Vincent Lévesque

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LANGUAGES

English: Fluent, **French:** Native

EDUCATION

2009	**Ph.D. in Electrical Engineering**, McGill University, Montréal, Canada Thesis: Virtual Display of Tactile Graphics and Braille by Lateral Skin Deformation Advisor: Vincent Hayward
2003	**M.Eng. in Electrical Engineering,** McGill University, Montréal, Canada Thesis: Measurement of Skin Deformation Using Fingerprint Feature Tracking Advisor: Vincent Hayward (Dean's Honour List)
2000	**B.Eng. in Computer Engineering**, McGill University, Montréal, Canada (Dean's Honour List)

PROFESSIONAL EMPLOYMENT

2017-	**École de technologie supérieure,** Montréal, Canada Associate Professor, Department of Software and IT Engineering
2016-2017	**Feel Forward Haptics inc.**, Montréal, Canada Founder and President
2016-2017	**Tactile Labs inc.**, Montréal, Canada Research Scientist (volunteer)
	Immersion Corporation, Research Department, Montréal, Canada
2015-2016	Senior Research Scientist
2012-2015	Research Scientist II
2011-2012	Postdoctoral Research Scientist
2009-2011	**University of British Columbia**, Computer Science Department, Vancouver, Canada Postdoctoral Researcher (Advisor: Karon MacLean)
	Tactile Labs inc., Montréal, Canada
2009-2011	Vice-president
2008-2009	President
2003	**Visuaide Inc.**, Longueuil, Canada Research Assistant

AWARDS AND DISTINCTIONS

2019	**TCH Early Career Award**, IEEE Technical Committee on Haptics
2016	**Best Reviewer Award**, ACM ICMI 2016, Tokyo, Japan
2013	**Citation for Meritorious Service**, IEEE Transactions on Haptics
2012	**Best Paper Award** (1st author), IEEE Haptics Symposium 2012, Vancouver, Canada
2011	**Best Paper Award** (1st author), ACM CHI'11, Vancouver, Canada
2011	**Citation for Meritorious Service**, IEEE Transactions on Haptics
2010	**Best Reviewer Award**, IEEE Haptics Symposium 2010, Waltham, USA
2008	**Best Demonstration Award** (1st author), IEEE Haptics Symposium 2008, Reno, USA
2007	**Best Paper Award for Haptic Application** (1st author), IEEE World Haptics Conference 2007, Tsukuba, Japan
2006	**Best Paper Award** (5th author), ACM CHI'06, Montréal, Canada
2004	**3rd Prize for Best Poster** (1st author), Institute for Robotics and Intelligent Systems (IRIS), Ottawa, Canada
2003	**Dean's Honour List**, Master of Engineering, McGill University
2002	**Best Demonstration Award**, (1st author), Institute for Robotics and Intelligent Systems (IRIS), Calgary, Canada
1996-1999	**Dean's Honour List**, Bachelor of Engineering, McGill University

GRANTS

2020-2023	**Mitacs Accelerate** ($30,000 of $226,667), IPtoki & Mitacs
2020-2021	**Research Tools and Instruments** ($148,800/6 applicants), Natural Sciences and Engineering Research Council of Canada (NSERC)
2020	**Mitacs Accelerate** ($30,000), Haply Robotics & Mitacs
2019-2025	**Regroupements Stratégiques** ($75,000 of $2.88M), REPARTI, Fonds de recherche du Québec - nature et technologies (FRQNT)
2019-2023	**Programme de soutien aux organismes de recherche et d'innovation PSOv4** ($87,560 of $36.4M), Ministère de l'Économie et de l'Innovation du Québec
2019-2020	**Programme de support institutionnel à la recherche et à l'enseignement (PSIRE) - volet enseignement** ($9,450), École de technologie supérieure
2019-2020	**Engage** ($28,954), HopChild Technologies & Natural Sciences and Engineering Research Council of Canada (NSERC)
2018-2025	**Discovery Grant** ($243,500/7yr), Natural Sciences and Engineering Research Council of Canada (NSERC)

FELLOWSHIPS AND SCHOLARSHIPS

2011-2013   **Industrial R&D Fellowship** ($20,000/yr), Natural Sciences and Engineering Research Council of Canada (NSERC)

2009-2011   **Postdoctoral Fellowship PDF** ($40,000/yr), Natural Sciences and Engineering Research Council of Canada (NSERC)

2003-2006   **Postgraduate Scholarship B2** ($20,000/yr), Fonds pour la Formation de Chercheurs et l'Aide à la Recherche (FCAR)

2003-2005   **Postgraduate Scholarship PGS B** ($21,000/yr), Natural Sciences and Engineering Research Council of Canada (NSERC)

2002-2005   **Precarn Student Scholarship** ($6,000), Institute for Robotics and Intelligent Systems

2001-2002   **Postgraduate Scholarship PGS A** ($17,300/yr), Natural Sciences and Engineering Research Council of Canada (NSERC)

1996-1999   **Hugh Brock / E.M. Wilson Scholarship** ($2,000/yr), McGill University

TEACHING EXPERIENCE

2018-   **Professor**, École de technologie supérieure, Montréal, Canada
GTI745 – Interfaces utilisateurs avancées
MGL835 – Interaction humain-machine

2021-   **Co-Creator and Co-Instructor**, CanHaptics (ETS, McGill, Waterloo, UBC)
Co-creator and co-instructor (yearly) of the multi-institution online course CanHaptics 501 – Introduction to Haptic Information Design

2021-   **Guest Lecturer**, Math. and Industrial Engineering, Polytechnique Montréal, Canada
Guest lecture on haptics (6 hours, yearly) in graduate seminar IND8409A on Usability and User Experience (instructor: Philippe Doyon-Poulin)

2010-2020   **Guest Lecturer**, Math. and Industrial Engineering, Polytechnique Montréal, Canada
Guest lecture on haptics (3-6 hours, yearly) in graduate course IND8409 on Specialized Human-Computer Interfaces (instructor: Jean-Marc Robert)

2015   **Innovation Instructor**, Immersion Corporation, Montréal, Canada
Co-instructor for training session on the Innovator's DNA method

2000-2003   **Teaching Assistant**, Electrical Engineering, McGill University, Montréal, Canada
Computer Architecture Laboratory (6 semesters) and Operating Systems (1 semester)

GRADUATE SUPERVISION

2022-   **Supervisor**, Arash Jamshidi Moghaddamanbaran, M. A. Sc., ÉTS

2022-   **Supervisor,** Jules Lestrade, M. Eng., ÉTS

2022-   **Supervisor,** Hocine Ben Hamou, M. Eng., ÉTS

2022-   **Supervisor,** Zemouri Mohammed Ahmed Aziz, M. Eng., ÉTS

2021-   **Supervisor**, Jérémy Durette-Morin, M. A. Sc., ÉTS

2021-	**Supervisor**, Pascal Fortin, Postdoctoral Researcher, ÉTS
2019-2022	**Supervisor**, Paria Majidi, M. A. Sc., ÉTS
2020-2021	**Supervisor**, Benjamin Delbos, M. Eng., ÉTS
2019-2021	**Supervisor**, Shirin Kasaei, M. A. Sc., ÉTS
2019-2021	**Supervisor**, Balkiss Friaa, M. A. Sc., ÉTS
2020	**Supervisor**, Samy Goulli, M. Eng., ÉTS
2020	**Supervisor**, Jiaxun Ge, M. Eng., ÉTS
2019-2020	**Supervisor**, Meïra Ben Cimon, M. Eng., ÉTS
2019-2020	**Supervisor**, Hayat Ankour, M. Eng., ÉTS
2019-2020	**Supervisor**, Danny Sauval, M. Eng., ÉTS
2019	**Supervisor**, Laura Rajkowski, M. Eng., ÉTS
2018-2019	**Supervisor**, Alim Amir Amadou, M. Eng., ÉTS
2018-	**Supervisor**, Baptiste Lestavel, M. Eng., ÉTS
2010-2011	**Co-supervisor (unofficial)**, Louise Oram, Undegraduate Research, UBC

PUBLICATIONS

H-Index of 42 and more than 5064 citations as of February 7, 2024 (Google Scholar).

