

Céline COUTRIX

Born June 04, 1982. French. Two children, born in 2013 and 2017.

Ph.D. (HdR) in Computer science, Human Computer Interaction

CNRS Researcher

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Awards and Fellowships

- 2025 **Best Paper Award** at ACM IHM 2025²
- 2024 **Best Paper Award** at ACM IHM 2024²
- 2021 **Best paper nominee** at ACM ICMI 2021 (Top 3% of 247 submissions)
- 2019 **Reviewers' Choice award** (Top 3% of 383 submissions) at IFIP Interact 2019¹
- 2018 **Honorable Mention** (Top 5% of >2500 submissions) at ACM CHI 2018³
- 2017–2020 **Research and doctoral supervision grant** (PEDR)
- 2017 National **CNRS Bronze Medal** for promising research
- 2017 **Humboldt Research Fellowship for Experienced Researchers** (12+4 months)
- 2016 **Best Paper Award** at ACM IHM 2016²
- 2016 **Honorable Mention** (Top 4% of ~2325 submissions) at ACM CHI 2016³
- 2005–2008 **MENRT Scholarship** of the French government for a three-year doctoral program

¹**Interact** is the flagship conference promoted by the **IFIP Technical Committee 13 on Human–Computer Interaction**. IFIP is the international federation for information processing. The conference is held every two years.

²The ACM IHM conference follows a very rigorous reviewing process, comparable to ACM CHI

³The ACM CHI conference is one of the top publication venues (among all conferences and journals), thanks to its rigorous review process, its low acceptance rate, its visibility and its large number of attendees.

Awards received by my students

2024 [AFIHM PhD award](#) for Zhuzhi Fan ('multidisciplinarity' mention)

Education

- February 24, 2021** **Accreditation to supervise research** (“Habilitation à diriger des recherches”) “Physically Flexible Control for Human-Computer Interaction”
Université Grenoble Alpes, France
Reviewers: Jean-Daniel Fekete, Kristina Höök, Christophe Jouffrais
- 2007 – 2010** **Research Student in Interactive Art**
Installation & relational devices, Locative medias
Top French art school, École Nationale Supérieure des Arts Décoratifs, Paris, France
- Oct. 2005–May 2009** **Ph.D. in Computer Science (Human Computer Interaction)**
“Mixed Reality Interfaces: Design and Prototyping”
Advisor Pr, Dr Laurence Nigay
University of Grenoble 1 (UJF)
Grenoble Informatics Laboratory (LIG)
EHCI research group, Grenoble, France
Funded by the French government
- 2004 – 2005** **Research Master of Science in Informatics**
University of Grenoble 1 (UJF)
Grenoble Informatics Laboratory (LIG)
EHCI research group, Grenoble, France
With honors
- 2002 – 2005** **Engineering Master of Science in Informatics**
Top French computer science engineering school ENSIMAG, Grenoble, France
With honors
- 2000 - 2002** **Classes préparatoires**
(Very demanding 2 years undergraduate program to enter the French “Grandes écoles”; followed by a national competitive examination, and according to the rank, admittance to a top-level engineering school)
Top 12% of candidates
- 2000** **A-levels, major in mathematics and art**
With highest honors

International Experience

2024 – Present	Research Director (2nd class) Research on Interaction with Reconfigurable Objects LIG Laboratory, EHCI research group	Grenoble, France
2016 – 2024	1st grade CNRS Researcher Research on Interaction with Tangible Objects LIG Laboratory, EHCI research group	Grenoble, France
2016 - 2018	Visiting researcher Research on Tangible Interaction University of Stuttgart, Institute for Visualization and Interactive Systems, Human Computer Interaction Group	Stuttgart, Germany
2010 – 2015	2nd grade CNRS Researcher Research on Interaction with Physical-Digital Objects LIG Laboratory, EHCI research group	Grenoble, France
2009 – 2010	External Researcher Research on Interactive Arts Top French art school, École Nationale Supérieure des Arts Décoratifs	Paris, France
2009 – 2010	Post-Doctoral Researcher Research on Ubiquitous Computing Software development, in C# and C++, with the MultiTouch sdk (http://multitouch.fi/) HIIT Laboratory, Ux research group	Helsinki, Finland
2005 – 2009	Research associate Research on mixed reality Software development with Java & C++, with ARToolKit, Phidgets and Qt LIG Laboratory, EHCI research group	Grenoble, France
2005 – 2008	Assistant Lecturer Teaching Computer Science to specialists and non-specialists University of Grenoble 2, Pierre Mendès-France	Grenoble, France
2004 – 2005	Research Intern Research on Mixed Reality Software development of an augmented reality multimodal and mobile game, in Java with Swing and JOGL LIG Laboratory, EHCI research group	Grenoble, France
Jul.–Sept. 2004	Intern Collaboration with artist Joëlle Bitton, on her « Passages » project Software development of Passages with Isis and C Media Lab Europe (European research partner of the MIT Media Lab), Human Connectedness group	Dublin, Ireland

Research

Publications (total 64)

International refereed journal articles (2)

