aspects of Video Game Experiments**. Video Games as Research Instruments Workshop in conjunction with Conference on Human Factors in Computing Systems (CHI 2010), April 10 - 15, 2010, Atlanta, Georgia, USA (2010).
- A. Cassinelli, A. Zerroug, J. Angeseva and M. Ishikawa, **Camera-less Smart Laser Projector**, 12th Virtual Reality International Conference, Laval Virtual 2010, VRIC Proceedings / ReVolution demo session, **[SIGGRAPH E-tech Revolution Award: invited to SIGGRAPH E-Tech 2010]**. Extended abstract: pp.291-295, (2010).
- Reynolds, C., Cassinelli, A., Watanabe, Y., and Ishikawa, M. (2009) **I am near my navel: learning mappings between location and skin**. Key Issues in Sensory Augmentation Workshop, March 26 - 27, 2009, University of Sussex, Brighton, UK. (2009).
- A. Cassinelli, Y. Kuribara, D. Manabe and M. Ishikawa, **scoreLight**, SIGGRAPH ASIA 2009, Art Gallery, Yokohama (2009). Art Gallery Catalog, p.15, (2009).
- A. Zerroug, A. Cassinelli and M. Ishikawa, **Virtual Haptic Radar**, sketch at SIGGRAPH ASIA 2009, Yokohama, one page abstract (2009).
- A. Cassinelli and M. Ishikawa, **Volume Slicing Display**, SIGGRAPH ASIA 2009, Emerging Technologies, Yokohama, Emerging Technologies Catalog, p.88. (2009).
- Reynolds, C. and Cassinelli, A., **Machine Self-Sacrifice**. Eighth International Conference of Computer Ethics: Philosophical Enquiry. June 26-28, Corfu, Greece, (2009).
- Hideyuki Ando, Alvaro Cassinelli, Junji Watanabe, **Ghostly Images Appearing in Moving Human Eyes and Still Machine Eyes**, DIGITAL EXPERIENCES Synthesis - Curated Show at Siggraph ASIA 10-13/12/2008, pp52, Singapore, (2008).
- Cassinelli, A., and Ishikawa, M. (2008). **Boxed Ego**, Devices that Alter Perception Workshop (DAP 2008) in conjunction with UbiComp, Sept. 21st, Seoul, South Korea (2008).
- Reynolds, C., Cassinelli, A., and Ishikawa, M. (2008). **Aural Antennae**, Devices that Alter Perception Workshop (DAP 2008) in conjunction with UbiComp, Sept. 21st, Seoul, South Korea (2008).
- Zerroug, A., Cassinelli A. and Ishikawa, M. (2008). **Spatial coverage vs. sensorial fidelity in VR**, Devices that Alter Perception Workshop (DAP 2008) in conjunction with UbiComp, Sept. 21st, Seoul, South Korea (2008).
- Stephane, P., Riva G. and Cassinelli A. (2008). **Creation of Sympathetic Media Content**, Devices that Alter Perception Workshop (DAP 2008) in conjunction with UbiComp, Sept. 21st, Seoul, South Korea (2008). Y. Watanabe, A. Cassinelli, T. Komuro and M. Ishikawa. **The Deformable Workspace: a Membrane between Real and Virtual Space**, IEEE Tabletops and Interactive Surfaces, Oct. 1-3, Amst., the Netherlands, (2008).
- Reynolds, C., Cassinelli, A., Watanabe, Y., and Ishikawa, M. **Manipulating Perception**. 6th European Conference on Computing and Philosophy, June 16 - 18, Montpellier, France (2008).
- Reynolds, C., Cassinelli, A., and M. Ishikawa (2008) **Meta-perception: reflexes and bodies as part of the interface**. Conference on Human Factors in Computing Systems (CHI 2008), April 5-10, Florence, Italy (2008).
- Reynolds, C., Cassinelli, A., and M. Ishikawa **Economically Autonomous Robotic Entities**. Workshop on Roboethics in conjunction with IEEE Inter. Conf. on Robotics and Autom. (ICRA'07). April 10-14, Rome, (2007).
- 伊藤崇仁, Alvaro Cassinelli, 小室孝 and 石川正俊, **タンジブルスクリーンを用いた3次元物体表現 (Volume Slicing Display)**, 計測自動制御学会 システムインテグレーション部門学術講演会 (SI2006).
- Cassinelli, A., Reynolds, C. and Ishikawa, M. (2006) **Augmenting spatial awareness with Haptic Radar**. Tenth International Symposium on Wearable Computers (ISWC), October 11 - 14, 2006, Switzerland, pp.61-64 (2006).
- A. Cassinelli, C. Reynolds, and M. Ishikawa, **Haptic Radar**. The 33rd International Conference and Exhibition on Computer Graphics and Interactive Techniques (SIGGRAPH), August 1, (2006), Boston, Massachusetts, USA.
- A. Cassinelli, T. Ito and M. Ishikawa, **Khronos Projector**. Interactive Tokyo 2005, Miraikan Museum of Science and Technology, Tokyo, 25-26 August (2005). One page abstract (english/japanese, p.23).
- A. Cassinelli and M. Ishikawa. **Khronos Projector**. Emerging Tech., SIGGRAPH2005, Los Angeles (2005).
- A. Cassinelli, S. Perrin and M. Ishikawa, **Smart Laser-Scanner for 3D Human-Machine Interface**, ACM SIGCHI 2005, Portland, Oregon. Extended Abstract, pp.1138-1139 (2005).
- A. Cassinelli, A. Goulet, M. Naruse, F. Kubota and M. Ishikawa, **Load-balanced optical packet switching using two-stage time-slot interchangers**, Proc. 2004 IEICE, Sept. 21-24, Tokushima, Japan, pp.49-50 (2004).