Journal Articles

Impact factors by Journal Citation Reports 2021.

[J1]   C. Basdogan, F. Giraud, **V. Lévesque**, and Seungmoon Choi (2020). A Review of Surface Haptics: Enabling Tactile Effects on Touch Surfaces. *IEEE Transactions on Haptics*, 13(3), pp. 450-470, 2020. (Impact factor: 3.105)

[J2]   M. Adams, S. Johnson, P. Lefèvre, **V. Lévesque**, V. Hayward, T. André, T., and J-L. Thonnard (2013). Finger pad friction and its role in grip and touch. *Journal of the Royal Society Interface*, 10(80):20120467. (Impact factor: 4.293)

[J3]   T. André, **V. Lévesque**, V. Hayward, P. Lefèvre, and J.-L. Thonnard (2011). Effect of skin hydration on the dynamics of fingertip gripping contact. *Journal of the Royal Society Interface*, published online 13 April 2011. (Impact factor: 4.293)

[J4]   G. Petit, A. Dufresne, **V. Lévesque**, and V. Hayward (2008). Exploration multimodale d'images pour des utilisateurs ayant une déficience visuelle. *Sciences et Technologies pour le Handicap*, 2(2):175-186.

[J5]   J. Pasquero, J. Luk, **V. Lévesque**, Q. Wang, V. Hayward, and K. E. MacLean (2007). Haptically Enabled Handheld Information Display with Distributed Tactile Transducer. *IEEE Transactions on Multimedia,* 9(4):746-753. (Impact factor: 8.182)

[J6]   **V. Lévesque**, J. Pasquero, V. Hayward, and M. Legault (2005). Display of Virtual Braille Dots by Lateral Skin Deformation: Feasibility Study. *ACM Transactions on Applied Perception*, 2(2):132-149. (Impact factor: 1.676)

Peer-Reviewed Conference Papers

[C1]   M. Valette, H. Bouchihan and **V. Lévesque** (2024). Exploring Cross-Device Haptics for Virtual Reality Experiences. In *Proc. Graphics Interface 2024*, June 2024, pp. 1-5.

[C2]   B. Friaa and **V. Lévesque** (2022). A Conceptual and Experimental Exploration of Electrovibration on the Palm and the Body. In *Proc. IEEE Haptics Symposium 2022*, March 2022, pp. 1-6.

[C3]   S. Kasaei and **V. Lévesque** (2022). Effect of vibration frequency mismatch on apparent tactile motion. In *Proc. IEEE Haptics Symposium 2022*, March 2022, pp. 1-6.

[C4]   B. Delbos, A. Mohtat, C. Gallacher, and **V. Lévesque** (2021). Velocity estimation for affordable force feedback devices by time stamping and adaptive windowing. Work-in-Progress. In *Proc. IEEE World Haptics Conference 2021*, July 2021, p. 1138.

[C5]   B. Friaa and **V. Lévesque** (2021). A Conceptual and Practical Exploration of Electrovibrating Wearables. Work-in-Progress. In *Proc. IEEE World Haptics Conference 2021*, July 2021, p. 1153.

[C6]   K. E. MacLean, O. Schneider, A. Weill—Duflos, **V. Lévesque**, P. Irani, and J. R. Cooperstock (2021). CanHap 501: Learning Haptic UX Design in Remote Teams. Work-in-Progress. In *Proc. IEEE World Haptics Conference 2021*, July 2021, p. 348.

[C7]   G. Verhoeven and **V. Lévesque** (2020). Design of a Haptic Language for Gestural Control of Smart Lights. In *Proc. 2020 International Workshop on Haptic and Audio Interaction Design (HAID'20)*, August 2020, pp. 1-6.

[C8]   L. Rajkowski, B. Friaa, and **V. Lévesque** (2020). SurfaceReach: Assistive Guidance by Electrovibration on a Large Table. Work-in-Progress. In *Proc. IEEE Haptics Symposium 2020*, March 2020, pp. 1-2.

[C9]   C. Frisson, B. Delbos, F. Désourdy, S. Ding, M. M. Wanderley, **V. Lévesque**, and C. Gallacher (2020). RepHap: towards an open source platform for benchmarking haptic devices leveraging the Robot Operating System ecosystem. Work-in-Progress. In *Proc. IEEE Haptics Symposium 2020*, March 2020, pp. 1-2.

[C10]   P. Strohmeier, J. Burstyn, J. P. Carrascal, **V. Lévesque** and R. Vertegaal (2016). ReFlex: A Flexible Smartphone with Active Haptic Feedback for Bend Input. In *Proc. ACM Conference on Tangible, Embedded and Embodied Interaction (TEI'16)*, Eindhoven, The Netherlands, February 2016. ***More than one million views on YouTube.*** *Acceptance rate: 25%.*

[C11]   **V. Lévesque**, L. Oram, K. MacLean (2012). Exploring the Design Space of Programmable Friction for Scrolling Interactions. In *Proc. Haptics Symposium 2012*, Vancouver, Canada, March 2012. ***Best Paper Award.***

[C12]   **V. Lévesque**, G. Petit, A. Dufresne, and V. Hayward (2012). Adaptive Level of Detail in Dynamic, Refreshable Tactile Graphics. In *Proc. Haptics Symposium 2012*, Vancouver, Canada, March 2012.

[C13]   **V. Lévesque**, L. Oram, K. MacLean, A. Cockburn, N. D. Marchuk, D. Johnson, J. E. Colgate, M. A. Peshkin (2011). Enhancing Physicality in Touch Interaction with Programmable Friction. In *Proc. ACM Conference on Human Factors in Computing Systems (CHI'11)*, pp. 2481-2490, Vancouver, Canada, May 2011. ***Best Paper Award.*** *Acceptance rate: 27%.*

[C14] **V. Lévesque**, L. Oram, K. MacLean, A. Cockburn, N. D. Marchuk, D. Johnson, J. E. Colgate, M. A. Peshkin (2011). Frictional Widgets: Enhancing Touch Interfaces with Programmable Friction. In *CHI'11 Extended Abstracts on Human Factors in Computing Systems*, pp. 1153-1158, Vancouver, Canada, May 2011. *Acceptance rate: 50%.*

[C15] **V. Lévesque** and V. Hayward (2010). Laterotactile Rendering of Vector Graphics with the Stroke Pattern. In *Proc. EuroHaptics 2010, Part II*, Kappers, A.M.L. et al. (Eds.), LNCS 6192, Springer-Verlag, pp. 25-30, Amsterdam, Netherlands, July 2010.