- 2 Kim, **Coutrix**, Roudaut
KnobSlider: Design of a Shape-Changing Parameter Control UI and Study of User Preferences on Its Speed and Tangibility. *Frontiers in Robotics and AI*, ISSN 2296-9144, Volume 6, 2019, 79 pages. DOI=<http://dx.doi.org/10.3389/frobt.2019.00079>
- 1 Chin, You, **Coutrix**, Lim, Chevallet, Nigay
Mobile phone-based mixed reality: the Snap2Play game. *The Visual Computer*, Springer Berlin / Heidelberg Publ., ISSN 0178-2789, Volume 25, Number 1, January 2009 (Print), ISSN 1432-2315, August 2008 (Online), pp. 25-37, 13 pages. DOI=<http://dx.doi.org/10.1007/s00371-008-0283-3>

Book Chapter (3)

- 3 **Coutrix**, Cunin, Okura, Serrano
De part et d'autre de l'interface : les continuités esthétiques et scientifiques. In *SIMULATION TECHNOLOGIQUE ET MATÉRIALISATION ARTISTIQUE : Une exploration transdisciplinaire arts/sciences*, Bianchini, S., Delprat, N., Jacquemin, C., Eds., Editions L'Harmattan, janvier 2012, ISBN 978-2-296-55938-7, 30 pages.
- 2 **Coutrix**, Nigay
An Integrating Framework for Mixed Systems. In *The Engineering of Mixed Reality*, Dubois, E., Gray, P., Nigay, L. (Eds.), Springer, ISBN: 978-1-84882-732-5, 2010, 22 pages.
- 1 Nigay, **Coutrix**, Renevier
Systèmes interactifs mixtes : Fusion des mondes physique et numérique. In *Interfaces numériques (Collection information, hypermédias et communication)*, Chapitre 3, Hermès Science, 15 juin 2007, ISBN13 978-2-7462-1695-2, 18 pages.

International refereed conference long papers (30)

- 30 Jobert, Korghlou, Coulibaly, Leone, Goguey, Berberian, Bourgeois, **Coutrix**
Swarm UIs: Impact of Assistance on Users' Sense of Agency. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*, ACM. Article 394, 17+14 pages. DOI=<https://doi.org/10.1145/3772318.3790663> Acceptance rate: 25.3%
- 29 Mackamul, Maillard, Marceau, Coulibaly, Pansiot, Boissieux, Vaufreydaz, Roudaut, **Coutrix**
"I don't want to break it": An Exploration of Perceived Fragility in Shape-Changing Interfaces. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*, ACM. 18+6 pages. DOI=<https://doi.org/10.1145/3772318.3793422> Acceptance rate: 25.3%
- 28 Fan, Sanson, Rames, **Coutrix**
Design and Perception of a Soft Shape Change Beneath a Smartwatch. In *Proceedings of the ACM on Human-Computer Interaction*, Volume 8, Issue MHCI, ACM. Article 250, 17+6 pages. DOI=<https://doi.org/10.1145/3676495> Acceptance rate: 32.6%
- 27 * **Coutrix**, Prost
Impact of Fingernails Length on Mobile Tactile Interaction. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24)*, ACM. Article 553, 16+7 pages. DOI=<https://doi.org/10.1145/3613904.3642037> Acceptance rate: 26.3%
- 26 Fan, **Coutrix**
Impact of softness on users' perception of curvature for future soft curvature-changing UIs. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23)*, ACM. Article 747, 19 pages. DOI=<https://doi.org/10.1145/3544548.3581179> Acceptance rate: 27.6%
- 25 Laura Pruszko, Hongri Gu, Julien Bourgeois, Yann Laurillau, **Coutrix**