- A. Goulet, A. Cassinelli, M. Naruse, F. Kubota and M. Ishikawa, **A load-balanced optical packet switch architecture with an O(1) scheduling complexity**, 9th OptoElectronics and communications Conference/3rd International Conference on Optical Internet (OECC/COIN 2004), July 2004, (2004).
- A. Cassinelli, S. Perrin and M. Ishikawa, **Markerless Laser-based Tracking for Real-Time 3D Gesture Acquisition**, ACM SIGGRAPH 2004, Los Angeles, 8-12 August (2004).
- S. Perrin, A. Cassinelli and M. Ishikawa, **Gesture Recognition Using Laser-based Tracking System**, 6th International Conference on Automatic Face and Gesture Recognition 2004 (FG 2004), Seoul, Korea, 17-19 May 2004, pp.541-546, (2004).
- A. Cassinelli, M. Naruse, A. Goulet and M. Ishikawa, **Arbitration-free Time-Division Permutation Switching Suitable for All-Optical Implementation**, IEICE meeting, Yamanashi Univ., 18-19 Dec. (2003).
- S. Perrin, A. Cassinelli and M. Ishikawa, **Laser-Based Finger Tracking System Suitable for MOEMS Integration**, Image and Vision Computing, New Zealand (IVCNZ), Massey Univ., 26-28 Nov., pp.131-136, (2003).
- A. Cassinelli, M. Naruse and M. Ishikawa, **Stage-Distributed Time-Division Permutation Routing in a Multistage Optically Interconnected Switching Fabric**, 29th European Conference on Optical Communication (ECOC-IOOC 2003), September 21-25, Rimini, Italy, pp.830-831 (2003).
- A. Cassinelli, M. Naruse, M. Ishikawa and F. Kubota, **Reconfigurable optical interconnections using multi-permutation-integrated fiber modules**, Extended Abstracts of the Optics Japan 2003 Conference, Japanese Society of Applied Physics (JSAP), Kanagawa, Tokyo, March 2003, p.1256 (27a-W12), (2003).
- M. Naruse, A. Cassinelli, M. Ishikawa: **Two-dimensional fiber array with integrated topology for short-distance optical interconnections**, 2002 IEEE LEOS Annual Meeting (Glasgow, 2002.11.14)/Conference Proceedings, pp.722-723, (2002).
- A. Cassinelli, M. Naruse, M. Ishikawa and F. Kubota, **A modular, guided wave approach to plane-to-plane optical interconnects for multistage interconnection networks**, Extended Abstracts of the Optics Japan 2002 Conference, Japanese Society of Applied Physics (JSAP), Koganei, Tokyo, Nov. 2-4, p.124-125 (3aES4), (2002).
- M. Naruse, A. Cassinelli, M. Ishikawa: **Real-Time Alignment Using Mechanical Dynamics of Optical Interconnection Systems**, OSA Annual Meeting & Exhibit 2002 (Orlando, 2002.10.1). Conf. p.77, (2002).
- A. Cassinelli, M. Naruse, M. Ishikawa, **Quad-tree image compression using reconfigurable free-space optical interconnections and pipelined parallel processors**, Proc. of the Optics in Computing conference, Grand Hotel Taipei (Taiwan) April 8-11 2002, pp.23-25, (2002).
- A. Cassinelli, M. Naruse, and M. Ishikawa: **Elemental optical fiber-based blocks for building modular computing parallel architectures**, The 49th Spring Meeting, 2002, The Japan Society of Applied Physics (JSAP) and Related Societies, (Kanagawa 2002.3.27), Extended Abstracts, pp.1204. (2002).
- P. Chavel, A. Cassinelli, I. Glaser, **Optoelectronic implementation of cellular automata for complex vision algorithms**, ROMOPTO 2000, 6th Conf. no Optics, September 4-7, Bucharest, Romania, (2000).
- P. Chavel, A. Cassinelli and I. Glaser, **Optoelectronic cellular automata for real time vision**, OC'2000, Canada, Quebec 18-23 juin 2000, SPIE 2000, pp.374-381, conference invitee, (2000).
- A. Cassinelli, P. Chavel, **Video-Rate Optoelectronic Parallel Processors for Image Processing using Simulated Annealing**, III. Euro Amer. Workshop on Optoelectronic Information Processing, pp.27, 31 May-2 June 1999, Colmar, France (1999).
- A. Cassinelli, Ph. Lalanne, P. Chavel and I. Glaser, **Demonstration of Video-Rate Optoelectronic Parallel Processors for Noise Cleaning in Binary Images by Simulated Annealing**, OC'98, Bruges. SPIE Proc. Vol 3490, p; 163-166 (1998).