[C16] G. Petit, A. Dufresne, **V. Lévesque**, V. Hayward, N. Trudeau (2008). Refreshable Tactile Graphics Applied to Schoolbook Illustrations for Students with Visual Impairment. In *Proc. 10th international ACM SIGACCESS conference on computers and accessibility (ASSETS'08)*, pp. 89-96, Halifax, Canada, October 2008. *Acceptance rate: 37%.*

[C17] G. Petit, A. Dufresne, **V. Lévesque**, V. Hayward, N. Trudeau (2008). Graphisme tactile appliqué aux illustrations de manuels scolaires à l'usage d'enfants ayant une déficience visuelle. In *Proc. 20ième conférence francophones sur l'interaction homme-machine (IHM'08)*, Metz, France, Septembre 2008.

[C18] **V. Lévesque** and V. Hayward (2008). Tactile Graphics Rendering Using Three Laterotactile Drawing Primitives. In *Proc. Haptics Symposium 2008*, pp. 429-436, Reno, Nevada, March 2008.

[C19] **V. Lévesque**, J. Pasquero, and V. Hayward (2007). Braille Display by Lateral Skin Deformation with the STReSS^2 Tactile Transducer. In Proc. World Haptics Conference 2007, pp. 115-120, Tsukuba, Japan, March 22-24, 2007. ***Best Paper Award for Haptic Application.***

[C20] Q. Wang, **V. Lévesque**, J. Pasquero, and V. Hayward (2006). A Haptic Memory Game using the STReSS^2 Tactile Display. In *CHI'06 Extended Abstracts on Human Factors in Computing Systems*, pp. 271-274, Montréal, Canada, April 2006. *Acceptance rate: 23%.*

[C21] J. Luk, J. Pasquero, S. Little, K. MacLean, **V. Lévesque**, and V. Hayward (2006). A Role for Haptics in Mobile Interaction: Initial Design Using a Handheld Tactile Display Prototype. Proc. *ACM Conference on Human Factors in Computing Systems (CHI'06)*, pp. 171-180, Montréal, Canada, April 2006. ***Best Paper Award.*** *Acceptance rate: 23%.*

[C22] J. Pasquero, **V. Lévesque**, V. Hayward, and M. Legault (2004). Display of Virtual Braille Dots by Lateral Skin Deformation: A Pilot Study. In Proc. EuroHaptics 2004, pp. 96-103, Munich, Germany, June 5-7, 2004.

[C23] **V. Lévesque** and V. Hayward (2003). Experimental Evidence of Lateral Skin Strain During Tactile Exploration. In *Proc. Eurohaptics 2003*, pp. 261-275, Dublin, Ireland, June 2003.

Non-Refereed Contributions

[N1] B. Friaa and V. Lévesque (2022). Exploring Electrovibration on the Palm and the Body. Poster, Graphics Interface 2022 (GI 2022), Montréal, Canada, May 2022.

[N2] S. Kasaei and V. Lévesque (2022). Robustness of apparent tactile motion to frequency mismatches. Poster, Graphics Interface 2022 (GI 2022), Montréal, Canada, May 2022.

[N3] **V. Lévesque**, L. Oram, K. MacLean, J. E. Colgate, M. A. Peshkin (2011). Restoring Physicality to Touch Interaction with Programmable Friction. In *Proc. International Conference on Consumer Electronics 2011 (ICCE'11)*, Las Vegas, IEEE, 2 pages, January 2011.

[N4] T. André, **V. Lévesque**, V. Hayward, P. Lefèvre and J.-L. Thonnard (2009). The effects of moisture on fingertip skin deformation during loading and slipping. 39th Annual Meeting of the Society for Neuroscience, Chicago, USA, 2009.

[N5] **V. Lévesque**, V. Hayward, G. Petit, and A. Dufresne (2008) Refreshable tactile graphics using a lateral skin deformation device. 9th International Conference on Low Vision, July 7-11, Montréal, Canada.

[N6] **V. Lévesque** (2005). Blindness, Technology and Haptics. Technical Report (CIM-TR-05.08), McGill University, Montréal, Canada, 28 pages.

[N7] **V. Lévesque**, J. Pasquero, V. Hayward, and M. Legault (2004). Display of Virtual Braille Dots by Lateral Skin Deformation. Poster, 14th Annual Canadian Conference on Intelligent Systems (IRIS), Ottawa, Canada, June 2004. ***3rd Prize, Best Poster Award.***

Demonstrations

[D1] H. Ankour, D. Sauval, and **V. Lévesque** (2019). Tangible capture of virtual objects with mid-air and wearable haptics. 12th Annual FRQNT-REPARTI Workshop, June 13, 2019.

[D2] A. A. Amadou and **V. Lévesque** (2019). Opportunistic use of a haptic smartwatch in virtual reality. 12th Annual FRQNT-REPARTI Workshop, June 13, 2019.

[D3] S. Gouli and **V. Lévesque** (2019). Haptic feedback for audiovisual content. 12th Annual FRQNT-REPARTI Workshop, June 13, 2019.

[D4] **V. Lévesque**, L. Oram and K. MacLean (2012). Programmable Friction in Scrolling Interactions. Haptics Symposium 2012, Vancouver, Canada, March 2012. ***Nominated for Best Demonstration Award.***

[D5] **V. Lévesque** and V. Hayward (2008). Refreshable Tactile Graphics with the STReSS^2 Laterotactile Display. EuroHaptics 2008, Madrid, Spain, June 11-13, 2008.

[D6] **V. Lévesque**, A. Gosline and V. Hayward (2008). Refreshable Tactile Graphics with the STReSS^2 Laterotactile Display. Haptics Symposium 2008, Reno, Nevada, March 13-14, 2008. ***Best Demonstration Award.***

[D7] **V. Lévesque**, J. Pasquero, V. Hayward, and M. Legault (2004). Display of Virtual Braille Dots by Lateral Skin Deformation. 14th Annual Canadian Conference on Intelligent Systems (IRIS), Ottawa, Canada, June 2004.

[D8] J. Pasquero, **V. Lévesque** and V. Hayward (2002). Minitature Tactile Display. 12th Annual Canadian Conference on Intelligent Systems (IRIS), Calgary, Canada, May 2002. ***Best Demonstration Award.***

PATENTS

Issued Patents

[P1] S. Forest, R. Mousakhanian, L. Wu, **V. Lévesque**, and C. Uon (2022). Systems and Methods for Integrating Environmental Haptics in Virtual Reality. US Patent 11,294,467, filed December 18, 2018, and issued April 5, 2022.

[P2]   **V. Lévesque** (2021). Method and System for the Detection and Augmentation of Tactile Interactions in Augmented Reality. US Patent 10,969,874, filed March 16, 2018, and issued April 6, 2021.

