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EDUCATION

Massachusetts Institute of Technology, Cambridge, MA
Candidate for the Doctorate in Media Arts and Science, PhD'10
Courses: Electrical Engineering and Computer Science
Focus: Gesture Object Interfaces

PhD Proposal (2009) with Dr. Hiroshi Ishii, Dr. Edith Ackermann and Dr. Cynthia Breazeal.
Title: Play it by eye, frame it by hand!
Tangible technologies to construct finalized video work from uninterrupted improvisation and play.

General Exams (2008): Main area with Dr. Hiroshi Ishii, Tangible interaction techniques.
Title: Grounding Interfaces: Shifting the body boundaries.
Contextual area with Dr. Edith Ackermann, Psychology, cultural artifacts and semiotics.
Technical area with Dr. Joe Paradiso, Technologies for body sensing and expression.

Harvard University Graduate School of Design, Cambridge, MA
Master in Design Studies – Product Design, 2006
Courses: CAD/CAM I, CAD/CAM II, Advanced Drawing, Kinetic Architecture, Architecture Theory, Smart Materials, Algorithmic Architecture, Product Design Studio, Sculpture Studio, Product Design Research

Massachusetts Institute of Technology, Cambridge, MA
Master of Science – Media, Arts & Sciences, Tangible Media, 2002
Courses: Electrical Engineering, Sensing Technologies, Fabrication of Smart Systems, Computational Linguistics, Fabrication, Human Computer Interaction, Tangible Interfaces

Paris VIII University, Paris, France
DEA (Diplôme d'Etudes Approfondies) – Art & Technology, 2000
Software development for thesis: Story generator based on the morphology of the folktale.

Paris VIII University, Paris, France
Bachelor of Science – Computational Linguistics (neural networks, word analysis & processing, programming), 2000

Paris VIII University, Paris, France
Master of Science and Technique – Major: computer sciences. Minor: graphic design, 1999
Software development for thesis: emailer for children + video game on visual perception.

Paris X University, Paris, France
Bachelor of Science – Mathematics and Economics, 1998

HONORS

SHASS deFlorez Fund for Humor, Grant for the AFK Cookset and WOW Pod, 2009.
Eyebeam, Grant for the AFK Cookset and WOW Pod, 2009
The Council for the Arts at MIT, Grant for the AFK Cookset and WOW Pod, 2008.
I.D. Magazine, Student Design Review. Honorable Mention, Jabberstamp, 2008.
Rockefeller Foundation, New Media Fellow Nominee, 2008
MIT Media Lab Assistantship, USA, 2006-present
Kendall Square Interactive Design Competition, USA, 2006
John F. Kennedy Grant, Ireland, 2005
Certificate of Research Excellence, MIT and Media Lab Europe Award, Ireland, 2004
MIT Travel Grant, USA, 2002
Mattel Inc. Fellowship, USA, 2001, renewed in 2002
MIT Media Lab Assistantship, USA, 2000-2002
MIT Robot Competition, USA, 2001
Thesis passed with distinction, Paris VIII, France, 2000
Distinguished Student Scholarship, Paris VIII, France, 1999-2000
Highest Departmental Jury Honors, Paris VIII, France, 1999

Merit Scholarship, Paris VIII, France, 1997-1999

EXHIBITIONS

MIT Museum, *WoW Pod*, April 2009-September 2009.
Ars Electronica, *Radical Atoms: Beyond Tangible Bits* (Group project), 3-8 September 2009
Eyebeam, Mixer Event New York, *WoW Pod*, March 6-7 2009.
AARP. *Picture This!* Washington DC, 2008.
NEXT 2008: Mindblowers. *Jabberstamp*. Aarhus, Denmark, 2008.
Siggraph. *Jabberstamp*. San Diego Convention Center, USA, Aug 2007.
Collision 12: Mini. 2007. *Jabberstamp*. MIT Stata Center Balcony Gallery. Cambridge, MA.
Sartorial Flux, *Psychohaptics*, A+D Gallery, Chicago, USA, Sept-Oct 2006.
Seamless Fashion Show, *Taptap*. Boston Museum of Science, USA, Feb 2006.
Siggraph, *Moving Pictures*. Los Angeles Convention Center, USA, Aug 2005.
Save the Robots Exhibition, *Terraria*. The Ark, Dublin, Ireland, June-Sept 2005.
Science & Cyber, *Moving Pictures*. Umeå, Sweden, Sept, 2004.
Innovact, *Moving Pictures*. Centre des Congrès, Reims, France, Sept 2004.
Avignon numérique, *Sam*. Avignon, France, June 2000.
Galerie Béatrice Soulier, *Paint on Diapositive*. Paris, France, June-Sept 1996-97.

