

Dr. Anatole Lécuyer
INRIA Senior Researcher

Email: anatole.lecuyer@irisa.fr

Phone: +33 2 99 84 74 83

Fax: +33 2 99 84 71 71

Web1: www.irisa.fr/bunraku/anatole.lecuyer

Web2: www.irisa.fr/tactiles/

Address: IRISA, Campus de Beaulieu, F35042 Rennes Cedex, France

Current Position

- Since November 2002: **Research scientist** at INRIA (www.inria.fr).
- Affiliation : BUNRAKU team, **INRIA Rennes**, head: Dr. S. Donikian (www.irisa.fr/bunraku/)
- Research activity: Virtual Reality, 3D Interaction, Haptic Feedback (Force and Tactile Feedback), Haptic Perception, Visuo-Haptic Integration, Brain-Computer Interfaces.

Main Collaborations and Projects

- **Leader of Working Group on Haptic Interaction in INTUITION Network of Excellence** (European Network of Excellence FP6-IST-NMP-1-507248-2: www.intuition-eunetwork.net). The working group on Haptic interaction in virtual reality encloses 22 European partners (PERCRO, MPI, CEA, ETH, TUM, CNRS, etc). Vice-leader: J. Perret (HAPTION) (2004-2008)
- **Coordinator of Open-ViBE project** (ANR RNTL National Project: www.irisa.fr/bunraku/OpenViBE). Open-source software for Brain-Computer Interfaces and virtual reality; 6 French partners (INSERM, AFM, FRANCE TELECOM, INRIA, INPG, CEA). (dec 2005-may 2009)
- **Coordinator of ECoViA project** (ROBEA National Project - www.irisa.fr/bunraku/ECOVIA). Collaboration on visuo-haptic perception for robotics and virtual reality; 4 French partners (INRIA, LPPA, CEA, UPMF). (2003-2006)
- **Member of NIW project** (European FET-OPEN STREP). Collaboration on multimodal perception of ground properties in virtual reality; 5 partners (Univ. Verona, Univ. Aalborg, Univ. Paris 6, Univ. McGill, INRIA). (2008-2011). *Coordinator : Dr. F. Fontana (Univ. Verona)*
- **Member of PACMAN project** (ANR PSIROB National Project). Collaboration on haptic perception and interaction techniques for telemanipulation at microscopic scale; 3 French partners (LRP, INRIA, CEA). (2006-2009). *Coordinator : Pr. S. Régnier (LRP)*
- **Member of PERF-RV2 project** (ANR RNTL National Project). Collaboration on multimodal integration and sensory substitution for locomotion; 17 French partners. (2005-2008). *Coordinator : R. Gelin (CEA)*

Animation of Scientific Community

- **Associate editor** of ACM Transactions on Applied Perception (ACM TAP)
- **Secretary** of IEEE Technical Committee on Haptics (IEEE TCH)
- **Secretary** of French Association for Virtual Reality (AFRV)
- **Organizer** of Scientific events:
 - **Tutorial at IEEE Virtual Reality 2008**: “Integration of Haptics in Virtual Environments: from Perception to Rendering”. Co-organiser: M. Harders (ETH Zurich).
 - **Tutorial at IEEE Virtual Reality 2007**: “Integration of Haptics in Virtual Environments: a Perception-Based Approach”. Co-organiser: M. Harders (ETH Zurich).
 - **Tutorial at Eurohaptics 2006**: “Perception-Based Haptic Rendering”. Co-organisers: M. Ernst (MPI), M. Harders (ETH Zurich).
 - **Special sessions**: INTUITION Workshop (2005: “Haptic Interaction”, 2006: “Haptic interfaces and Locomotion Interfaces”).
 - **Workshop**: Laval Virtual (2006: “Integration of Haptics in Industry”. Co-organiser: J. Perret, HAPTION).
- **Participation** in Scientific events:
 - **Keynote speaker**: WSCG (2008), RoCHI (2007)
 - **Panellist**: IPT-EGVE (2007: “Human Perception and Virtual Environments”, organizer: B. Mohler, MPIT)