[P3]   **V. Lévesque**, A. Modarres, D. Grant, J. F. Dionne, and D. Birnbaum (2020). Systems, methods for providing haptic feedback for remote interactions. US Patent 10,613,627, filed May 12, 2014, and issued April 7, 2020.

[P4]   V. Khoshkava, J. M. Cruz-Hernandez, and **V. Lévesque** (2020). Local Haptic Actuation System. US Patent 10,584,689, filed September 2, 2016, and issued March 10, 2020.

[P5]   **V. Lévesque** and M. Motamedi (2020). Handheld Interface Device Having a Plurality of Electrostatic Friction (ESF) Electrodes. US Patent 10,534,435, filed November 18, 2016, and issued January 14, 2020.

[P6]   D. Birnbaum, **V. Lévesque**, and D. Grant (2019). Mobile Device with Instinctive Alerts. US Patent 10,504,339, filed February 21, 2013, and issued December 10, 2019.

[P7]   **V. Lévesque** (2019). Usable hidden controls with haptic feedback. US Patent 10,359,857, filed July 18, 2013, and issued July 23, 2019.

[P8]   **V. Lévesque**, D. Birnbaum, B. P. Belley, J. Saboune, A. Hamam, R. Patel, C. Ullrich, M. Motamedi, J. M. Cruz-Hernandez (2019). Haptic Implants. US Patent 10,327,974, filed August 2, 2017, and issued June 25, 2019.

[P9]   **V. Lévesque**, J. Saboune and J. M. Cruz-Hernandez (2019). Systems and Methods for Providing Electrostatic Haptic Effects via a Wearable or Handheld Device. US Patent 10,261,586, filed October 11, 2016, and issued April 16, 2019.

[P10]   W. Rihn, M. Motamedi, D. Grant, N. Olien, **V. Lévesque**, and J. Saboune (2019). Single actuator haptic effects. US Patent 10,241,577, filed August 1, 2017, and issued March 26, 2019.

[P11]   **V. Lévesque**, J. M. Cruz-Hernandez, and V. Khoshkava (2019). Haptic delivery cluster for providing a haptic effect. US Patent 10,235,849, filed December 22, 2017, and issued March 19, 2019.

[P12]   **V. Lévesque**, A. Modarres and W. S. Rihn (2019). Compensated Haptic Rendering for Flexible Electronic Devices. US Patent 10,234,945, filed September 9, 2016, and issued March 19, 2019.

[P13]   K. Shah, **V. Lévesque** (2019). Haptic Feedback for Opportunistic Displays. US Patent 10,198,072, filed June 8, 2016, and issued February 5, 2019.

[P14]   L. Wu, H. Da Costa, C. Yang, **V. Lévesque**, H. Yu, D. M. Birnbaum, and C. Ullrich (2019). Delivery Of Haptics To Select Recipients Of A Message. US Patent 10,200,332, filed December 14, 2015, and issued February 5, 2019.

[P15]   **V. Lévesque**, A. Zhu, E. Gervais, F. An, J. Maalouf, and E. Lajeunesse (2019). Systems And Methods For Location-Based Notifications For Shopping Assistance. US Patent 10,185,986, filed September 11, 2015, and issued January 22, 2019.

[P16]   **V. Lévesque** (2018) Haptically Enabled Flexible Devices. US Patent 10,152,125, filed November 20, 2015, and issued December 11, 2018.

[P17] **V. Lévesque** and V. Khoshkava (2018). Wearable Article Having An Actuator That Performs Non-Haptic And Haptic Operations. US Patent 10,102,722, filed December 18, 2015, and issued October 16, 2018.

[P18] **V. Lévesque**, D. Grant, R. Mousakhanian, A. Rabemiarisoa, G. Isajanyan, and A. Zhu (2018). Systems and Methods for Providing Haptic Feedback via a Case. US Patent 10,095,311, filed June 15, 2016, and issued October 9, 2018.

[P19] J. M. Cruz-Hernandez, J. Saboune, A. Hamam, and **V. Lévesque** (2018). Deformable Haptic Wearables with Variable Physical Properties. US Patent 10,082,872, filed December 30, 2014, and issued September 25, 2018.

[P20] **V. Lévesque** and J. M. Cruz-Hernandez (2018). Method, apparatus for providing haptic cues for guidance, alignment with electrostatic friction. US Patent 10,078,384, filed March 1, 2013, and issued September 18, 2018.

[P21] D. Grant, **V. Lévesque**, A. Weddle, D. Birnbaum, J. M. Cruz-Hermandez, and J. Saboune (2018). Systems, Methods for Haptic Fiddling. US Patent 10,037,081, filed August 27, 2013, and issued July 31, 2018.

[P22] D. Grant, **V. Lévesque**, E. Redelsheimer, D. Parker (2018). Wearable Device with Flexibly Mounted Haptic Output Device. US Patent 10,032,345, filed April 2, 2014, and issued July 24, 2018.

[P23] **V. Lévesque**, J. M. Cruz-Hernandez, D. Grant, J. Saboune, L. Wu, K. E. Stahlberg, and A. Hamam (2018). Systems, Methods for Force-Based Object Manipulation, Haptic Sensations. US Patent 10,031,583, filed March 19, 2015, and issued July 24, 2018.

[P24] **V. Lévesque**, J. Saboune, J. M. Cruz-Hernandez, A. Hamam, V. Khoshkava, and L. Wu (2018). Systems And Methods For Providing Haptic Effects In Response To Deformation Of A Cover For An Electronic Device. US Patent 10,013,060, filed September 18, 2015, and issued July 3, 2018.

[P25] **V. Lévesque** (2018). Haptic CAPTCHA. US Patent 9,990,040, filed September 25, 2015, and issued June 5, 2018.

[P26] V. Khoshkava, **V. Lévesque**, J. M. Cruz-Hernandez, M. Alghooneh, and W. Rihn (2018). Systems and Methods for Position-Based Haptic Effects. US Patent 9,990,078, filed December 11, 2015, and issued June 5, 2018.

[P27] K. Shah, **V. Lévesque** (2018). Systems and Methods for Monitoring Insulation Integrity for Electrostatic Friction. US Patent 9,983,675, filed June 10, 2016, and issued May 29, 2018.

[P28] **V. Lévesque**, A. Modarres, A. Weddle, and D. Birnbaum (2018). Systems, methods for a haptically-enabled projected user interface. US Patent 9,965,034, filed December 30, 2013, and issued May 8, 2018.

[P29] J. M. Cruz-Hernandez, D. Grant, **V. Lévesque**, and A. Modarres (2018). System, Method for a Haptically-Enabled Deformable Surface. US Patent 9,939,900, filed March 21, 2014, and issued April 10, 2018.

[P30] **V. Lévesque**, J. M. Cruz-Hernandez, M. Motamedi, K. Shah and A. Modarres (2018). Method and apparatus for controlling generation of electrostatic friction effects for a plurality of electrodes. US Patent 9,928,700, filed January 25, 2017, and issued March 27, 2018.