INVITED TALKS

MIT Museum, *On the WoW Pod: a Design for Extimacy and Fantasy-Fulfillment for the World of Warcraft player*, Artist talk & panel, April 13th 2009.
Samsung, *Corporate design center*, Film assembly using toy gestures, Seoul, South Korea, Sept 2008.
LG, *Woomyeon R & D Campus*, Tangible Media, Seoul, South Korea, Sept 2008.
AARP, *Life @ 50+*, National Event, Sept 2008.
Simon Fraser University, *Faculty of Business Administration*, towards seamless integration of digital and physical worlds, Vancouver, Canada, May 2008.
Highlands & Islands Enterprise, *Tourism & Fusion Event*, innovation and technologies to interpret Shetland's culture, heritage and environment, Shetlands, Scotland, Sept 2005.
Ecole Polytechnique Fédérale de Lausanne, *Collaborative Artefacts Interactive Furniture*, *Moving Pictures*: looking out/looking in, Switzerland, June 2005.
D.A.T.A., *Event 21*, real time video making for the museum exhibition space, Dublin, Ireland, 2002.
Lego, *Video Games and Interactive Toy Event*, research on computational toys for narrative perspective taking for Lego's future product line, Billund, Denmark, Dec 2002.
Fisher Price, discussing the pros and cons of interactive toys, Buffalo, USA, Aug 2001.
Mattel, semi-regular invited talks on research and development for prototyping my master's research into a future product line, Los Angeles, USA, 2000-2002.

TEACHING

MIT Media Laboratory, Teaching Assistant, Tangible Interfaces class taught by Dr. Hiroshi Ishii, Fall'06.
MIT Media Laboratory, Guest Lecturer, Tangible Interfaces class taught by Dr. Hiroshi Ishii, Fall'06.
Media Lab Europe, Creator, Lecturer and Organizer (co-leading with Joelle Bitton) of the Video Art History Crash Course. Fall'03 & Spring'04.
Trinity College Dublin, Guest Lecturer for the interactive narrative course, M.Sc. Multimedia Systems, Spring'04.
Paris X University, English Tutor for Undergraduates, Nanterre, France, Fall'99, Spring'00.

PUBLICATIONS

Book Chapter. Vaucelle, C. **Collect to connect in the Mobile Age**. *To be published in* New technologies of the self, mobilities and (co-)constructions of identities. Eds. Dervin, F. & Abbas, Y.

Book Chapter. Vaucelle, C. **From Touch Sensitive to Aerial Jewelry**. *In* Fashionable Technology, The intersection of Design, Fashion, Science, and Technology. Ed. Seymour, S., Springer-Verlag Wien New York, 2008.

Book Chapter. Vaucelle, C. **Between improvisation and publication: Supporting the creative metamorphosis with technology** *to be published in* The Mobile Audience. Art and New Located Technologies of the Screen. Ed. Reiser, M.

Journal Paper. Vaucelle, C and Ishii, H. (2009) **Play-it-by-eye! Collect movies and improvise perspectives with tangible video objects**. *To be published in* Artificial Intelligence for Engineering Design, Analysis and Manufacturing (AIEDAM). Special Issue: Tangible Interaction. Cambridge University Press.

Journal Paper. Ryokai, K., Vaucelle, C., and Cassell, J. **Virtual Peers as Partners in Storytelling and Literacy Learning.** Journal of Computer Assisted Learning. Special Issue: Children and new technology. 2003. 19 (2), pp.195-208.

Full Paper. Vaucelle, C. and Ishii, H. 2008. **Picture this!: film assembly using toy gestures.** In Proceedings of the 10th international Conference on Ubiquitous Computing'08.

Full Paper. Vaucelle, C. and Ishii, H. **Interfacing Video Capture, Editing and Publication in a Tangible Environment.** Published in Lecture Notes in Computer Science, Interact 2007 Socially Responsible Interaction, pp.1-15.

Full Paper. Raffle, H., Vaucelle, C., Wang, R. and Ishii, H. **Jabberstamp: Embedding sound and voice in traditional drawings.** Published in 6th International Conference on Interaction Design and Children (IDC'07), ACM SIGCHI.

Full Paper. Vaucelle, C., Africano, D., Davenport, G., Wiberg, M., and Fjellstrom, O. **Moving pictures: Looking Out/Looking.** Published in. SIGGRAPH'05, ACM Press.

Full Paper. Vaucelle, C., and Davenport, G. **An open-ended tool to compose movies for cross-cultural digital storytelling: Textable Movie.** In the Proceedings of ICHIM 04 'Digital Culture & Heritage'.

Full Paper. Nemirovsky, P., Vaucelle, C., and Quattoni, A. **Mixer-Subverter :: an Online Improvisational Video System.** AINA 2004 International Conference on Advanced Information Networking and Applications.