- **Special session member** : IPT-EGVE (2007: “Influence of Bio/Neural Sensors on 3D Interaction”, organizer: R. Blach, Fraunhofer)
- **Session chair**: WorldHaptics (2005, 2007), Eurohaptics (2004, 2006), IPT-EGVE (2007), CGI (2006), WSCG (2008), etc
- **Expert** in Virtual Reality for : **ANR** (French National Agency for Research), **NWO** (Netherlands Organisation for Scientific Research)
- **Member of PhD Jury**: L. Dominjon (2006), A. Kadri (2007), L. Bibin (2007)

Supervision of Research

Post-doc:

1. Dr. Nizar OUARTI (with Pr. A. Berthoz)
2. Dr. Zhan GAO
3. Dr. Mingjun ZHONG
4. Dr. Marco CONGEDO

PhD students:

5. Mr. Gabriel CIRIO
6. Mr. Sébastien HILLAIRE (with Dr. R. Cozot)
7. Mr. Jean SRENG (with Dr. C. Andriot)
8. Mr. Fabien LOTTE
9. Mr. Lionel DOMINJON (with Pr. S. Richir)

Expert engineers:

10. Mr. Yann JEHANNEUF
11. Dr. Lazar BIBIN
12. Mr. Yann RENARD
13. Mr. Vincent DELANNOY

Master students:

14. Mr. Jean-Baptiste SAUVAN (with F. Lotte)
15. Mr. Sébastien HILLAIRE (with Dr. R. Cozot and Dr. G. Casiez)
16. Mr. Sébastien THOMAS (with Dr. T. Duval)
17. Mr. Jean SRENG (with Dr. C. Andriot and Dr. C. Mégard)
18. Mr. Fabien LOTTE (with Dr. M. Congedo)
19. Mr. Jildaz LEBILLER
20. Mr. Cédric ARROUET (with Dr. M. Congedo)
21. Mr. Laurent ETIENNE
22. Mr. Taegi LIM (with Dr. S. Coquillart)
23. Mr. Chee-Hian TAN
24. Mr. Olivier JOLY (with Pr. A. Berthoz)

Engineer students:

25. Mr. Léo TERZIMAN (With Dr. J. Wiener)
26. Mr. Thomas ERNEST (with F. Lotte)
27. Mr. Jean-Marc MONTANIER
28. Mr. Bruno RENIER (with F. Lotte and Y. Renard)
29. Mr. Sébastien HILLAIRE (with Dr. R. Cozot and Dr. G. Casiez)
30. Mr. Jean-Marie HENAFF
31. Mr. Ludovic HOYET (with F. Lotte and Y. Renard)
32. Mr. Olivier JOLY (with Pr. A. Berthoz)
33. Mr. Julien SUPPO (with Pr. A. Berthoz)

Main Publications (chronological order)

Book Chapter

1. **A. Lécuyer**, « *Chapitre 16 : Le retour pseudo-haptique* », Le traité de la réalité virtuelle, P. Fuchs et G. Moreau (Eds), Les Presses de l’Ecole des Mines de Paris, Vol 2, ISBN 2-911762-63-0, Mars **2006**.