## PhD Dissertation:

- "**Processeurs Paralleles Optoelectroniques Stochastiques pour le traitement d'images en temps reel**" (Optoelectronic Stochastic Parallel Processors for real time image processing and application to motion detection), University of Paris XI, (IOTA, Laboratoire Charles Fabry, CNRS). Sept. 21, 2000.

## Courses & other academic activities

- [Introduction to on AVR microcontrollers](#) (course)
- Optical technologies for HCI (review through practical examples).
- Direction of PhD work (in Uruguay), director of bachelor and master thesis work.

## Workshops & Conferences

- [Workshop on Physical Computing](#) (Processing and Arduino/Wiring, focused in communication protocols), "Invention Workshop" at the [Yotsuya Art Studium](#), 17 Nov (2007). Code examples in the [workshop website](#).

- Workshop on Physical Computing (focused on motor control), 13.12.2007. Ishikawa-Namiki-Komuro Lab.
- Invited as a teacher at the [Interactivos?08 international workshop](#) at the [MEDIALAB-PRADO \(Madrid\)](#), on the theme "[Vision Play](#)". Lead by Alvaro Cassinelli and Simone Jones, with the participation of Daniel Canogar, Julian Oliver and Pablo Valbuena, from May 30th through June 14th 2008.
- Physical Computing Workshop in Montevideo, Uruguay (January 2009) [[Taller ComputacionFisica Montevideo](#)]
- [Program Chair](#), The [Fifth Asia-Pacific Computing and Philosophy Conference](#) (AP-CAP 2009). October 1st-2nd, 2009. Tokyo, Japan. [[Website](#)]
- [Workshop Chair](#), "Devices that Alter Perception 1" (DAP2008), in conjunction with UbiComp 2008. September, 21st 2008. Seoul, Korea. [[Proceedings PDF](#) / [Website](#) / [poster \(1MB\)](#)]
- [Workshop Chair](#), "Devices that Alter Perception 3" (DAP2010), in conjunction with IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2010), Oct.13th, 2010, Seoul, Korea. [[DAP3 website](#)]