Full Paper. Cassell, J., Stocky, T., Bickmore, T., Gao, Y., Nakano, Y., Ryokai, K., Tversky, D., Vaucelle, C., and Vilhjálmsson, H. **MACK: Media lab Autonomous Conversational Kiosk.** Published in the Proceedings of Imagina '02.

Full Paper. Ryokai, K., Vaucelle, C., and Cassell, J. **Literacy Learning by Storytelling with a Virtual Peer.** Published in Computer Support for Collaborative Learning 2002.

Selected Peer Reviewed Conference Papers. **Cost-effective Wearable Sensor to Detect EMF** at CHI 2009. **Design of Haptic Interfaces for Therapy** short paper at CHI 2009. **Electromagnetic Field Detector Bracelet** at Ubicomp'08. **The Everyday Collector** at Ubicomp'08. **Touch · Sensitive Apparel** at Chi'07. **The Texture of Light** at Siggraph'06. **Affective TouchCasting** at Siggraph'06. **A Framework for Haptic Psycho-Therapy** at IEEE ICPS 2006. **TapTap: A Haptic Wearable for Asynchronous Distributed Touch Therapy** at Chi'06. **PlayPals: Tangible Interfaces for Remote Communication and Play** at Chi'06. **Re-thinking real time video making for the museum exhibition space** at Siggraph'05. **Real-time Distributed Media Applications in LANs with OSC** at the 1st Open Sound Control Conference 2004. **A system to Compose Movies for Cross-cultural Storytelling: Textable Movie** at TIDSE'04. **Ambient Urban Interludes: Passing Glances** at Chi'04. **The WANDerful alcove: Encouraging constructive social interaction with a socially transforming interface** at Interact 2003. **Textable Movie: improvising with a personal movie database** at Siggraph'03. **Cati dance: self-edited, self-synchronized music video** at Siggraph'03. **Texting Glances: Ambient Interludes from the Dublin Cityscape** at Enarrative5. **Hover: conveying remote presence** at Siggraph'02. **Dolltalk: A computational toy to enhance children's creativity** at Chi'02.

PRESS

Make Volume 19: Robots, page 25, "All We Can Say Is, WoW", 2009. **Boston Herald** Game womb in play at MIT, 2009. **Popular Science**, 2009. **The Sydney Morning Herald**, 2009. **CNET News**, 2009. **Boing Boing**, 2009. **WoW insider**, 2009. **Make Magazine**, 2009. **G4tv**, 2009. **Gizmodo**, 2009. **Engadget**, 2008. **Make**, 2008. **Discovery Channel**, 2007. **Neonomads**, Interview, 2007. **Digital experience**, 2007. **M-trend**, 2007. **We-Make-Money-Not-Art.com**, Interview, 2007. **Autism Vox**, 2007. **Forbes**, 2006. **Make**, 2006. **CNET**, 2006. **Boston Globe**, 2006. **Pasta and Vinegar**, 2006. **We-Make-Money-Not-Art.com**, 2005. Press release **Umea university**, 2004. **Vasterbottens-kuriren**, 2004. **Vasterbottens folkblad**, 2004. **Televisual magazine: over the cutting edge** at SIGGRAPH 2003. **New Scientist: move over darling**, 2002. **Tech tv: fresh gear**, 2002. **Converge magazine**, 2001. **Discovery Channel**. technologies for storytelling, 2000.

+ *Approximately 300 international blogs with project references and interviews.*

EXPERIENCE

MIT Media Laboratory, Tangible Media Group, 2006-present
Research Assistant – Advisor Hiroshi Ishii

Conception, hardware and software development of Electromagnetic Field Detector Bracelet to possess a sense similar to the one of an electric fish.
Conception, hardware, software development and empirical research of Picture This! for algorithmic film assembly using toy gestures.
Empirical Research & interaction design on Jabberstamp, a tool that allows children to synthesize their drawings and voices.
Conception, design and hardware development of Touch Sensitive - how the structure and the embedded components of a garment participate in pushing its function to become an envelope or cocoon for one's well-being.
Conception and prototype development for Psychohaptics, a diverse set of simulations of touch modalities to assist in the treatment of specific mental disorders.

Harvard University, Graduate School of Design, Sept-Dec 2005
Exhibition and graphic designer – Work with Joan Busquets & Felipe Correa
Exhibition: cities: 10 lines. Approaches to cities and open territory design.

Trinity College Dublin, Ireland. Computer Science Department, Feb-Sept 2005
Researcher – Work with Brendan Tangney
Research and development of tangible interfaces for collaborative video, multimodal interface for music improvisation.
Led the development of a multimodal interface for Drumsteps, a constructionist software tool for teaching music developed within CRITE (The Centre for Research in IT in Education).
Led CRITE's collaboration with the Ark, a cultural centre for children located in the centre of Dublin. Developed software and hardware tools for the Save the Robots exhibition at the Ark.
Developed innovative digital tools made available to the National Centre for Technology in Education for potential use throughout Ireland.