Papers in International Journals

2. **A. Lécuyer**, “*Simulating Haptic Feedback using Vision: a Survey of Research and Applications of Pseudo-Haptic Feedback*”, **to appear** in *Presence: Teleoperators and Virtual Environments*, MIT Press, (ISI impact factor 2006/2007: 1.00/0.72)
3. S. Hillaire, **A. Lécuyer**, R. Cozot, G. Casiez, “*Automatic, Real-Time Depth-Of-Field Blur Effect for First-Person Navigation in Virtual Environments*”, *IEEE Computer Graphics and Applications*, vol. 28, num. 6, pp. 47-55, **2008** (ISI impact factor 2006/2007: 1.43/1.40)
4. **A. Lécuyer**, F. Lotte, R. Reilly, R. Leeb, M. Hirose, M. Slater, “*Brain-Computer Interfaces, Virtual Reality, and Videogames*”, *IEEE Computer*, vol 41, num 10, pp. 66-72, **2008** (ISI impact factor 2005/2007: 1.28/1.37)
5. M. Zhong, F. Lotte, M. Girolami, **A. Lécuyer**, “*Classifying EEG for Brain Computer Interfaces Using Gaussian Process*”, *Pattern Recognition Letters*, vol. 29, num. 3, pp. 354-359, **2008** (ISI impact factor 2005/2006: 1.14/0.95)
6. **A. Lécuyer**, J.M. Burkhardt, and C.H. Tan, “*A Study of the Modification of the Speed and Size of the Cursor for Simulating Pseudo-Haptic Bumps and Holes*”, *ACM Transactions on Applied Perception*, vol. 5, issue 3, article 14, **2008** (ISI impact factor 2005/2006: n.a.)
7. F. Lotte, **A. Lécuyer**, F. Lamarche, and B. Arnaldi, “*The Use of Fuzzy Inference Systems for Motor Imagery Classification*”, *IEEE Transactions on Neural Systems & Rehabilitation Engineering*, vol. 15, no. 2, pp. 322-324, **2007** (ISI impact factor 2005/2006: 1.68/1.84)
8. L. Dominjon, J. Perret, and **A. Lécuyer**, “*Novel Devices and Novel Interaction Techniques for Human-Scale Haptics*”, *The Visual Computer*, Vol. 23, Num. 3, March **2007** (ISI impact factor 2005/2006: 0.67/0.71)
9. F. Lotte, M. Congedo, **A. Lécuyer**, F. Lamarche, and B. Arnaldi, “*A Review of Classification Algorithms for EEG-based Brain-Computer Interfaces*”, *Journal of Neural Engineering*, 4, R1-R13, **2007** (ISI impact factor: n.a.)
10. J. Sreng, **A. Lécuyer**, C. Mégard, and C. Andriot, “*Using Visual Cues of Contact to Improve Interactive Manipulation of Virtual Objects in Industrial Assembly/Maintenance Simulations*”, *IEEE Transactions on Visualization and Computer Graphics*, 12(5):1013-1020, September/October, **2006** (ISI impact factor 2005/2006: 1.46/1.79)
11. M. Congedo, **A. Lécuyer**, and E. Gentaz, “*The Influence of Spatial De-location on Perceptual Integration of Vision and Touch*”, *Presence: Teleoperators and Virtual Environments*, MIT Press, Vol. 15, Issue 3, June **2006** (ISI impact factor 2005/2006: 0.63/1.00)
12. M. Congedo, F. Lotte, and **A. Lécuyer**, “*Classification of movement intention by spatially filtered electromagnetic inverse solutions*”, *Physics in Medicine and Biology*, 51, pp. 1971-1989, **2006** (ISI impact factor 2005/2006: 2.68/2.87)
13. L. Dominjon, **A. Lécuyer**, J.M. Burkhardt, and S. Richir, “*A Comparison of Three Techniques to Interact in Large Virtual Environments Using Haptic Devices with Limited Workspace*”, *Lecture Notes in Computer Science*, Vol. 4035, Hans-Peter Seidel, Tomoyuki Nishita and Qunsheng Peng (Eds), Springer Verlag, pp. 288-299, **2006** (ISI impact factor 2005: 0.40)
14. C. Arrouet, M. Congedo, J.E. Marvie, F. Lamarche, **A. Lécuyer**, and B. Arnaldi, “*Open-ViBE: a 3D Platform for Real-Time Neuroscience*”, *Journal of Neurotherapy*, Vol. 9, Num. 1, **2005** (ISI impact factor: n.a.)

Paper in French Journals

15. F. Lotte, **A. Lécuyer**, B. Arnaldi, “*FuRIA : un nouvel algorithme d'extraction de caractéristiques pour les interfaces cerveau-ordinateur utilisant modèles inverses et modèles flous*”, **to appear** in *Traitement du Signal*, (ISI impact factor: n.a.)