- Modular Tangible User Interfaces: Impact of Module Shape and Bonding Strength on Interaction.** In Proceedings of the 17th International Conference on Tangible Embedded and Embodied Interaction (TEI '23), ACM. Article 1, 15 pages. DOI=<https://doi.org/10.1145/3569009.3572731> Acceptance rate: 22.5%
- 24 Pruszek, Laurillau, Piranda, Bourgeois, **Coutrix**
Impact of the Size of Modules on Target Acquisition and Pursuit for Future Modular Shape-changing Physical User Interfaces. In Proceedings of the 2021 International Conference on Multimodal Interaction (ICMI '21), ACM. pages 297–307, 8+3 pages DOI=<https://doi.org/10.1145/3462244.3479936> Acceptance rate: 13.7% for oral presentations. **BEST PAPER NOMINEE (TOP 3% OF 247 SUBMISSIONS)**
- 23 Pruszek, **Coutrix**, Laurillau, Piranda, Bourgeois
Molecular HCI: Structuring the cross-disciplinary space of modular shape-changing user interfaces. In Proceedings of the ACM Human-Computer Interaction 4, EICS, (June 2021), ACM. Article 211, 26+7 pages DOI=<https://doi.org/10.1145/3461733> Acceptance rate: 33%.
- 22 Fan, **Coutrix**
Impact of Hand Used on One-Handed Back-of-Device Performance. In Proceedings of the ACM Human-Computer Interaction 4, ISS, (November 2020), ACM. Article 188, 15+4 pages. DOI=<https://doi.org/10.1145/3427316> Acceptance rate: 28%.
- 21 Qamar, Stawarz, Robinson, Goguy, **Coutrix**, Roudaut
Morphino: A Nature-Inspired Tool for the Design of Shape-Changing Interfaces. In Proceedings of the ACM conference on Designing Interactive Systems (DIS '20), July 6-20, 2020, (virtual) Eindhoven, Netherlands. ACM. pages 1943–1958, 10+6 pages. DOI=<https://doi.org/10.1145/3357236.3395453> Acceptance rate: 24%.
- 20 Sarkis, **Coutrix**, Nigay, Duda
WiBend: Recognizing Bending Interaction for Passive Deformable Surfaces with Wi-Fi. In Proceedings of the 21st ACM International Conference on Multimodal Interaction (ICMI '19), October 14-18, 2019, Suzhou, Jiangsu, China, ACM. pages 339-348, 8+2 pages. DOI=<https://doi.org/10.1145/3340555.3353746> Acceptance rate: 41%.
- 19 Greis, Kim, Korge, **Coutrix**, Schmidt
SplitSlider: a Tangible Interface to Input Uncertainty. In Proceedings of the 17th IFIP TC.13 International Conference on Human-Computer Interaction (INTERACT '19), September 2 – 6, 2019, Paphos, Cyprus, Springer LNCS, pages 493–510, 15+2 pages. DOI=https://doi.org/10.1007/978-3-030-29390-1_27 Acceptance rate: 29%. **REVIEWERS' CHOICE AWARD (TOP 3% OF 383 SUBMISSIONS)**
- 18 Kim, Deug Guimaraes, **Coutrix**, Roudaut
Expandial: Designing a Shape-Changing Dial. In Proceedings of the conference on Designing Interactive Systems (DIS '19), June 23–28, 2019, San Diego, California, USA, ACM. Pages 949-961, 10+3 pages. DOI=<https://doi.org/10.1145/3322276.3322283> Acceptance rate: 25%.
- 17 Goguy, Steer, Lucero, Nigay, **Coutrix**, Roudaut, Subramanian, Tokuda, Neate, Pearson, Robinson, Jones
PickCells: a Physically Reconfigurable Cell-composed Touchscreens. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI'19), May 4-9, Glasgow, UK, ACM. Paper 273, 11.5+2.5 pages. DOI=<https://doi.org/10.1145/3290605.3300503> Acceptance rate: 23.8%.
- 16 Rosso, **Coutrix**, Jones, Nigay
Simulating an Extendable Tangible Slider for Eyes-Free One-Handed Interaction on Mobile Devices. Proceedings of the International Conference on Advanced Visual Interfaces (AVI'18), May 29 - June 1, Resort Riva del Sole, Castiglione della Pescaia, Grosseto, Italy, ACM. Article 16, 8+1 pages. DOI=<https://doi.org/10.1145/3206505.3206510> Acceptance rate: 25%.
- 15 Kim, **Coutrix**, Roudaut
Morpheus+: Studying Everyday Reconfigurable Objects for the Design and Taxonomy of Reconfigurable UIs . In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI'18), April 21-26, Montréal, Canada, ACM. Paper 619, 10+3 pages. DOI=<https://doi.org/10.1145/3173574.3174193> Acceptance rate: 25%. **HONORABLE MENTION AWARD (TOP 5% OF >2500 SUBMISSIONS)**

- 14 Kim, **Coutrix**, Roudaut
KnobSlider: Design of a Shape-Changing UI for Parameter Control. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI'18), April 21-26, Montréal, Canada, ACM. Paper 339, 10+3 pages. DOI=<https://doi.org/10.1145/3173574.3173913> Acceptance rate: 25%.
- 13 Delamare, Janssoone, **Coutrix**, Nigay
Designing 3D Gesture Guidance: Visual Feedback and Feedforward Design Options. In Proceedings of the International Working Conference on Advanced Visual Interfaces (AVI'16), June 7-10, Bari, Italy, ACM. pp. 152-159. 8 pages. DOI=<http://dx.doi.org/10.1145/2909132.2909260> Acceptance rate: 27.4%.
- 12 * Robinson, **Coutrix**, Pearson, Rosso, Torquato, Nigay, Jones
Emergeables: Deformable Displays for Continuous Eyes-Free Mobile Interaction. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI'16), May 7-12, San Jose, CA, USA, ACM, pp. 3793-3805. 10+3 pages. DOI=<http://dx.doi.org/10.1145/2858036.2858097> Acceptance rate: 23.4%. **HONORABLE MENTION AWARD (TOP 4% OF ~2325 SUBMISSIONS)**
- 11 * **Coutrix**, Masclet
Shape-Change for Zoomable TUIs: Opportunities and Limits of a Resizable Slider. In Proceedings of the 15th IFIP TC13 Conference on Human-Computer Interaction (INTERACT'15), September 14-18, 2015, Bamberg, Germany, Springer. 18 pages. DOI=http://dx.doi.org/10.1007/978-3-319-22701-6_27 Acceptance rate: 29.5%
- 10 Delamare, **Coutrix**, Nigay
Designing Guiding Systems for Gesture-Based Interaction. In Proceedings of the 7th ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS'15), June 23-26, 2015, Duisburg, Germany, pp. 44-53. 10 pages. DOI=<http://dx.doi.org/10.1145/2774225.2774847> Acceptance rate: 29.7%
- 9 Delamare, **Coutrix**, Nigay
Mobile Pointing Task in the Physical World: Balancing Focus and Performance while Disambiguating. In Proceedings of the 15th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI'13), August 27-30, 2013, Munich, Germany, 10 pages. DOI=<http://dx.doi.org/10.1145/2493190.2493232> Acceptance rate: 23%
- 8 Delamare, **Coutrix**, Nigay
Designing Disambiguation Techniques For Pointing in the Physical World. In Proceedings of the fifth ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS'13), June 24-27, 2013, London, UK, 10 pages. DOI=<http://dx.doi.org/10.1145/2494603.2480309> Acceptance rate: 22%
- 7 * **Coutrix**, Mandran
Identifying Emotions Expressed by Mobile Users through 2D Surface and 3D Motion Gestures. In Proceedings of the 14th ACM International Conference on Ubiquitous Computing (Ubicomp'12), September 5-8, 2012, Pittsburgh, Pennsylvania, United States, 10 pages. DOI=<http://dx.doi.org/10.1145/2370216.2370265> Acceptance rate: 19.3%
- 6 * **Coutrix**, Nigay
OP: A Novel Programming Model for Integrated Design and Prototyping of Mixed Objects. In Proceedings of the 13th IFIP TC13 Conference on Human-Computer Interaction (Interact'11), Part III, 5-9 September 2011, Lisbon, Portugal, Springer, LNCS 6948, pp. 54-72, 18 pages. DOI=http://dx.doi.org/10.1007/978-3-642-23765-2_5 Acceptance rate: 27.6%
- 5 **Coutrix**, Kuikkaniemi, Kurvinen, Jacucci, Avdouevski, Mäkelä
FizzyVis: Designing for Playful Information Browsing on a Multitouch Public Display. In Proceedings of the the conference on Designing Pleasurable Products and Interfaces (DPPI'11), 22-25 June 2011, Milan, Italy, ACM, 8 pages. DOI=<http://dx.doi.org/10.1145/2347504.2347534>
- 4 **Coutrix**, Jacucci, Advouevski, Vervondel, Cavazza, Gilroy, Parisi
Supporting Multi-user Participation with Affective Multimodal Fusion. In Proceedings of the 9th International Conference on Creating, Connecting and Collaborating through Computing (C5'11), Kyoto, Japan, January 18-20 2011, IEEE, 8 pages. DOI=<http://dx.doi.org/10.1109/C5.2011.14>
- 3 * **Coutrix**, Jacucci, Spagnolli, Ma, Helin, Richard, Parisi, Roveda, Narula