## Invited talks & Presentations

- [Time Delayed Cinema](#), invited talk at [Microwave New Media Art Festival](#), Hong Kong 4-15 Nov. (2006)
- [El Khronos Projector: uninterfazorganico parapintar con el Tiempo](#), /[ArtFutura](#), Barcelona 25-28 Oct. (2007).
- Invited talk at the Tokyo [C-Wave symposium](#).
- [Research and Media Art at the Ishikawa-Komuro Laboratory](#), ArsElectronica Campus exhibition (9.9.2008).
- Invited talk at Samsung Electronic headquarters, Suwon, Korea (25.9.2008).
- [From Science to Art and beyond](#), Invited talk at Hong-Ik University, Seoul, Korea, (25.9.2008).
- [Kicked up from Flatland](#), invited talk at the [Sympathetic Media Symposium: Augmented Space Through Media](#), Hongik University, Seoul, Korea (24.6.2009).
- Invited talk at "[IDD meets DigitaleKlasse](#)" (Tama Art University / Belin University).
- ISMAR2010 Arts, Media and Humanities panel: Art/Social/Novel Media, (15/10) & OpenSession (16/10/2010).
- [Conferencia "Alvaro Cassinelli: Proyectos"](#), MÁSTER ARTES DIGITALES (MAD), Universidad Pompeu Fabra (Barcelona, 21/6/2011).
- Invited talk at "Exploring Possibilities of "Disseminating Science" for Society" workshop (Science Agora), Kyoto University Museum, Monday 12 Sept. (2011)

## Awards and grants

- Grant by the French government to study in France.
- [NHK Digital Stadium, Best Selection Award](#) (aired at NHK-BS2, 8/10/2005).
- [NHK Digital Stadium, Finalist Award](#) (aired at NHK-BS, 14/1/2006).
- Panasonic Prize at the [Digital Art Festival 2005](#)(9-13/12/2005).
- [Grand Prize \[Art Division\]](#) at the [9th Japan Media Art Festival](#) (24/2-5/3/2006).
- Honorary Mention at [Prix Ars Electronic 2006](#) (Interactive Art Category).
- [Awarded a prix in the category Medicine and Health](#) for the Volume Slicing Display, at [LAVAL VIRTUAL 2009](#), 22-26 April 2009.
- [Excellence Prize](#) at the 2009 [13th] Japan Media Arts Festival for scoreLight, in collaboration with Daito Manabe.
- SIGGRAPH E-TECH AWARD at Laval Virtual 2010 (invited to exhibit at SIGGRAPH E-TECH 2010, LA).
- NISSAN research competition award (11.2010)
- Best Paper Award VRSJ (Virtual Reality Society of Japan), (2010).
- Laval Virtual 2011 (6-10 April 2011), [Jury Grand Prize \(for "Invoked Computing"\)](#)

## Patents, Trademarks

- *Optical Switch Architecture* (2004)
- *Cascaded 2D integrated fiber arrays with interleaved topologies for short-distance reconfigurable optical interconnections*, (2002)
- *Trademark on Khronos Projector system ("KhronoTouch")* (2007)

## Reviewing / Editorial activity

- Editorial committee member of the electronic journal CLEI (Centro Latinoamericano de Estudios en Informática).
- Reviewer for CHI interactivity, SIGGRAPH art gallery, IEEE (Transactions on Communications, Photonics Technology Letter), IEEE Conference on Virtual Reality, International Conference on Robotics and Automation (ICRA), Elsevier, Optics and Lasers in Engineering, International Journal of Imaging Systems and Technology (IJIST, Korea), ACE International Conference on Advances in Computing Entertainment Technology, Tangible

and Embedded Interaction (TEI), New Instruments for Musical Expression (NIME), International Symposium for Wearable Computers (ISWC), etc.

## Professional Memberships

- ACM (Association for Computer Machinery) Professional Member / SIG Affiliation: SIGCHI
- IEICE (The Institute of Electronics, Information and Communication Engineers)
- VRSJ (Virtual Reality Society of Japan)