Papers in International Conferences

16. Z. Gao, **A. Lécuyer**, “*A VR Simulator for Training and Prototyping of Telemanipulation of Nanotubes*”, (short paper) *ACM Symposium on Virtual Reality Software and Technology (ACM VRST)*, Bordeaux, France, **2008**
17. L. Bibin, **A. Lécuyer**, J.M. Burkhardt, A. Delbos, M. Bonnet, “*SAILOR: a 3D medical simulator of loco-regional anaesthesia based on desktop virtual reality and pseudo-haptic feedback*”, (short paper) *ACM Symposium on Virtual Reality Software and Technology (ACM VRST)*, Bordeaux, France, **2008**
18. F. Lotte, H. Mouchère, **A. Lécuyer**, “*Pattern Rejection Strategies for the Design of Self-Paced EEG-based Brain-Computer Interfaces*”, *International Conference on Pattern Recognition (ICPR)*, **2008**

19. S. Hillaire, **A. Lécuyer**, R. Cozot, and G. Casiez, "Using an Eye-Tracking System to Improve Camera Motions and Depth-of-Field Blur Effects in Virtual Environments", (short paper) IEEE International Conference on Virtual Reality (IEEE VR), Reno, US, **2008**
20. J. Sreng, **A. Lécuyer**, and C. Andriot, "Using vibration patterns to provide impact position information in haptic manipulation of virtual objects", Eurohaptics, Madrid, Spain, **2008**
21. G. Millet, **A. Lécuyer**, J.M. Burkhardt, D.S. Haliyo, and S. Régnier, "Improving Perception and Understanding of Nanoscale Phenomena Using Haptics and Visual Analogy", Eurohaptics, Madrid, Spain, **2008**
22. F. Lotte, Y. Renard, **A. Lécuyer**, "Self-Paced Brain-Computer Interaction with Virtual Worlds: A Quantitative and Qualitative Study 'Out of the Lab'", International Brain-Computer Interface Workshop and Training Course, Graz, Austria, **2008**
23. S. Hillaire, **A. Lécuyer**, R. Cozot, and G. Casiez, "Depth-of-Field Blur Effects for First-Person Navigation in Virtual Environments", (short paper) ACM Symposium on Virtual Reality Software and Technology (ACM VRST), Newport Beach, US, **2007**
24. J. Sreng, F. Bergez, J. Legarrec, **A. Lécuyer**, and C. Andriot, "Using an Event-Based Approach to Improve the Multimodal Rendering of 6DOF Virtual Contact", ACM Symposium on Virtual Reality Software and Technology (ACM VRST), Newport Beach, US, **2007**
25. A. Kadri, **A. Lécuyer**, J.M. Burkhardt, and S. Richir, "The Visual Appearance of User's Avatar Can Influence the Manipulation of Both Real Devices and Virtual Objects", IEEE International Symposium on 3D User Interfaces (IEEE 3DUI), Charlotte, US, **2007**
26. F. Lotte, **A. Lécuyer**, and B. Arnaldi, "FuRIA: A novel feature extraction algorithm for brain-computer interfaces using inverse models and fuzzy region of interest", IEEE/EMBS International Conference on Neural Engineering, Hawaii, **2007**
27. **A. Lécuyer**, J.M. Burkhardt, J.M. Henaff, and S. Donikian, "Camera Motions Improve Sensation of Walking in Virtual Environments", IEEE International Conference on Virtual Reality (IEEE VR), Washington, US, **2006**
28. L. Dominjon, **A. Lécuyer**, J.M. Burkhardt, and S. Richir, "Haptic Hybrid Rotations: Overcoming Hardware Rotational Limitations of Force-Feedback Devices", IEEE International Conference on Virtual Reality (IEEE VR), Washington, US, **2006**
29. T. Duval, **A. Lécuyer**, and S. Thomas, "SkeweR: a 3D Interaction Technique for 2-User Collaborative Manipulation of Objects in Virtual Environments", (short paper) IEEE International Symposium on 3D User Interfaces (IEEE 3DUI), Washington, US, **2006**