[P31]   **V. Lévesque**, D. M. Birnbaum, B. Belley, J. Saboune, V. Khoshkava, S. Forest, and J. M. Cruz-Hernandez (2018). Externally-Activated Haptic Devices and Systems. US Patent 9,928,696, filed December 30, 2015, and issued March 27, 2018.

[P32]   **V. Lévesque**, D. Grant, A. Modarres, and J. Saboune (2018). Systems, Methods for Haptically-Enabled Curved Devices. US Patent 9,921,650, filed March 19, 2015, and issued March 20, 2018.

[P33]   **V. Lévesque**, A. Hamam, D. A. Grant (2016). Systems and Methods for Deformation and Haptic Effects. US Patent 9,921,609, filed August 2, 2016, and issued March 20, 2018.

[P34]   **V. Lévesque** and Vahid Khoshkava (2018). Selective Control Of An Electric Field To Deliver A Touchless Haptic Effect. US Patent 9,898,904, filed August 17, 2016, and issued February 20, 2018

[P35]   V. Khoshkava, **V. Lévesque**, J. Saboune, A. Hamam, J. M. Cruz-Hernandez, L. Wu (2018). Systems and Methods for Haptic Surface Elements. US Patent 9,898,903, filed March 7, 2016, and issued February 20, 2018.

[P36]   **V. Lévesque** (2018). Systems and Methods for Closed-Loop Control for Haptic Feedback. US Patent 9,886,829, filed June 20, 2016, and issued February 6, 2018.

[P37]   **V. Lévesque** (2018). Haptic Effects Conflict Avoidance. US Patent 9,881,467, filed February 22, 2016, and issued January 30, 2018.

[P38]   **V. Lévesque** (2018). Automated Haptic Setting Generation. US Patent 9,880,627, filed December 15, 2015, and issued January 30, 2018.

[P39]   R. Lacroix and **V. Lévesque** (2018). Friction modulation for three dimensional relief in a haptic device. US Patent 9,880,623, filed March 11, 2013, and issued January 30, 2018.

[P40]   V. Khoshkava, **V. Lévesque** and J. M. Cruz-Hernandez (2018). Systems and Methods for Multifunction Haptic Output Devices. US Patent 9,875,625, filed December 18, 2015, and issued January 23, 2018.

[P41]   D. Grant, P. Pimentel, E. Gervais, **V. Lévesque**, A. Kapelus, M. Chang, D. Parker, D. Birnbaum, L. Jiang, and S. Rank (2018). Systems, Methods for Enhanced Television Interaction. US Patent 9,866,924, filed March 14, 2013, and issued January 9, 2017.

[P42]   **V. Lévesque**, J. M. Cruz-Hernandez, A. Hamam (2017). Systems and Methods for Haptically-Enabled Holders. US Patent 9,851,805, filed December 24, 2014, and issued December 26, 2017.

[P43]   D. Grant and **V. Lévesque** (2017). Haptic sensations as a function of eye gaze. US Patent 9,833,697, filed March 11, 2013, and issued December 5, 2017.

[P44]   **V. Lévesque** and J. M. Cruz-Hernandez (2017). System, Method For Feedforward, Feedback With Haptic Effects. US Patent 9,836,150, filed March 14, 2013, and issued December 5, 2017.

[P45]   **V. Lévesque**, A. Hamam, J. M. Cruz-Hernandez, and V. Khoskava (2017). Systems and Methods for Providing Enhanced Haptic Feedback. US Patent 9,763,628, filed December 31, 2014, and issued September 19, 2017.

[P46]   **V. Lévesque**, A. A. Dauhajre (2017). Haptic Functionality For Network Connected Devices. US Patent 9,756,604, filed July 21, 2016, and issued September 5, 2017.

[P47] **V. Lévesque**, D. Grant, J.-F. Blanchard-Dionne, A. Weddle, and J. M. Cruz-Hernandez (2017). Haptic notification manager. US Patent 9,733,880, filed May 30, 2014, and issued August 15, 2017.

[P48] **V. Lévesque**, A. Modarres, N. Olien, D. Grant, E. Ramsay, D. Birnbaum, and A. Weddle (2017). Systems, Methods For Perceptual Normalization of Haptic Effects. US Patent 9,729,730, filed July 2, 2013, and issued August 8, 2017.

[P49] **V. Lévesque** and J. M. Cruz-Hernandez (2017). Systems, Methods For Determining Haptic Effects For Multi-Touch Input. US Patent 9,710,063, filed July 21, 2014, and issued July 18, 2017.

[P50] A. Modarres, J. M. Cruz-Hernandez, C. Ullrich, D. Grant, N. Olien, and **V. Lévesque** (2017). Systems, Methods for Multi-Output Electrostatic Haptic Effects. US Patent 9,696,806, filed July 2, 2014, and issued July 4, 2017.

[P51] **V. Lévesque**, D. Grant, J. Saboune, A. Hamam, and W. Rihn (2017). Systems, Methods for Shape Input, Output for a Haptically-Enabled Deformable Surface. US Patent 9,690,381, filed August 21, 2014, and issued June 27, 2017.

[P52] E. Gervais, S. Asfour, J. Saboune, A. Alhabi, and **V. Lévesque** (2017). Crowd-Based Haptics. US Patent 9,691,238, filed October 14, 2015, and issued June 27, 2017.

[P53] **V. Lévesque** and D. Grant (2017). Systems, Methods for Viewport-Based Augmented Reality Haptic Effects. US Patent 9,690,370, filed May 5, 2014, and issued June 27, 2017.

[P54] **V. Lévesque**, A. Modarres, A. Weddle, D. Birnbaum, J. M. Cruz-Hernandez, and H. D. Costa (2017). Method, apparatus of body-mediated digital content transfer, haptic feedback. US Patent 9,671,826, filed December 13, 2013, and issued June 6, 2017.

[P55] J. M. Cruz-Hernandez, **V. Lévesque**, J. Saboune, D. Grant, R. Lacroix, and A. Hamam (2017). Haptic Feedback In A Haptically Noisy Environment. US Patent 9,659,468, filed September 16, 2015, and issued May 23, 2017.

[P56] **V. Lévesque**, W. Zhu, E. Gervais, F. An, E. Lajeunesse, J. Maalouf (2017). Systems and Methods for Haptically-Enabled Interactions with Objects. US Patent 9,658,693, filed December 19, 2014, and issued May 23, 2017.

[P57] **V. Lévesque**, A. Modarres, J. M. Cruz-Hernandez, and J. Saboune (2017). Method, System For Providing Haptic Effects Based on Information Complementary to Multimedia Content. US Patent 9,652,945, filed December 31, 2013, and issued May 16, 2017.

[P58] **V. Lévesque** (2017). Systems and Methods for Haptic Feedback for Modular Devices. US Patent 9,645,647, filed May 13, 2015, and issued May 9, 2017.

[P59] W. Rihn, D. Birnbaum, Y. Wang, **V. Lévesque**, and D. Grant (2017). Mobile device with motion controlling haptics. US Patent 9,645,643, filed June 17, 2014, and issued May 9, 2017.

[P60] **V. Lévesque**, A. Modarres, J. M. Cruz-Hernandez, A. Weddle, D. Birnbaum, and D. Grant (2013). Systems, methods for generating friction and vibrotactile effects. US Patent 9,639,158, filed November 26, 2013, and issued May 2, 2017.