## Media Art Exhibitions

- The [Khronos Projector](#) interactive installation:
  - [Split Film Festival](#) (Croatia), 3/6-10/7/2005
  - [Interactive Tokyo 2005](#) (25-26/8/2005).
  - [NHK Digital Stadium, Best Selection Award](#) (aired at NHK-BS2, 8/10/2005).
  - [NHK Digital Stadium, Finalist Award](#) (aired at NHK-BS, 14/1/2006).
  - [Digital Art Festival 2005](#) (awarded the Panasonic Prize) (9-13/12/2005).
  - [9th Japan Media Art Festival, \(Grand Prize in Art Division\)](#) the (24/2-5/3/2006).
  - [Laval Virtual](#) (France), (25-30/4/ 2006)
  - Aired in "[On a tout essaye](#)" TV program, France2 television (4/5/2006).
  - [TIMESCAPE](#) installation at the Okamura Design Space (collaboration with architect Hiroshi Naito), Tokyo (13-28/07/2006) and featured on TV-Tokyo, 知恵の和 program 13/08/2006. Picture Gallery [here](#).
  - Honorary Mention at [Prix Ars Electronic 2006](#) (Interactive Art Category). Piece exhibited at the O.K. Center for Contemporary Art in Linz, Austria. (Prix Ars and Cyberarts 2006 exhibition, 31/08-8/10/2006).
  - Exhibited (for two years since 2006) at the [ArsElectronica Center \(AEC\)](#) in Linz, Austria.
  - [Future of Design Pavillon](#) at [WIRED NEXTFEST 2006](#) in New York (20/09-01/10/2006).
  - [Animatronica](#) - Microwave International New Media Arts Festival, Hong Kong (4-15/11/2006). ([Invited talk here.](#))
  - NTT Inter Communication Center "[Sight & Sound: Watch the sound, listen to the images](#)" exhibition ([details](#)), 14/7-2/9 2007. Featured a system with [spatializedsound](#) on the screen.
  - [Future of Design Pavillon](#) at [WIRED NEXTFEST 2007](#), Los Angeles, Convention Center (13-16/09/2007)
  - Festival [ArtFutura](#), Barcelona 25-28 Oct. (2007).
  - "[Openplay](#)", [Digital Art Festival Taipei](#), 23/11 - 2/12 Taipei, Taiwan (2007)
  - [VIA Festival International](#) (20-22/3 in Maubeuge), and [EXIT08 festival international](#) (28/3-5/4, Maison des Arts de Creteil), France (2008).
  - [Tokyo Science and Technology museum](#), (6/7/2008, Tokyo).
  - J-PARC opening ceremony, Ibaraki-ken (10.8.2008)
  - [Scopitone Festival](#) (Nantes, France, 17-21 Sept. 2008)
  - Various TV programs in Japan and abroad (see *Media Appearances*).
- "[dischorde](#)" interactive sound/video installation with [Philippe Chatelain](#) and [Daito Manabe](#). Museum of Contemporary Art (MOT), Tokyo (2007). Video extract: [\[wmv-13MB\]](#)
- Video Material for VJ performance in France, with Philippe Chatelain&Valerie Lavey.
- [Flat Elephant Walks](#), 12-27.7.2007, Okamura Design Space R / New Otani Garden Coat, Tokyo. By Shin Egashira with the help of Okamura technical team, Yuji Fukui (mechanical structures) & Alvaro Cassinelli (visual interaction). Video: [LQ: [wmv-20MB](#) / HQ: [wmv-60MB](#)]
- Experiment at [dorkbotswisstokyo 2007](#) (interactive sound/image performance with Stephane Perrin). Video: [\[wmv-40MB\]](#)
- [NoForkDroise](#) (toys + percussions) + alvarocassinelli (interactive visuals), N.1. Live performance at [Nana Hari](#) (22.12.2007). Video: [\[wmv-45MB\]](#)
- [NoForkDroise](#) + alvarocassinelli (interactive visuals& midi sound), N.2. Live performance at [Nana Hari](#) (19.1.2008). Video: [\[wmv-88MB\]](#)
- [boxedEgo](#) interactive-art installation:
  - commissioned for [Sonar/SonarMatica 2008 FUTURE PAST CINEMA](#) (curated by Jose Luis de Vicente, Oscar AbrilAscaso and Advanced Music. With the collaboration of Medialab-Prado and the Museu de Cinema de Girona).
  - exhibited at the Media Lab Prado, Madrid, "[Vision Play](#)", 2008.
  - exhibited at [ArsElectronica - Tokyo University Campus Exhibition: HYBRID EGO](#)
  - SNUMOA, [Game+Interactive Media Art](#), Museum of Art, Seoul National University (2010.12.2-2011.1.9)
- [Sticky Light](#) exhibited at [ArsElectronica - Tokyo University Campus Exhibition: HYBRID EGO](#)
- [Wireless Haptic Radar](#)
  - exhibited at [ArsElectronica - Tokyo University Campus Exhibition: HYBRID EGO](#)
  - exhibited at new ArsElectronica Center (AEC, Linz) as part of the permanent exhibition [New Views of Humankind/Main Gallery/Robolab](#) (since Feb.2009).
- Ghostly Images Appearing in Moving Human Eyes and Still Machine Eyes (Hideyuki Ando, Alvaro Cassinelli, Junji Watanabe), DIGITAL EXPERIENCES Synthesis - Curated Show at Siggraph ASIA 2008, pp52, Singapore, (2008).