- Engaging Spect-actors with Multimodal Digital Puppetry.** In Proceedings of the 6th Nordic Conference on Human-Computer Interaction (NordCHI'10), Reykjavik, Iceland, October 16 - 20, 2010, ACM Press, 10 pages. DOI=<http://dx.doi.org/10.1145/1868914.1868934> Acceptance rate: 27.5%
- 2 Chin, You, **Coutrix**, Lim, Chevallet, Nigay
Snap2Play: A Mixed-Reality Game based on Scene Identification. In Proceedings of the 14th International IEEE and ACM Multimedia Modeling Conference (MMM'08), Springer LNCS (Lecture Notes in Computer Science), Advances in Multimedia Modeling, Volume 4903/2008, Kyoto, Japan, January 9-11 2008, pp. 220-229. 10 pages. DOI=http://dx.doi.org/10.1007/978-3-540-77409-9_21 Acceptance rate: 18% for oral papers
- 1 * **Coutrix**, Nigay
Mixed Reality: A Model of Mixed Interaction. In Proceedings of the 8th International Conference on Advanced Visual Interfaces (AVI'06), Venezia, Italy, 23-26 may 2006, ACM Press, pp. 43-50, 8 pages. DOI=<http://dx.doi.org/10.1145/1133265.1133274> Acceptance rate: 25%

International refereed conference short papers (3)

- 3 Pearson, Robinson, **Coutrix**, Jones
Evaluating Deformable Devices with Emergent Users. In Proceedings of the 19th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI'17), Vienna, Austria, September 4-7 2017, ACM Press, Article 14, 5+2 pages. DOI=<http://dx.doi.org/10.1145/3098279.3098555> Acceptance rate: 20%
- 2 * **Coutrix**, Nigay
Balancing Physical and Digital Properties in Mixed Objects. In Proceedings of the 9th International ACM Conference on Advanced Visual Interfaces (AVI'08), Naples, Italy, May 28-30 2008, ACM Press, pp. 305-308, 4 pages. DOI=<http://dx.doi.org/10.1145/1385569.1385619>
- 1 You, Chin, Lim, Chevallet, **Coutrix**, Nigay
Deploying and Evaluating a Mixed Reality Mobile Treasure Hunt: Snap2Play. In Proceedings of the 10th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI'08), Amsterdam, the Netherlands, September 2-5 2008, ACM Press, pp. 335-338, 4 pages. DOI=<http://dx.doi.org/10.1145/1409240.1409282>

French-speaking refereed conference long papers (12)

- 12 Jobert, Leone, Goguy, Berberian, Bourgeois, **Coutrix**
Effet du type d'assistance d'une interface modulaire robotisée sur le sens d'agentivité. In Actes de la 36ème conférence francophone sur l'Interaction Homme Machine (IHM'25), Toulouse, France, 3-7 novembre 2025, ACM. DOI=<http://dx.doi.org/10.1145/3765712.3765725> **BEST PAPER AWARD (TOP 3% OF 42 SUBMISSIONS)**
- 11 Gasmi, Fan, **Coutrix**
Impact des tâches primaires sur la perception du changement de forme molle au dos d'une montre. In Actes de la 36ème conférence francophone sur l'Interaction Homme Machine (IHM'25), Toulouse, France, 3-7 novembre 2025, ACM. DOI=<http://dx.doi.org/10.1145/3765712.3765729>
- 10 Fan, Sanson, Rames, **Coutrix**
Conception et perception d'un changement de forme molle au dos d'une montre connectée. In Actes de la 35ème conférence francophone sur l'Interaction Homme Machine (IHM'24), Sorbonne Université, France, 25-29 mars 2024, ACM. DOI=<http://dx.doi.org/10.1145/3649792.3649800> **BEST PAPER AWARD**
- 9 * **Coutrix**, Laurillau
Which Tangible Control for Which Visual Task?. In Actes de la 31ème conférence francophone sur l'Interaction Homme Machine (IHM'19), Grenoble, France, 10-13 décembre 2019, Grenoble, France, ACM, pp.3:1-8. 7+1 pages. DOI=<http://dx.doi.org/10.1145/3366550.3372249>
- 8 Parriaud, Reynaud, Joatton, Caffiau, **Coutrix**