[P61] J. M. Cruz-Hernandez, J. Saboune, **V. Lévesque**, and A. Modarres (2017). Systems and Methods for Generating Haptic Effects Associated With Audio Signals. US Patent 9,619,980, filed November 12, 2013, issued April 11, 2017.

[P62] **V. Lévesque**, D. Grant and Y. Wang (2017). Haptically-Enabled Deformable Device with Rigid Component. US Patent 9,606,625, filed October 13, 2014, issued March 28, 2017.

[P63] **V. Lévesque** and J. M. Cruz-Hernandez (2017). Systems, methods to generate haptic feedback for skin-mediated interactions. US Patent 9,600,083, filed July 15, 2014, issued March 21, 2017.

[P64] **V. Lévesque**, W. Zhu, E. Gervais, F. An, E. Lajeunesse, J. Maalouf (2017). Systems and Methods for Object Manipulation with Haptic Feedback. US Patent 9,600,076, filed December 19, 2014, issued March 21, 2017.

[P65] **V. Lévesque**, D. Grant, J. M. Cruz-Hernandez, A. Modarres, W. Rihn (2017). Systems and Methods for Deformation-Based Haptic Effects. US Patent 9,535,550, filed November 25, 2014, issued January 3, 2017.

[P66] **V. Lévesque**, D. Birnbaum, A. Weddle, R. Lacroix, J. M. Cruz-Hernandez, D. Grant, N. Olien, E. Ramsay, A. Modarres (2016). Systems and Methods for Providing Haptic Notifications. US Patent 9,529,435, filed December 30, 2014, issued December 27, 2016.

[P67] A. Modarres, **V. Lévesque**, D. Grant, and J. M. Cruz-Hernandez (2016). Haptic feedback for interactions with foldable-bendable displays. US Patent 9,524,030, filed March 21, 2014, issued December 20, 2016.

[P68] **V. Lévesque** (2016). Contactor-based haptic feedback generation. US Patent 9,436,282, filed March 14, 2013, issued September 6, 2016.

[P69] A. Modarres, J. M. Cruz-Hernandez, D. Grant, and **V. Lévesque** (2016). Simulation of tangible user interface interactions, gestures using array of haptic cells. US Patent 9,405,369, filed April 25, 2014, and issued August 2, 2016.

[P70] **V. Lévesque**, J. Saboune and D. Birnbaum (2016). Method, apparatus of converting control tracks for providing haptic feedback. US Patent 9,401,079, filed August 29, 2014, and issued July 26, 2016.

[P71] **V. Lévesque**, J. M. Cruz-Hernandez, A. Weddle, and D. Birnbaum (2016). System and Method for Simulated Physical Interactions With Haptic Effects. US Patent 9,330,544, filed March 14, 2013, and issued May 3, 2016.

[P72] **V. Lévesque** (2015). Automatic haptic effect adjustment system. US Patent 9,202,352, filed March 11, 2013, and issued December 1, 2015.

[P73] **V. Lévesque** and A. Weddle (2015). Systems, Methods For Haptics In Vibrating Environments, Devices. US Patent 9,202,351, filed March 11, 2013, and issued December 1, 2015.

[P74] **V. Lévesque** and J. M. Cruz-Hernandez (2015). Method, apparatus for simulating surface features on a user interface with haptic effects. US Patent 9,196,134, filed October 31, 2012, and issued November 24, 2015.

[P75] D. Grant and **V. Lévesque** (2015). User interface device provided with surface haptic sensations. US Patent 9,041,647, filed March 15, 2013, and issued May 26, 2015.

[P76] V. Hayward, J. Pasquero and **V. Lévesque** (2006). Apparatus to reproduce tactile sensations. US Patent 7,077,015, filed May 29, 2003, and issued July 18, 2006.

Abandoned Patents

[A1]   M. Motamedi, M. Alghooneh, V. Khoshkava, **V. Lévesque**, J. M. Cruz-Hernandez and J. Saboune (2017). Multi-Stable Haptic Feedback Systems. US Patent Application 15/476,056, filed March 31, 2017.

[A2]   **V. Lévesque**, M. Alghooneh, J. Saboune, V. Khoshkava, M. Motamedi, D. Grant, J. M. Cruz-Hernandez, and L. Wu (2016). Control of Contact Conditions for Static ESF. US Patent Application 15/354,148, filed November 17, 2016.

[A3]   **V. Lévesque**, J. M. Cruz-Hernandez, A. Hamam, and V. Khoshkava (2015). Haptic Effects Based On Predicted Contact. US Patent Application 14/717,393, filed May 20, 2015.

[A4]   A. Hamam, J. M. Cruz-Hernandez, L. Wu, J. Saboune, **V. Lévesque**, R. Lacroix, and D. Grant (2015). Systems And Methods For Tactile Guidance. US Patent Application 14/697,680, filed April 28, 2015.

[A5]   **V. Lévesque**, N. Olien, C. Ullrich, D. Birnbaum, and A. Weddle (2014). Friction augmented controls, method to convert buttons of touch control panels to friction augmented controls. US Patent Application 14/585,898, filed December 30, 2014.

[A6]   **V. Lévesque**, J. Saboune and D. Birnbaum (2014). Systems, methods for recording, playing back point-of-view videos with haptic content. US Patent Application 14/585,752, filed December 30, 2014.

[A7]   **V. Lévesque**, J. M. Cruz-Hernandez, A. Dauhajre, P. Raynes, S. S. Bhatia (2014). Systems and Methods for Generating Haptic Effects Based on Eye Tracking. US Patent Application 14/584,098, filed December 29, 2014.

[A8]   **V. Lévesque**, D. Birnbaum, J. M. Cruz-Hernandez, and A. Weddle (2013). Systems, Methods For Providing Mode or State Awareness With Programmable Surface Texture. US Patent Application 13/830,125, filed March 14, 2013.

PROFESSIONAL AFFILIATIONS

2019-present   Engineer, **Ordre des ingénieurs du Québec (OIQ)**

2017-2019   Junior engineer, **Ordre des ingénieurs du Québec (OIQ)**

2011-present   Member of the **Association for Computer Machinery (ACM)**

2010-present   Member of the **Tactile Research Group (TRG)**

2007-present   Member of the **IEEE Technical Committee on Haptics (TCH)**

2000-present   Member of the **Institute of Electrical and Electronics Engineers (IEEE)**

PROFESSIONAL SERVICE

Editorship

2023   **Guest Associate Editor**, IEEE Transactions on Haptics (ToH)

2018-2021   **Associate Editor**, IEEE Robotics and Automation Letters (RA-L)

2016-2019   **Associate Editor**, IEEE Transactions on Haptics (ToH)

2013-2014   **Podcast Co-Editor,** IEEE Transactions on Haptics (ToH)