The Ark, Dublin, Ireland, Feb-Sept 2005
Technology director – Work with Michael John Gorman & Natalie Jeremijenko
Technology development and project management for the Save the Robots exhibition on robotic art and art-making robots, including ArtBots 2005.

Media Lab Europe, Story Networks Group, Sept 2002 - Dec 2004
Research Associate – Work with Glorianna Davenport
Independent research on story networks. Implementation of tangible systems and mobile technology for the city space using audio-visual media.

MIT Media Laboratory, Cambridge, USA, 2000-2002
Research Assistant – Advisor Hiroshi Ishii
Research and development of tangible story listening systems for children

Paris VIII University, Paris, France, 1999-2001
Web design and development
Teamwork for le voy@geur <http://www.imago.univ-paris8.fr/voyageur>

ECPA: Etablissement Cinématographique et Photographique des Armées, Ministère de la Défense, Ivry, France, June-Sept 1998
Software designer
Lingo programming, 3d modeling with 3D engine explore on Silicon Graphics.

ECPA: Etablissement Cinématographique et Photographique des Armées, Ministère de la Défense, Ivry, France, June-Sept 1997
Photojournalist Assistant

Photography, Photographer Assistant, Fashion Photography, 1996-2000

SELECTED
WORKS

Hap-bit. A series of haptic devices embedded in garments, designed to deliver stimuli to modulate neurological function in brain diseased patients. 2008-2009.
The AFK Cookset. The AFK Cookset harvests the heat produced from an ordinary laptop computer to cook meals, 2008-2009.
The WOW Pod. The WOW Pod is an immersive architectural solution for the advanced WOW player that provides and anticipates all life needs, 2008-2009.
EMFDB. Electromagnetic Field Detector Bracelet. 2008.
Picture This. Algorithmic film assembly using toy gestures. 2007.

Jabberstamp. The first tool that allows children to synthesize their drawings and voices, 2007.

Touch · Sensitive Apparel. Haptic apparel that allows massage therapy to be diffused, customized and controlled by nomadic people. 2006-2007.

The Texture of Light. Live feed video metamorphosis in the public space using tailored synthetic lenses, 2006.

Psychohaptics. Haptic interfaces for psychotherapy: *Cool me down* - An electronic cold wrap. *Hurt me* - A bracelet that generates therapeutic controlled pain. *Squeeze me* – A haptic vest that simulates therapeutic Holding, *Touch me* - Remote application of touch therapy. 2005-2006.

Aerial Jewelry. Jewelry in the form of aerial patterns of a city, 2005-2006.

Kendall Roses. Kendall Roses provide visitors useful information about nearby attractions, generate interfaces for games and entertainment, and allows the neighborhood's residents to post information through their cellular telephones. 2006.

EmoCAD: *Les meubles fous*. Using natural voice as a design tool, 2006.

PlayPals. A set of wireless figurines with their electronic accessories that provide children with a playful way to communicate between remote locations. 2005.

TapTap. A wearable haptic system that allows nurturing human touch to be recorded, broadcast and played back. 2005.

The Breathing Wall. A Kinetic Installation made out of architectural objects that deploys and retracts soft fabric. 2005.

Memento Box. An interactive box as an attractive passage to souvenirs. 2005.

The Ambient Peacock Explorer. A framework for mobile units to document on their environment and report back to a central hub. 2005.

Terraria. Real time video making for the museum exhibition space, 2005.

Moving Pictures. Interfacing video capture, editing and publication in a tangible environment. 2004-2007.

Mixer Subverter. An online improvisational video system. 2003-2004.

Passing Glances. Ambient interludes from the Dublin cityscape through SMS. 2002-2004.

Textable Games. A platform for children to be their own video game producers, 2003.

Textable Movie. A system to Compose Movies for Cross-cultural Storytelling, 2002-2004.

Wanderful Alcove. Encouraging constructive social interaction with a socially transforming interface. 2002-2003.

Droppin' science. To mix music samples using sensors. 2001.

Hover. Conveying remote presence. 2001.

Dolltalk. (MS Thesis project). A computational toy to enhance narrative perspective-taking, 2000-2002.

Sam. Literacy learning by storytelling with a virtual peer. 2000-2002.

Mack. An autonomous conversational kiosk. 2000-2002.

Story Generator. Algorithmic story generator based on Vladimir Propp's analysis of the morphology of the folktale, 1999-2000.

TaiBa. Deconstruction of the internet architecture frames with a text of Georges Bataille. 1998.

Konsensus. Internet navigation with a semiotic square. 1998.

Emailer. An electronic mail composer for children to share ideas about visual perception, 1997-1999.