- Vers davantage d'information tactile sur les variateurs linéaires.** In Actes de la 31ème conférence francophone sur l'Interaction Homme Machine (IHM'19), Grenoble, France, 10-13 décembre 2019, Grenoble, France, ACM, pp.11:1-11. 10+1 pages. DOI=<http://dx.doi.org/10.1145/3366550.3372257>
- 7 Rosso, **Coutrix**, Jones, Nigay
Deformable Tangible Slider for Eyes-Free One-Handed Thumb Interaction on Mobile Devices. In Actes de la 29ème conférence francophone sur l'Interaction Homme Machine (IHM'17), Poitiers, France, 29 août - 1er septembre 2017, ACM, pp. 21-31. 10+1 pages. DOI=<http://dx.doi.org/10.1145/3132129.3132134>
- 6 Rosso, **Coutrix**, Jones, Nigay
Impact of mobile tangible slider design and its reachability on pointing performance. In Actes de la 28ème conférence francophone sur l'Interaction Homme Machine (IHM'16), Fribourg, Switzerland, 25-28 octobre 2016, ACM, pp. 70-78. 10+2 pages. DOI=<http://dx.doi.org/10.1145/3004107.3004123> **BEST PAPER AWARD**
- 5 Kim, **Coutrix**, Roudaut
KnobSlider: design of a shape-changing device grounded in users' needs. In Actes de la 28ème conférence francophone sur l'Interaction Homme Machine (IHM'16), Fribourg, Switzerland, 25-28 octobre 2016, ACM Press, pp. 91-102. 10+2 pages. DOI=<http://dx.doi.org/10.1145/3004107.3004125>
- 4 Bortolaso, Dubois, Bach, Nigay, **Coutrix**
Conception de systèmes interactifs mixtes : articulation d'une méthode informelle et d'un modèle d'interaction. In Actes de la 21ème conférence francophone sur l'Interaction Homme Machine (IHM'09), Grenoble, France, 13-16 novembre 2009, ACM Press, pp. 293-302, 10 pages. DOI=<http://dx.doi.org/10.1145/1629826.1629874>
- 3 * **Coutrix**, Nigay
Interagir avec un objet mixte : Propriétés physiques et numériques. In Actes de la 19ème conférence francophone sur l'Interaction Homme Machine (IHM'07), IRCAM, Paris, France, 13-15 novembre 2007, ACM Press, pp. 51-58, 8 pages. DOI=<http://dx.doi.org/10.1145/1541436.1541447>
- 2 * **Coutrix**, Nigay, Pasqualetti, Renevier
RAZZLE : de la conception à l'évaluation d'un système mobile et multimodal. In Actes des Troisièmes Journées Francophones: Mobilité et Ubiquité (UBIMOB'06), Paris, France, 5-8 septembre 2006, ACM Press, pp. 1-8, 8 pages.
- 1 * **Coutrix**, Nigay, Renevier
Modèle d'Interaction Mixte : la Réalité Mixte à la Lumière des Modalités d'Interaction. In Actes des Deuxièmes Journées Francophones: Mobilité et Ubiquité (UBIMOB'05), Grenoble, France, 31 mai-3 juin 2005, ACM Press, pp. 153-160, 8 pages. DOI=<http://dx.doi.org/10.1145/1102613.1102646>

Other publications (14)

- 14 Greis, Kim, Korge, **Coutrix**, Schmidt
Extending Input Space of Physical Dials and Sliders for Uncertain Input. Work-in Progress paper in Adjunct Proceedings of the Thirteenth International Conference on Tangible, Embedded and Embodied Interaction (TEI'19), March 17–20, 2019, Tempe, AZ, USA. 6+2 pages. DOI=<https://doi.org/10.1145/3294109.3300985>
- 13 Kim, **Coutrix**, Roudaut
KnobSlider: A Shape-Changing Interface for Parameter Control. Position paper for the workshop on Shape Changing Robotic Structures and Interfaces at the 2018 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'18), Madrid, Spain on 5 October 2018. 1 page.
- 12 Kim, Aliva, Kosch, **Coutrix**, Roudaut
Using Shape-Changing Interfaces to Foster Inclusive Education for Visually Impaired People. Position paper for the workshop on Inclusive Educational Technologies: Emerging Opportunities for People with Visual Impairments at the SIGCHI Conference on Human Factors in Computing Systems (CHI'18), April 21, 2018, Montréal, Canada. 3+1 pages.
- 11 Kim, **Coutrix**, Roudaut