Conference Organization

2024   **Cross-Cutting Challenges Co-Chair,** IEEE Haptics Symposium 2024

2022   **Program Chair,** IEEE Haptics Symposium 2022

2012-2022   **Program Committee,** EuroHaptics 2022, 2018, 2016, 2014, 2012

2022   **Program Committee,** HAID 2022

2021   **Local Arrangement Co-Chair**, ACM ICMI 2021

2021   **General Co-Chair**, IEEE World Haptics Conference 2021

2020   **Program Chair,** IEEE Haptics Symposium 2020

2014-2020   **Program Committee,** IEEE Haptics Symposium 2020, 2018, 2016, 2014

2015-2019   **Program Committee,** IEEE World Haptics Conference 2019, 2015

2019   **Chair of Transactions on Haptics Session**, IEEE World Haptics 2019

2018   **Chair of Transactions on Haptics Posters**, IEEE Haptics Symposium 2018

2018   **Chair of Works-in-Progress (WIP)**, IEEE Haptics Symposium 2018

2016   **Chair of Workshops and Tutorials**, IEEE Haptics Symposium 2016

2014   **Program Committee,** IEEE HAVE 2014

2011-2012   **WIP Program Committee**, ACM CHI 2012, 2011

2012   **Co-organizer, Invited Session on Haptic HCI**, IEEE Haptics Symposium 2012

2011   **WIP Program Committee**, GRAND 2011

Dissertation Reviewing

2022   **Jury President,** M.A.Sc., Hamed Montazer Zohour, ETS, Montréal

2022   **Jury Member**, M.A.Sc., Corentin Boucher, ETS, Montréal

2022   **Jury Member**, M.A.Sc., Thibault Friedrich, ETS, Montréal

2022   **Jury Member**, Ph.D., Corentin Bernard, Université d'Aix-Marseille, France

2021   **Jury President**, M.A.Sc., Siamak Rajabi, ETS, Montréal

2020   **Jury Member**, M.A.Sc., Alaeddine Chouchane, ETS, Montréal

2020   **Pre-Examiner**, Ph.D., Toni Pakkanen, University of Tampere, Finland

2020   **Jury President**, Ph.D., Jean-Philippe Roberge, ETS, Montréal

2020   **Jury President**, M.A.Sc., Behnaz Nasiri, ETS, Montréal

2019   **Jury Member**, M.Eng., Gloria Hang-Vo, ETS, Montréal

2019   **External Reviewer**, Ph.D., Deborah Egloff, McGill Montréal

2018   **Jury Member**, M.A.Sc., Patrice Robitaille, ETS, Montréal

2014   **External Examiner**, Ph.D., Jussi Rantala, University of Tampere, Finland

Journal Reviewing

*I have reviewed **77 manuscripts** for **32 journals** as of October 5, 2022.*

2014-2022	Virtual Reality (5 manuscripts)
2021-2022	Frontiers in Virtual Reality (2 manuscripts)
2013-2022	PLOS ONE (2 manuscripts)
2022	Computers & Graphics (1 manuscript)
2010-2020	IEEE Transactions on Haptics (29 manuscripts)
2020	Applied Sciences (1 manuscript)
2020	PeerJ Computer Science (1 manuscript)
2013-2019	Interacting with Computers (6 manuscripts)
2012-2019	ACM Transactions on Applied Perception (3 manuscripts)
2016-2019	International Journal of Human-Computer Studies (2 manuscripts)
2015-2019	ACM Transactions on Accessible Computing (2 manuscripts)
2019	Journal of NeuroEngineering and Rehabilitation (1 manuscript)
2019	Virtual Reality & Intelligent Hardware (1 manuscript)
2018	Computers (1 manuscript)
2018	Displays (1 manuscript)
2017	International Journal of Human-Computer Interaction (1 manuscript)
2017	Mechatronics (1 manuscript)
2017	IEEE Robotics & Automation Letters (1 manuscript)
2016	Journal of Rehabilitation and Assistive Technologies Engineering (1 manuscript)
2016	ROBOMECH Journal (1 manuscript)
2016	Sensors (1 manuscript)
2016	Tribology International (1 manuscript)
2015	ACM Transactions on Interactive Intelligent Systems (1 manuscript)
2009-2014	IEEE Transactions on Neural Systems & Rehabilitation Engineering (3 manuscripts)
2013	IEEE Computer Graphics and Applications (1 manuscript)
2013	Advanced Robotics (1 manuscript)
2013	International Journal of Robotics Research (1 manuscript)
2012	International Journal of Industrial Ergonomics (1 manuscript)
2012	ACM Transactions on Computer-Human Interactions (1 manuscript)
2012	Universal Access to the Information Society (1 manuscript)
2009	IEEE/ASME Transactions on Mechatronics (1 manuscript)
2009	Teaching Statistics (1 manuscript)

Conference Reviewing

*I have reviewed **174 papers** for **29 conferences** as of October 5, 2022.*

2008-2021	*IEEE Haptics Symposium (19 papers)*
2007-2020	*ACM Conference on Human Factors in Computing Systems (CHI) (36 papers)*
2010-2020	*ACM International Conference on Multimodal Interaction (ICMI) (25 papers)*
2010-2020	*EuroHaptics (9 papers)*
2020	*ACM Nordic Conference on Human-Computer Interaction (NordiCHI) (3 papers)*
2009-2019	*IEEE World Haptics Conference (20 papers)*
2017-2019	*IEEE Virtual Reality (VR) (7 papers)*
2019	*ACM International Conference on Tangible, Embedded and Embodied Interaction (TEI) (4 papers)*
2019	*ACM/IEEE International Conference on Human Robot Interaction (1 paper)*
2019	*IEEE International Conference on Development and Learning and on Epigenetic Robotics (1 paper)*
2012-2018	*ACM International Conference on Human-Computer Interaction with Mobile Devices and Service (MobileHCI) (8 papers)*
2018	*ACM NordiCHI (4 papers)*
2018	*AsiaHaptics (3 papers)*
2018	*IEEE Canadian Conference on Electrical and Computer Engineering (CCECE) (3 papers)*
2018	*Conférence Francophone sur l'Interaction Homme-Machine (IHM) (1 paper)*
2018	*ACM Automotive UI (1 paper)*
2008-2017	*ACM User Interface Software and Technology Symposium (UIST) (4 papers)*
2012-2015	*ACM Conference on Human Factors in Computing Systems Extended Abstracts (CHI EA) (5 papers)*
2012-2015	*ACM Special Interest Group on Computer Graphics and Interactive Techniques (SIGGRAPH) (4 papers)*
2015	*ACM Interactive Tabletops and Surfaces (ITS) (1 paper)*
2014	*IEEE International Conference on Robotics and Automation (ICRA) (1 paper)*
2012-2013	*IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) (3 papers)*
2013	*International Conference on Consumer Electronics (ICCE) (2 papers)*
2011-2012	*ACM User Interface Software and Technology Symposium Extended Abstracts (UIST EA) (2 papers)*
2012	*IEEE International Symposium on Haptic Audio-Visual Environments and Games (HAVE) (1 paper)*
2011	*Grace Hopper Conference, New Investigator (2 papers)*

2009	*ASME International Design Engineering Technical Conferences & Computers & Information in Engineering Conference (IDETC/CIE) (2 papers)*
2009	*ASME International Mechanical Engineering Congress and Exposition (IMECE) (1 paper)*
2009	*Joint Virtual Reality Conference (JVRC) (1 paper)*

ENTREPRENEURSHIP

2016-2017	**Feel Forward Haptics Inc.**, Montréal, Canada *Founder and president* Consulting services and development of intellectual property related to haptic technologies and their applications in consumer products.
2008-2017	**Tactile Labs Inc.**, Montréal, Canada *Co-founder, vice-president (2009-2011), president (2008-2009)* Non-profit organisation with the mission of refining and distributing precompetitive haptic devices such as vibrotactile actuators and tactile displays for use in research.