- [It's a Donnie World](#) was one of the winners of Dorbot Tokyo 2009.
- [scoreLight](#)
  - invited at CONTEX2009 exhibition, 22-25 October 2009, Miraikan, Museum of Emerging Science and Innovation, Tokyo, JAPAN.
  - [13th Japan Media Art Festival 2009](#) (Excellence Prize), The National Art Center, Tokyo, JAPAN (3/2-14/2/2009).
  - [SIGGRAPH ASIA 2009](#) (juried), *Art Gallery: Adaptation*. Yokohama, Japan, 17-19 december 2009. Art Gallery & Emerging Technologies DIGITAL EXPERIENCES, p.15 [[pdf](#)]
  - [EXIT & VIA festival](#), Creteil and Maubeuge, FRANCE (18-28/3/2010)
  - Fuji TV stage, ホルスの好奇心, 3.1.2010.
  - [Scopitone 2010](#) (15-19/9.2010, Nantes, FRANCE)
  - [Lille3000. "Dancing Machine"](#) (2/7 - 31/10 2010, Lille, FRANCE)
  - [Kyoto Media Art Festival](#) (2/9-12/9/2010, Kyoto, JAPAN)
  - [Okayama Media Art Festival](#) (30/10-7/11/2010, Okayama, JAPAN)
  - Japanese television (Nihon Terebi, 「世界一受けたい授業」), aired 18.12.2010.
  - SNUMOA, [Game+Interactive Media Art](#), Museum of Art, Seoul National University (2010.12.2-2011.1.9)
  - Japanese television, TV Asahi, "Sakicho" program (Dec.2010).
  - Sonar Tokyo Festival (2-3.4.2011)
  - The sense of Machines (one year exhibit at Disseny Hub Barcelona - DHUB), (21.06.2011 – 15/01/2012)
  - [Dancing Machine / Monaco Dance Forum](#) (10-17 Dec. 2011).
  - [Microwave Festival: Alchemy: Drifting lab](#) (6-21/11/2011)
- [LightArrays](#)
  - Performance and installation at the Yebisu International Festival of Art and Alternative Visions (commissioned work in collaboration with Danielle Wilde, 18-27/2/2011)
  - SEAM Symposium: Spacing Movements Outside in. ([SEAM2011](#)). Sydney, September (2011)
  - [Microwave Festival: Alchemy: Drifting lab](#) (6-21/11/2011).
- [Numbers, Time & Space: seeing through numbers](#) (by Alvaro Cassinelli & Philippe Chatelain)
  - Taller de Produccion directed by Chris Sugrue and Daniel Sanchez / Medialab-Prado, Madrid (March 2011). Exhibition: 29/3/2011.