- Empowering Makers to Create Reconfigurable Objects.** Position paper for the workshop on Maker Movements, Do-It-Yourself Cultures and Participatory Design: Implications for HCI Research at the SIGCHI Conference on Human Factors in Computing Systems (CHI'18), April 21, 2018, Montréal, Canada. 4+1 pages.
- 10 Kim, **Coutrix**, Roudaut
Leveraging Everyday Deformation for Shape-Changing Interfaces. Position paper for the workshop on Sharing Perspectives on the Design of Shape-Changing Interfaces at the SIGCHI Conference on Human Factors in Computing Systems (CHI'16), May 8, 2016, San Jose, CA, USA. 4 pages.
- 9 Delamare, **Coutrix**, Nigay
A Tool for Optimizing the Use of a Large Design Space for Gesture Guiding Systems. Demonstration paper in adjunct Proceedings of the 7th ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS'15), June 23-26, 2015, Duisburg, Germany. 4 pages.
- 8 **Coutrix**, Delamare, Guillon, Kurata, Leitner, Nigay, Vincent
Techniques de Pointage à Distance : Cibles Numériques et Cibles Physique. In Actes des 10èmes journées francophones Mobilité et Ubiquité (UbiMob'14). 5 pages.
- 7 * **Coutrix**, Rivière, Borgiel, Castet, Couture, Ullmer, Geelhaar, Reuter, Takouachet, Kolski, Lepreux, Legardeur, Kubicki, Jansen, Bouadid
Methods for Designing Tangible UI: A First Comparative Case Study. Work-in Progress paper in Adjunct Proceedings of the Seventh International Conference on Tangible, Embedded and Embodied Interaction (TEI'13), February 10-13, 2013, Barcelona, Spain. 7 pages.
- 6 Delamare, **Coutrix**, Nigay
Pointing in the Physical World for Light Source Selection. Position paper for a workshop of the ACM conference on Designing Interactive Systems (DIS'12), Newcastle, UK, June 11-15, 2012, 4 pages.
- 5 **Coutrix**, Avdouevski, Jacucci
The Common Touch: Aesthetic and affective interaction in semi-public settings. Position paper for a workshop of the 8th International Conference on Pervasive Computing (Pervasive'10), Helsinki, Finland, may 17-20, 2010, 2 pages.
- 4 * **Coutrix**, Narula, Helin, Jacucci, Roveda
Interactivity of an Affective Puppet. In Adjunct Proceedings of the 11th International Conference on Ubiquitous Computing (UbiComp'09), Orlando, Florida, September 30th - October 3rd 2009, ACM Press, 2 pages.
- 3 * **Coutrix**
Helping the Design of Mixed Systems. In Adjunct Proceedings (Doctoral Colloquium) of the 6th International Conference on Pervasive Computing (Pervasive'08), Sydney, Australia, may 19-22 2008, Austrian Computer Society Publ., pp. 154-159, 6 pages.
- 2 * **Coutrix**
Modèle d'Interaction pour les systèmes mixtes. In Actes (Doctoral Consortium) de la 19ème conférence francophone sur l'Interaction Homme Machine (IHM'07), IRCAM, Paris, France, 13-15 novembre 2007, ACM Press, pp. 229-232, 4 pages.
- 1 * **Coutrix**
Le Modèle d'Interaction Mixte : Un cadre pour la conception des systèmes mixtes. Rencontres des Jeunes Chercheurs en Interaction Homme-Machine (RJC-IHM'06), Anglet, France, 12-15 novembre 2006, 4 pages.

Projects Fundings

Since 2010, I received a total of >**1.8M€** in funding from various sources (SATT, Carnot and FUI with close links to **industry**, CNRS and local Labex with a focus on **exploratory projects**, and **ANR (JCJC & PRCE)**). I played different roles, including **coordinator or partner leader**.

- 2025-2029** (5 years) **DECO (Physical Shape-change and Collaboration)**
Funding ~959 k€ from ANR through [PEPR eNSEMBLE](#)
Research DECO studies dynamic deformation of devices for digital collaboration between humans
Role Coordinator (204 k€)
Consortium CNRS, [ENAC](#), [INSA Strasbourg](#), [UBFC](#), [ONERA](#)
- 2022-2025** (3 years) **TINPOA (Transfert d’expertise entre INterfaces Physiques existantes et modalités d’interaction avancées avec des Objets Augmentés)**
Funding ~150 k€ from both [ARTS](#) and [LSI](#) Carnot Institutes
Research TINPOA studies skills transfer between interaction techniques
Role Co-coordinator (66k€)
Consortium CNRS, [ESTIA-Recherche](#)
- 2022-2026** (4 years) **MolecUI (Molecular Implementation of Shape-Changing User Interfaces)**
Funding 580 k€ from ANR (French National Agency for Research)
Research MolecUI studies HCI implemented with stand-alone and attachable/detachable robots that move in 3D
Role Coordinator (260k€)
Consortium CNRS (coordinator), Université de Bourgogne Franche-Comté
- 2022-2025** (4 years) **SecondSkin (Shape-Changing Materials for HCI)**
Funding 662 k€ from ANR (French National Agency for Research)
Research SecondSkin studies new tactile shape-changing interfaces, both for enabling new interactions and conveying emotions
Role Partner leader (181k€)
Consortium Télécom ParisTech (coordinator), CNRS (LIG lab), CNRS (PMMH physics lab)
- 2020-2022** (1.33 year) **KnobSlider miniaturization**
Funding 67 k€ from [Carnot LSI](#)
Research Miniaturization of [KnobSlider prototype](#) for transfer to industry
Role Coordinator (67 k€)
Consortium LIG (coordinator)
Impact 1 Patent “Dispositif de contrôle tangible à géométrie variable” (FR2301674)
- 2020** (1 year) **KnobSlider transfer**
Funding 5k€ from [Out of Labs SATT LinkSium](#)
Research Transfer of [KnobSlider prototype](#) to industry
Role Coordinator (5k€)
Consortium LIG (coordinator)
- 2019–2020** (2 years) **MeMorI (Meta-Morphic Changing Interface)**
Funding 154 k€ from CNRS ([CNRS 80 Prime](#))