OPEN SOURCE & WEBSITES

2016-present	**OpenLatero.org** *Creator and Developer* Open source community dedicated to Tactile Labs' Latero tactile display. Seeded with C/C++ software developed during Ph.D., including API and tactile graphics library.
2006-2009	**Laterotactile.com** *Co-creator and Maintainer (with J. Pasquero)* Website about research on tactile displays operating by lateral skin deformation.
2005	**Sidus**, http://sidus.sourceforge.net *Creator and Developer* C++ library and linux driver for the Nova Engineering FPGA development board.

MEDIA COVERAGE (SELECTED)

Oct. 2023	**Beau dans ma tête, Télé-Québec,** "Le besoin des autres"
Nov. 2022	**Les années lumière, Radio-Canada**, "Des technologies haptiques au service de notre quotidien"
May 2022	**Les années lumière, Radio-Canada**, "L'innovation pour réveiller les sens jusque dans la bouche"
Apr. 2022	**Québec Science**, "Plongée dans le métavers"
Oct. 2021	**Les années lumière, Radio-Canada**, "Le prix Nobel de médecine et le sens du toucher"
June 2021	**Moteur de recherche, Radio-Canada,** "Qu'est-ce que l'haptique?"
Feb. 2016	**The Verge,** "This flexible phone prototype lets you flick through digital books"
Feb. 2016	**Fortune,** "See The Smartphone That Can Bend, Not Break"

Feb. 2016	**Engadget,** "Flexible smartphones may be coming sooner than you think"
Feb. 2016	**Wired,** "This is the world's first actually-useful bendable phone"
May 2011	**NewScientist: One Per Cent**, "Programmable friction makes touchscreens feel sticky"
May 2011	**MIT Technology Review**, "A Touch Screen that Plays Sticky"
May 2011	**Gizmodo,** "Future Touchscreens Might Have Adjustable 'Stickiness' Factor"
May 2011	**Slashdot,** "A Sticky Touch Screen Lets You Feel the Buttons"
April 2009	**McGill Reporter**, "The touch of technology"
Sept. 2008	**New Scientist**, "New computer display let's the blind feel the detail"
Jan. 2007	**IT World Canada,** "Virtual Braille opens employment doors for visually impaired"
June 2003	**Global TV Montréal,** Global News
March 2003	**McGill Reporter**, "Braille for computers"

TALKS

Invited Talks

1. "Introduction à CanHaptics." Lancement de la Grappe d'Innovation Haptique, École des arts numériques, de l'animation et du design (NAD), June 2022.

2. "Enrichir l'expérience utilisateur avec l'haptique." Invited Keynote, Colloque REPARTI 2022, Virtual, May 2022.

3. "Design Tools for Novel Haptic Experiences." Invited Keynote, Sustainable Haptic Design Workshop, ACM CHI '22 Conference on Human Factors in Computing Systems, Virtual, April 2022.

4. "Creating Compelling User Experiences with Haptics." Invited Talk, Huawei HMI Virtual Workshop, September 2021.

5. "Introduction to the Haptic User Experience Research Group." Invited Talk, CanHaptics Seminar, August 2021.

6. "Exploring Ubiquitous Haptics on Wearables and Everyday Objects." Invited Talk, Colloque REPARTI 2021, Virtual, June 2021.

7. "Introduction to the Haptic User Experience Research Group." Invited Talk, Montréal Haptics Meetup, July 2020.

8. "Laterotactile Displays and their Applications." Invited Talk, Motsai Research, January 2020.

9. "Creating Compelling User Experiences with Haptics." Invited Talk, Tactile Research Group, Psychonomics 2019, Montreal, Canada, November 2019.

10. "Creating Compelling User Experiences with Haptics." Invited Talk, TCH Early Career Award 2019, IEEE World Haptics Conference 2019, Tokyo, Japan, July 2019.

11. "Haptics+UX: Enriching User Experiences with Haptics." Invited Talk, Aslla Symposium, Gangneung, South Korea, January 2019.

12. "Designing the Haptic User Experience." Invited Talk, Technoculture, Art and Games (TAG), Concordia, June 2014. *Lecture in class on designing for the senses.*

13. "Programmable Friction and the Haptic User Experience." Invited Talk, Tactile Research Group Meeting, Toronto, Canada, November 2013.

14. "Enhancing Touch Interactions with Programmable Friction." Invited Talk, Workshop on Vibrotactile Haptics for Touch Screens, IEEE World Haptics Conference 2011, Istanbul, Turkey, June 2011.

15. "Do-It-Yourself Haptics: A Practical Introduction to Haptics for Consumer Electronics." IEEE International Conference on Consumer Electronics (ICCE), Las Vegas, January 2011.

16. "Laterotactile Displays and Rendering: from Illusion to Application." IEEE VR 2008 Tutorial, Integration of Haptics in Virtual Environments: from Perception to Rendering, Reno, Nevada, March 2008. (with J. Pasquero)

17. "Refreshable Braille and Tactile Graphics by Lateral Skin Deformation." First Canada-Europe eInclusion Symposium for Deaf and Blind Communities, Montréal, Canada, March 2007.

18. "Laterotactile Devices and Rendering. Tactile Display Design Workshop." EuroHaptics 2006, Paris, France, July 2006.

19. "Experimental Evidence of Lateral Skin Strain During Tactile Exploration." Online presentation, International Society for Haptics, May 2004.

Conference Presentations

1. "Exploring the Design Space of Programmable Friction for Scrolling Interactions." IEEE Haptics Symposium 2012, Vancouver, Canada, March 2012.

2. "Adaptive Level of Detail in Dynamic, Refreshable Tactile Graphics." IEEE Haptics Symposium 2012, Vancouver, Canada, March 2012.

3. "Enhancing Physicality in Touch Interaction with Programmable Friction." ACM Conference on Human Factors in Computing Systems (CHI '11), Vancouver, Canada, May 2011.

4. "Laterotactile Rendering of Vector Graphics with the Stroke Pattern.", EuroHaptics 2010, Amsterdam, Netherlands, July 2010.

5. "Tactile Graphics Rendering Using Three Laterotactile Drawing Primitives." IEEE Haptics Symposium 2008, Reno, USA, March 2008.

6. "Refreshable tactile graphics using a lateral skin deformation device." 9th International Conference on Low Vision, Montréal, Canada, July 2008.

7. "Braille Display by Lateral Skin Deformation with the STReSS^2 Tactile Transducer." IEEE World Haptics Conference 2007, Tsukuba, Japan, March 2007.

8. "Experimental Evidence of Lateral Skin Strain During Tactile Exploration." EuroHaptics 2003, Dublin, Ireland, July 2003.