

**Vincent Hayward**, Professeur, 1<sup>re</sup> classe, section 61, Sorbonne Université, Institut des Systèmes Intelligents et de Robotique

### **Main appointments and education**

2019– Professeur, Sorbonne Université (half-time)  
2017–18 Professor of Tactile Perception and Technologies, School of Advanced Study, University of London (half-time)  
2017– Chief Scientific Officer, Actronika SAS, Paris (half-time)  
2011–16 Professeur (on secondment 2017 et 18) Institut des Systèmes Intelligents et de Robotique, Sorbonne Université  
2008–11 Professeur (associé), Institut des Systèmes Intelligents et de Robotique, Université Pierre et Marie Curie (UPMC)  
2006–10 Professor, Department of Electrical and Computer Engineering, McGill University, Montréal, Qc Canada  
2006–07 Professeur Invité, Université Pierre et Marie Curie  
2001–04 Director, Center for Intelligent Machines, McGill Univ., Montréal, Qc Canada  
1989–06 Assistant then Associate Professor (tenured '94), Dept. of Elec. & Comp. Eng., McGill Univ., Montréal, Qc Canada  
1983–85 Attaché then Chargé de Recherche at the Centre National de la Recherche Scientifique (CNRS)  
1981–83 Visiting Scholar and Assistant Professor, Purdue University, School of Electrical Engineering, Indiana, USA  
1978–81 Thèse de Docteur Ingénieur, Université de Paris XI at Orsay, France  
1975–78 Diplôme d'Ingénieur, École Centrale de Nantes (then ENSM), Nantes, France

### **Awards and Distinctions, selection out a total of 41 plus 12 « best paper » and « best demonstration awards »**

2019 Keynote Speaker, International Conference on Virtual Rehabilitation, Tel Aviv, Israel  
2019 Keynote Speaker, Workshop On Soft Haptic Interaction, Int. Conf. on Robotics and Automation, Montréal, Canada  
2018 Keynote Speaker, Workshop on active touch for perception and interaction, ICRA 2018, Brisbane, Australia  
2018 Keynote Speaker, Cross-Cutting Challenges, IEEE Haptics Symposium, San Francisco, CA, USA  
2018 Keynote Speaker, UK & Ireland IEEE Robotics and Automation Conference, London, UK  
2017 Plenary Speaker, 43rd International Conference On Micro And Nano-engineering, Braga, Portugal  
2017 Keynote Speaker, IEEE/RSJ International Conference on Intelligent Robots and Systems, Vancouver, BC, Canada  
2017 Leverhulme Trust Visiting Professorship, University of London  
2016 Keynote Speaker, Handicap 2016, Paris, France  
2014 Invited Speaker, AsiaHaptics 2014, Tsukuba, Japan  
2013 Distinguished Lecture Series, Department of Computing Science, University of British Columbia, Canada  
2012 Plenary Speaker IEEE Int. Conf. on Multisensor Fusion and Information Integration, Hamburg, Germany  
2012 Lecturer, « Robotique, les fondations d'une discipline », Collège de France, Paris  
2010 Keynote Speaker, Haptic Audio Interaction Design 2010, Copenhagen, Denmark  
2010 Plenary Speaker, 32nd Annual Int. Conf. of the IEEE Engineering in Med. and Bio. Society, Buenos Aires, Argentina  
2008 Elected Fellow of the IEEE  
2002 The E. (Ben) & Mary Hochhausen Award for Res. in Adaptive Technology For Blind and Visually Impaired Persons  
2000 Distinguished Lecture Series, Department of Computing Science, University of Alberta, Canada  
1991 NASA Space Act Tech Brief Award (as a result of work on robot programming for JPL)

**Research Contributions** 100 articles in journals (*Nature* (2), *PNAS* (3), *Neuron* (1), *Current Biology* (2), *Royal Society Journals* (6), *Scientific Reports* (5), *Plos ONE*) 25 chapters in books, 160 papers in conference proceedings, 30+ patents, 60+ invited lectures in the past 10 years, h-index : 60 (Google Scholar), 38 (Scopus). Many mentions in the press including *Wired Magazine* (2015), "Big Data : The Next Google" *Nature* Vol. 455 (2008), *The New Scientist*, or *The Economist* (2007).

### **Active Research Grants and Contracts**

2019–22 *Innovative Network for Training in Touch Interactive Interfaces* H. Jörntell (Coordinator), R. Dahiya, V. Hayward, E. Burdet (PIs), plus 10 industry associates, H2020 Marie Skłodowska-Curie Innovative Training Networks (ITN).  
2019–22 *Predictive Haptic Coding Devices in Next Generation Interfaces*. H. Jörntell (Coordinator), E. Burdet, R. Dahiya, V. Hayward (PIs), H2020 Research & Innovation FET-Open project.  
2018–21 *Mixed Haptic Feedback for Mid-Air Interactions in Virtual and Augmented Realities*. M. J. Adams (Coordinator), S. A. Seah, V. Hayward, J. Hartcher-O'Brien, C. Pacchierotti (PIs), H2020 Research & Innovation FET-Open project.  
2018–19 *Distal Projection of Tactile Sensations from Oculomotor Signals*, Research Contract, Oculus VR, V. Hayward.  
2017–19 *Hand-to-Hand Remote Deafblind Tactile Communication*, Google Faculty Research Award, V. Hayward.  
2016–20 *Developmental trajectories of sensorimotor control of mechanical tools*, L'Agence Nationale de la Recherche, A. Farné (Coordinator), A. Roy, V. Hayward, F. de Vignemont (PIs).

### **Teaching (at Université Pierre et Marie Curie only)**

2008–16 *Interfaces et réalité virtuelle + Haptics for rehabilitation + Asservissements numériques* (niveau M2).

### **Supervision**

In progress at London University : 1 Postdoc  
In progress at Sorbonne Université : 3 Ph.D., 2 Postdoc  
Completed at Sorbonne Université : 10 Postdocs ; 10 Ph.D. ; 11 Masters ; 7 Research Engineers  
In Canada : 6 Postdocs ; 17 Ph.D. ; 18 Masters

### **Numerous other activities among which**

2010– Editorial Advisory Board Member, *Springer Series on Haptics and Touch Systems*  
2007–14 Associate Editor, *ACM Transactions on Applied Perception*  
2007–11 Associate Editor, *IEEE Transactions on Haptics*  
1994–98 Associate Editor, *IEEE Transactions on Robotics and Automation*