30. L. Dominjon, **A. Lécuyer**, J.M. Burkhardt, P. Richard, and S. Richir, "Influence of Control/Display Ratio on Perception of Mass of Manipulated Objects in Virtual Environments", IEEE International Conference on Virtual Reality (IEEE VR), Bonn, Germany, **2005**
31. F. Crison, **A. Lécuyer**, D. Mellet-D'Huart, J.M. Burkhardt, G. Michel, and J.L. Dautin, "Virtual Technical Trainer: Training to Use Milling Machines with Multi-Sensory Feedback in Virtual Reality", IEEE International Conference on Virtual Reality (IEEE VR), Bonn, Germany, **2005**
32. **A. Lécuyer**, J.M. Burkhardt, J. Le Biller, M. Congedo, "A4: A Technique to Improve Perception of Contacts with Under-Actuated Haptic Devices in Virtual Reality", WorldHaptics Conference (joint Eurohaptics Conference and Haptics Symposium), Pisa, Italy, **2005**
33. L. Dominjon, **A. Lécuyer**, J.M. Burkhardt, G. Andrade-Barroso, and S. Richir, "The 'Bubble' Technique: Interacting with Large Virtual Environments Using Haptic Devices with Limited Workspace", World Haptics Conference (joint Eurohaptics Conference and Haptics Symposium), Pisa, Italy, **2005**
34. **A. Lécuyer**, J.M. Burkhardt, L. Etienne, "Feeling Bumps and Holes without a Haptic Interface: the Perception of Pseudo-Haptic Textures", ACM International Conference in Human Factors in Computing Systems (ACM CHI), Vienna, Austria, **2004**
35. **A. Lécuyer**, M. Vidal, O. Joly, C. Mégard and A. Berthoz, "Can Haptic Feedback Improve the Perception of Self-Motion in Virtual Reality?", Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems (Haptics), Chicago, US, **2004**
36. F. Crison, **A. Lécuyer**, A. Savary, D. Mellet-d'Huart, J.M. Burkhardt, and J.L. Dautin, "The Use of Haptic and Pseudo-Haptic Feedback for the Technical Training of Milling", EuroHaptics Conference, Munich, Germany, **2004**
37. D. Mellet-d'Huart, G. Michel, J.M. Burkhardt, **A. Lécuyer**, J.L. Dautin, and F. Crison, "An Application to Training in the Field of Metal Machining as a Result of Research-Industry Collaboration", Virtual Reality International Conference (VRIC), Laval, France, **2004**
38. **A. Lécuyer**, P. Mobuchon, C. Mégard, J. Perret, C. Andriot, J.P. Colinot, "HOMERE: a Multimodal System for Visually Impaired People to Explore Virtual Environments", IEEE International Conference on Virtual Reality (IEEE VR), Los-Angeles, US, **2003**
39. **A. Lécuyer**, C. Mégard, J.M. Burkhardt, T. Lim, S. Coquillart, P. Coiffet and L. Graux, "The Effect of Haptic, Visual and Auditory Feedback on an Insertion Task on a 2-Screen Workbench", Immersive Projection Technology Symposium (IPT), Orlando, US, **2002**

40. **A. Lécuyer**, J.M. Burkhardt, S. Coquillart, and P. Coiffet, "*Boundary of Illusion : an Experiment of Sensory Integration with a Pseudo-Haptic System*", IEEE International Conference on Virtual Reality (IEEE VR), Yokohama, Japan, **2001**
41. **A. Lécuyer**, A. Kheddar, S. Coquillart, L. Graux, and P. Coiffet, "*A Haptic Prototype for the Simulations of Aeronautics Mounting/Unmounting Operations*", IEEE International Workshop on Robot-Human Interactive Communication (IEEE ROMAN), Bordeaux and Paris, France, **2001**
42. **A. Lécuyer**, S. Coquillart, A. Kheddar, P. Richard and P. Coiffet, "*Pseudo-Haptic Feedback : Can Isometric Input Devices Simulate Force Feedback?*", IEEE International Conference on Virtual Reality (IEEE VR), New Brunswick, US, **2000**