## Media Appearances

- **NHK BS2** (デジスタ) with the "*KhronosProjector*", Best Selection Award (8/10/2005)
- **NHK BS2** (デジスタアワード) with the "*KhronosProjector*" (14/1/2006)
- **TV Tokyo** (テレビ東京), 「知恵の和」 with the "*KhronosProjector*" (13/8/2006)
- **France 2 (French broadcasting television)** with the "*KhronosProjector*" at "On a tout essaye", (4/5/2006)
- **NTV Japan Television** (日本テレビ), 「世界一受けたい授業」, with "*HapticRadar*" (7/6/2008)
- **FNN (Fuji-terebi)**, 「ホルスの好奇心」 with "*scoreLight*", (3/1/2010)
- **FNN (Fuji-terebi)**, 「ホルスの好奇心」 with "*Khronos Projector*", (11/4/2010)
- **TV Tokyo** (テレビ東京), 「さきっちょ」, with "*Khronos Projector*", (22/6/2010)
- **TV Tokyo** (テレビ東京), ワールドビジネスサテライト 「トレンドたまご」, with "Volume Slicing Display", (19/7/2010).
- **TBS**, 「夢の扉」, with "*Khronos Projector*", (5/9/2010)
- **BS Japan**, 「世の中進歩堂」, with *Khronos Projector* & *Volume Slicing Display* (17/9/2010)
- **NTV Japan Television** (日本テレビ), 「世界一受けたい授業」, with *Volume Slicing Display* (9/10/2010).
- **NTV Japan Television** (日本テレビ), 「世界一受けたい授業」, with *Smart Laser Scanner* (18/12/2010).
- **テレ朝**, 「さきっちょ」, with "Sensing Display" (17/1/2011).
- **TBS**, 「教科書に載せたい」, with "Khronos Projector" (3/5/2011).
- "*Laser Scanner Reads Air Writing*", article on **Discovery Channel.com** (Sept. 1, 2005)
- **Discovery Channel** (covering **WIRED NEXT FEST**), with the "*Khronos Projector*"
- **The Daily Planet (Discovery Channel Canada)**, about "*Haptic Radar*" (Nov. 6, 2007)
- **RTVE** (radio television Espanola), interview 17.6.2008; **RTVE**, [Japan\\_ON](#) (Metropolis) Fall 2010.
- **ITV1 British Television**, with Joanna Lumley as "Catwoman", aired on 6th and 13th Sept. 2009.
- Interview at Cite des Sciences (<http://www.universcience.tv>) WebTV, (23/9/2010)
- Several newspapers and international magazines, including **Nikkei Shinbun** (Japan), **Tokyo Shinbun** (Japan), **アスキ** (Japan), **ArtTop** (Japan), **Nikkan Kogyo Shimbun** (Japan), **Metropolis** (Japan), **Sankei Shinbun** (Japan), **Tokyo Design Brand** (Japan), **Okamura Design Space-R** (Japan), **ID Magazine**, **Wired Magazine** (USA), **Liberation** (France), **L'Ordinateur Individuel** (France), **The Guardian** (UK), etc.

## Work experience

- 2006-----** **Assistant Professor**, University of Tokyo, Ishikawa-Komuro Lab, Dept. of Information Physics and Computing. **Leader of the Meta-Perception group**, specialized on human-computer interfaces and new media-art related research.
- 2000-2005-----** **Research Fellow** (CREST/SORT), University of Tokyo, Ishikawa-Namiki Lab. Involved mainly in the Optoelectronic Computing and Sensor Fusion Group. Primary research themes: optical networking and human computer interfaces using laser technology.
- 1998-99-----** **Teaching assistant** (examiner) in physics at Louis-Le-Grand (first year Univ. level).
- July/Sept. 96-** Internship at the **ENST Optoelectronic Laboratory**, Paris, France.
- July/Sept. 95-** Internship in the **Quantum Optics laboratory at EcolePolytechnique**, Paris, France.
- July 1994-----** Internship with a small electronic/telecommunication company in Montevideo, Uruguay.
- 1994-95-----** Private tuition in mathematics to first year University students, Paris, France.
- 1989-----** Team development (with Eduardo Ricobaldi and Pablo Gindel) and commercialization the first true light-pen for the micro-computer Zx-Spectrum, Montevideo, Uruguay.

## Others

- Board member of [EXVISION](#) (a research **spinoff company** of the Ishikawa-Oku Laboratory).
- Invited as a **consultant** (and later collaborator) by SigongTech (Korean Multimedia company) to propose ideas and technology for the [Yeosu World Expo Thematic Pavillon 2012](#).
- Collaborator on the "LASERINNE" project, an international collaborative project (**European Regional Development Fund Programming period 2007 to 2013**), between Lapland University (Finland), University of Berlin, and The University of Tokyo. (The goal is to create interactive laser games on the ski slope during the skiing world cup at the Levi resort in 2012).
- As a Ph.D. student (1996-2000) I collaborated yearly (technical report) for the European Commission.
- Since 2006, I've been consultant for a large Japanese furniture company (Okamura) planning the design of the "office of the future", as well as a big car maker (Nissan) designing a futuristic personal mobility system.

## Knowledge of computer languages

- Programming languages: C++ (main), Java, LISP, LabView, ASSEMBLER (AVR, 68000, Z80).
- Specialized Software: Photoshop, Video Editing Tools (Adobe Premiere, Vegas, etc.)
- Systems: UNIX, VAX/VMS, MS-DOS, LINUX.
- Others: OpenGL, OpenCV, OpenFrameWorks, Processing/Arduino, Python, MATLAB, Mathematica, MAX/MSP.

## Spoken languages

- Bicultural [Spanish / French](#). Fluent [English](#). Good knowledge of [Italian](#) and [Japanese](#).

## Hobbies

- Drawing and digital composition / Piano improvisation / Writing (short stories) / Diving.