Research	Novel physical ways to interact with devices using the currently emerging family of programmable, shape-morphing materials
Role	Coordinator (111 k€)
Consortium	LIG (coordinator), PMMH
Impact	1 ACM ISS paper
2015–2019 (3+1 years)	PhyFlex (Physically Flexible Control for Human-Computer Interaction)
Funding	200 k€ from ANR (French National Agency for Research) starting grant
Research	PhyFlex opens new perspectives on TUI based on the flexibility provided by the dynamic change of shapes of input devices.
Role	Principal investigator and coordinator (200k€)
Consortium	CNRS (coordinator), Bristol Interaction and Graphics (UK)
Impact	3 CHI long papers, including 2 with honorable mention award (top 4-5%), 1 DIS long paper, 1 Frontiers journal paper, 3 IHM long papers including 1 best paper award, 1 Interact paper with reviewers' choice award, 1 AVI paper, 1 MobileHCI paper, and 4 workshop papers.
2015–2018 (3 years)	IoIT (Internet of Interactive Things)
Funding	220 k€ from local LabEx (PERSYVAL-Lab)
Research	Novel means for user interaction with energy-efficient 5G and IP connected Things, with distributed routing and resource allocation algorithms, and lightweight security and privacy protocols.
Consortium	LIG (coordinator), CEA, Verimag
Role	Member (LIG)
Impact	1 ACM ICMI paper
2014–2017 (3 years)	ISAR (Interaction with Spatial Augmented Reality)
Funding	664 k€ from ANR (French National Agency for Research)
Research	Design, implementation and evaluation of interaction techniques with spatial Augmented Reality, directly projecting in physical space information coming from the digital world.
Consortium	INRIA (coordinator), CNRS, Diotasoft
Role	Project manager (CNRS, 265k€)
Impact	2 publications, including 1 CHI paper with honorable mention award
2013–2015 (2 years)	TAPIOCA (TAngibilité Physiologique Instrumentée : Outil mixte redimensionnable pour la Conception d'Artefact)
Funding	20 k€ from local LabEx (PERSYVAL-Lab)
Research	Identifying and engineering gesture recognition-based interactive systems of the future, based on resizable mixed tools.
Consortium	LIG (coordinator), GIPSA-Lab, G-SCOP, LJK
Role	Project co-manager (LIG, 20 k€)
Impact	3 publications
2011–2013 (3 years)	DELIGHT
Funding	2663 k€ from FUI (Fond Unique Interministériel)
Research	Design and prototyping of interaction techniques for novel LED lightning systems. Evaluation in hotels and workspaces.

Consortium	Schneider Electric (coordinateur), Saint Gobain, Texas Instruments, SONEPAR, Ecole Nationale des Travaux Public de l'Etat, Université Paul Sabatier, UJF, Centre de Recherche de l'Institut Paul Bocuse, EFS Electronique, Ingelux, Motwin
Role	Project co-manager (UJF, 242 k€)
Impact	8 publications for UJF partner, a commercial product for the whole project
2009–2011 (2 years)	S3 (Screen × Space × Social activity)
Funding	360 k€ from TEKES (National Technology Agency of Finland)
Research	Build, test and evaluate prototypes that interlink physical and virtual spaces and foster engaging and fun social activity and rich interaction using large-scale digital displays in connection with physical spaces.
Consortium	Helsinki Institute for Information Technology (coordinator), University of Art and Design, Elisa, Nokia Siemens Networks, Pelika.net, Porijazz, Fullsteam Agency, Lacquer
Role	Member (HIIT)
Impact	2 publications and public installation in Pori Jazz Festival (155 000 visitors)
2007–2010 (3 years)	CALLAS (Conveying Affectiveness in Leading-Edge Living Adaptive Systems)
Funding	6.5 M€ from European Commission (IP FP6)
Research	Design and development of a Framework based on a plug-in multimodal architecture, invariant to configuration of Multimodal Components, to interpret and process emotional aspects in real-time for easy and fast development of applications for Art and Entertainment.
Consortium	Engineering Ingegneria Informatica SpA (coordinator), British Broadcasting Corporation, VTT Technical Research Centre of Finland, Studio Azzurro, XIM, Digital Video, Humanware, NEXTURE Consulting srl, University of Augsburg, National Technical University of Athens, Université de Mons, University of Teesside, Aalto University, Telecom Paristech, Scuola Normale Superiore of Pisa, University of Reading, Fondazione Teatro Massimo, Human Interface Technology Laboratory New Zealand.
Role	Partner co-manager (Aalto University, 2009)
Impact	Contributed to 6 publications out of a total of 84 publications for the project
2007–2009 (3 years)	CARE (Cultural Experience: Augmented Reality and Emotion)
Funding	ANR (French National Agency for Research)
Research	Definition of new interfaces for interaction based on emotions and augmented reality. Definition of a design and evaluation method of the experience of the user in a cultural context through emotions and augmented reality.
Role	Member
2008 (1 year)	Simulation and Materialization
Funding	CNRS (French National Centre for Scientific Research)
Research	Collaboration between art & science laboratories around the simulation and materialization theme.
Role	Member
2006–2008 (2 years)	MoSAIC (Mobile Search and Annotation using Images in Context)
Funding	ICT-Asia (French program to foster cooperation and networking in research and training in ICT in Asia).