Posters in International Conferences

43. A. Kadri, **A. Lécuyer**, J.M. Burkhardt, and S. Richir, "*The Influence of Visual Appearance of User's Avatar on the Manipulation of Objects in Virtual Environments*", IEEE International Conference on Virtual Reality (IEEE VR), Charlotte, US, **2007**
44. M. Congedo, **A. Lécuyer**, and B. Arnaldi, "*Open-ViBE, a Platform for 3-D Visualization of Brain Electromagnetic Dynamics*", Neuroimage, 26 (Supp. 1), **2005**

Keynote talk/paper

45. **A. Lécuyer**, "*Perception-Based Integration of Vision and Touch in Virtual Environments*", International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG), Plzen, Czech Republic, 4-7 February, **2008**
46. **A. Lécuyer**, "*Pseudo-haptic feedback: simulating haptic feedback without haptic devices*", RoCHI Conference, Constanza, Romania, 20-21 September, **2007**

Invited papers in International Conferences/Events

47. **A. Lécuyer**, "*Main Results of the OpenViBE project*", XVR Workshop on Brain-Computer Interfaces and Virtual Environments, Pisa, Italy, **2008**
48. F. Lotte, M. Congedo, **A. Lécuyer**, C. Arrouët, F. Lamarche, J.-E. Marvie, and B. Arnaldi, "*The Use of EEG-Based Inverse Models for both BCI Design and 3D Visualization of Brain Activity in VR*", Cybertherapy, Gatineau, Canada, **2006**
49. **A. Lécuyer** and L. Dominjon, "*How to go beyond the limits of haptic interaction?*", 3rd International INTUITION Workshop, Stuttgart, December **2006**
50. A. Lécuyer, « *Virtual Reality and Real-Time Neurosciences* », 1st Symposium of the Society of Applied Neuroscience, Istanbul, 2 Sept, **2005**
51. **A. Lécuyer**, « *Pseudo-Haptic Feedback* », 2nd International INTUITION Workshop, Senlis, France, November **2005**
52. M. Congedo, C. Arrouët, **A. Lécuyer**, and B. Arnaldi, "*EEG in Real-Time: New Perspectives and a Platform for 3-D Visualization of Functional Brain Dynamics*", Conference of the International Society for Neuronal Regulation, **2004**
53. **A. Lécuyer**, S. Coquillart and P. Coiffet, "*Simulating Haptic Information with Haptic Illusions in Virtual Environments*", NATO RTA/Human Factors & Medicine Panel Workshop, The Hague, The Netherlands, **2000**

National Conferences/Events

54. **A. Lécuyer**, « *Commande cérébrale, à travers le projet OpenViBE* », Journée du Groupe de Travail Interaction Personnes-Systèmes Robotiques (GDR Robotique), Juillet **2008**
55. F. Lotte, **A. Lécuyer**, and B. Arnaldi, « *FuRIA : un nouvel algorithme d'extraction de caractéristiques pour les interfaces cerveau-ordinateur utilisant modèles inverses et modèles flous* », 21^{ème} colloque GRETSI, **2007**
56. G. Millet, **A. Lécuyer**, S. Halyo, J.M. Burkhardt, S. Regnier, « *A Study on the Perception of Nanoscales through Virtual Reality* », actes des 2^{èmes} Journées de l'Association Française de Réalité Virtuelle, Luminy, **2007**
57. J. Sreng, F. Bergez, J. Le Garrec, **A. Lécuyer**, C. Andriot, « *Approche événementielle pour l'amélioration du rendu multimodal 6DDL de contact virtuel* », actes des 2^{èmes} Journées de l'Association Française de Réalité Virtuelle, Luminy, **2007**

58. S. Hillaire, **A. Lécuyer**, R. Cozot, G. Casiez, « *Effet de flou de profondeur pour la navigation en environnements virtuels en vue à la première personne* », actes des Journées de l'Association Francophone d'Informatique Graphique, Marne-La-Vallée, **2007**
59. F. Lotte, **A. Lécuyer**, and B. Arnaldi, « *Interfaces Cerveau-Ordinateur : Utilisation en Robotique et Avancées Récentes* », Journées Nationales de la Recherche en Robotique, **2007**
60. F. Lotte, **A. Lécuyer**, Y. Renard, F. Lamarche, and B. Arnaldi, "*Classification de Données Cérébrales par Système d'Inférence Flou pour l'Utilisation d'Interfaces Cerveau-Ordinateur en Réalité Virtuelle*", actes des 1ères Journées de l'Association Française de Réalité Virtuelle, Rocquencourt, **2006**
61. **A. Lécuyer**, J. McIntyre, C. Mégard, S. Coquillart, and E. Gentaz, "*Bilan du Projet ECoViA : Etude du Couplage Visuo-haptique*", Journées ROBEA, Paris, Avril **2006**
62. **A. Lécuyer**, « *Open-ViBE : Un Environnement Logiciel Open-Source pour les Interfaces Cerveau-Machine* », Journées sur les Interfaces Cerveau-Ordinateur, Lille, 13 Avril **2006**
63. **A. Lécuyer**, "*Intégration Visuo-Haptique pour la RV : le Retour Pseudo-Haptique* », Groupe de Travail Animation et Simulation (GTAS), Lille, **2005**
64. **A. Lécuyer**, J. McIntyre, C. Mégard, M. Congedo, E. Gentaz, et S. Coquillart, « *Bilan de la première année du projet ECOVIA : Etude du Couplage Visuo-Haptique* » - Journées ROBEA (Robotiques et Entités Artificielles), Montpellier, 29/31 Mars **2005**
65. **A. Lécuyer**, « *Le retour pseudo-haptique* », Le virtuel et le tangible : ce qui résiste, Séminaire Inter-Disciplinaire de Sciences et Technologies Cognitives, UTC Compiègne, Janvier **2005**
66. **A. Lécuyer**, « *Interfaces à retour d'effort et handicap* », 4^{ème} Journées Handicap et Nouvelles Technologies, Rennes, Avril **2004**
67. **A. Lécuyer**, L. Dominjon, "*Techniques d'Interaction avec Retour Haptique*", 3ème Journée de l'A.S. Haptique, INRIA Rhône-Alpes, France, Juin **2004**
68. **A. Lécuyer**, "*Intégration Visuo-Haptique*", 2ème Journée de l'A.S. Haptique, France, mars **2004**
69. **A. Lécuyer**, "*Réalité virtuelle, illusions sensorielles et retour d'effort*", Séminaire IriSaTech, IRISA, Rennes, France, mars **2004**
70. **A. Lécuyer**, C. Andriot and A. Crosnier, « *Interfaces Haptiques et Pseudo-Haptiques* », Journées Nationales de la Recherche en Robotique, **2003**
71. **A. Lécuyer**, "*Evaluation of Haptic and Pseudo-Haptic Feedback in Virtual Reality* ", Workshop on Multimodal Interactions in Perception, Séminaire du Programme Cognitique/CNRS, Paris, April **2002**
73. S. Coquillart, J. Grosjean and **A. Lécuyer**, « *Interaction et Systèmes Haptiques* », Séminaire Environnements Virtuels à Base de Projection sur Grands Ecrans, INRIA Rocquencourt, France, **2000**
74. **A. Lécuyer**, « *Retour Pseudo-Haptique* », Séminaire Images Virtuelles, Technocentre RENAULT Guyancourt, **2000**
75. **A. Lécuyer**, « *Retour Pseudo-Haptique* », Séminaire du CAOR, Ecole des Mines, Paris, **2000**

Reports

76. M. Zhong, **A. Lécuyer**, "*Automatic Elimination of Ocular and Muscle Artifacts in EEG Recordings Based on Blind Source Separation*", IRISA Technical Report PI 1817, September **2006**
77. **A. Lécuyer**, « *Interfaces haptiques : disponibilités, contraintes et applications* », EADS Report DCR/I/1999-06650/01, **1999**
78. **A. Lécuyer**, « *Interactions physiques avec les maquettes numériques : le besoin en retour haptique dans les applications EADS Airbus* », EADS Report DCR/I/1999-06650/02, **1999**

Patent

79. « **Modulation of cursor position in video data of computer screen** », patent FR0311302, co-inventor (75%) with L. Etienne (15%) and B. Arnaldi (10%), **2004**.

Reviewer/IPC Member

Member of Editorial Board:

- ACM Transactions on Applied Perception (ACM TAP) (associate editor since 2007)

Member of International Program Committee (IPC):

- ACM VRST (2008 : short papers and posters chair)

- World Haptics Conference (2007, 2009)
- Eurohaptics (2006)
- IPT-EGVE (2007)
- EGVE (2004, 2008)
- Cyberworlds (2006, 2007)
- MMVIS (2004)
- M2VIS (2005)
- EMCS (2008)
- VRIC (2005, 2007, 2008)
- INTUITION (2007, 2008)

Reviewer for Journals:

- IEEE Transactions on Haptics
- ACM Transactions on Applied Perception
- Presence
- Virtual Reality Journal
- Journal of Computer Animation and Virtual Worlds
- Haptics-e
- IEEE Transactions on Neural Systems and Rehabilitation Engineering

Reviewer for International Conferences:

- IEEE VR (2005, 2007)
- ACM CHI (2006)
- IEEE 3DUI (2006, 2007, 2008)
- EUROGRAPHICS (2008)
- ACM VRST (2008)
- ACM UIST (2006)
- World Haptics Conference (2007, 2009)
- Haptics Symposium (2008)
- Eurohaptics (2006)
- ACM/IEEE ISMAR (2003, 2008)
- EGVE (2004, 2008)
- IPT-EGVE (2007)
- Cyberworlds (2006, 2007)
- ECMS (2008)
- MMVIS (2004)
- M2VIS (2005)
- GRAPP (2007)
- VRIC (2005, 2007, 2008)
- INTUITION (2007, 2008)

Teaching

- University of Maine, France: Master in Virtual Reality, course on “Haptic perception and haptic rendering”, since 2003: 7h/year
- University of Rennes 2, France: Master in Biological Signals, course on “Haptic interfaces and brain-computer interfaces”, since 2006: 3h/year
- Technical University of Compiègne, France: Grad., course on “Haptic Interaction”, 2005-2006: 4h/year
- University of Paris-Dauphine, France: Undergrad., course on “Introduction to algorithms and data bases”, 2000-2001 : 70h

Education

- **1998-2001: PhD in Computer Science at University of Paris XI-Orsay, France**
 - Title : « Contribution to the Study of Haptic and Pseudo-Haptic Feedback and their Impact on Simulations of Assembly/Maintenance Operations in Aeronautics» (defended December 5th 2001)
 - Supervisors : Pr. P. Coiffet (CNRS) and Dr. S. Coquillart (INRIA)
- **1996: Master's degree at University of Lille I, France**

- Internship at IRMS Lab of **Simon Fraser University** (Canada) with Pr. W. Gruver and Pr. Y. Zhang on a «simulator for a dextrous robot hand ».
- **1993-1996: Engineer degree at Ecole Centrale de Lille, France**
 - 3rd year specialization in Automation and Control.

Alumni

- Jan 2007- Jan 2009 : (part-time) **Researcher** at **Collège de France**, Paris, (Laboratory of Physiology of Perception and Action, head: Pr. A. Berhoz)
- May 2006 : **Research Fellow** at **University of Osaka**, Human-Interface Engineering Lab (Pr. Y. Kitamura), Japan
- 2001-2002: **Research Engineer** at **CEA** (French Commission for Atomic Energy), Fontenay-aux-roses, France
- 1997-1998: **System Engineer** at **Sextant Avionique**, in Vélizy, France