Research Development of a novel contextual information access framework and robust visual indexing and matching algorithms for mobile media search applications.
Role Member

2006–2009 (33 months) **OpenInterface**
Funding European project (STREP FP6)
Research Design and development of a platform for rapid prototyping of multimodal interactive systems as a central tool for user centred iterative design.
Role Member

2005–2006 (10 months) **RA-Mobile**
Funding Industrial project with France Telecom R&D
Research Mobile Augmented Reality.
Role Member

Talks

Conferences

For the 16 publications marked with (*), I delivered the presentation, either through a talk (12), a demonstration (1) or a poster presentation (3).

Invited talks

- | | |
|--|--|
| <i>Physically Flexible Control for Human-Computer Interaction</i> | Journées plénières 2025 du GDR IG-RV
in INSA Rennes, Rennes, France
June 3rd, 2025 |
| <i>Towards physically flexible interaction</i> | Second Forum Ouvert Œuvres et Recherches
in Le Fresnoy , Tourcoing, France
November 22nd, 2018 |
| <i>Physically Flexible Control</i> | Collaborative research center SFB-TRR 161
in University of Stuttgart
and streamed to University of Konstanz, Germany
October 17th, 2016 |
| <i>Let's get physical</i> | Interactions and Cognition Department
of LIRIS lab , Lyon, France
November 27, 2015 |
| <i>Shape-Change for Zoomable TUIs</i> | Bristol Interaction and Graphics Group , UK
November 6, 2015 |
| <i>Interaction à distance
pour le contrôle de la lumière par l'utilisateur final</i> | Cluster Lumière meeting
in Smart Electric , Lyon, France
January 20th, 2015 |
| <i>Concevoir l'interaction
avec l'informatique diffusée dans les objets</i> | Summer School on Ambient Intelligence
organized by CNRS GDR I3 , Lille, France
July 7, 2011 |
| <i>L'Homme augmenté en IHM</i> | Augmented Human group
in ISCC , Paris, France
December 7, 2010 |
| <i>Large multitouch public displays
in an artistic and entertainment context</i> | Multitouch interfaces workshop
in HIIT , Helsinki, Finland
November 26, 2009 |
| <i>Interfaces for Art & Entertainment</i> | TAUCHI , Tampere, Finland
November 11, 2009 |
| <i>Réalité mixte mobile</i> | French working group on mobility (GTMOB) meeting
in INRESTS , Lille, France
December 1, 2005 |

Supervision

Post-docs

EVA MACKAMUL (September 2024 – September 2025)
Involvement Co-advised (50%) with Anne Roudaut (25%) and Dominique Vaufreydaz (25%)
Subject Impact of fragility on shape-changing interaction
Career Post-doc in Vancouver, Canada

MIRA SARKIS (March 2017 – September 2018)
Involvement Co-advised (25%) with Andrzej Duda (50%) and Laurence Nigay (25%)
Subject Using radio signal for interaction
Impact 1 publication at ACM ICMI 2019
Career Research engineer at Laboratoire d'astrophysique de Marseille

PhD students

FOUAD GASMI (September 2025 – August 2028)
Level PhD student in Computer Science
Involvement Co-advised (40%) with S. Pauchet (ENAC, 20%) and Q. Roy (UGA, 40%)
Subject SHape-Changing Interaction Techniques for Collaboration

LOUIS BADR (November 2024 – October 2027)
Level PhD student in Computer Science
Involvement Co-advised (20%) with X. Xiao (IFT, 40%) and P. Strohmeier (MPI, 40%)
Subject Exploring Haptic Illusions with Auditory Stimuli

ANNA SIACCHITANO (October 2023 – September 2026)
Involvement Co-advised (50%) with William Delamare (ESTIA Research, 50%)
Subject Skill transfer from existing interfaces to augmented physical objects

OPHÉLIE JOBERT (November 2022 – October 2025)
Involvement Co-advised (50%) with Alix Goguy (UGA, 50%)
Subject Modular implementation of HCI

ZHUZHI FAN (October 2019 – January 2024)
Involvement Co-advised (90%) with Benoit Roman (CNRS, 10%)
Subject Pneumatic implementation of shape-changing interfaces
Impact 4 publications among them ACM CHI'23 and best paper award at ACM IMH'24, [AFIHM PhD award](#) for Zhuzhi Fan ('multidisciplinarity' mention)

Career Post-doc at University of Bristol, UK

LAURA PRUSZKO (October 2019 – August 2023)
Involvement Co-advised (60%) with Julien Bourgeois (Univ. Bourgogne Franche-Comté, 20%), and Yann Laurillau (20%)
Subject Molecular implementation of shape-changing UIs
Impact 3 publications EICS'21, ICMI'21, TEI'23
Career Defended on August 29th, 2023
Lecturer at the Glasgow Caledonian University

HYUNYOUNG KIM (October 2015 – September 2019)
 Involvement Co-advised (70%) with Anne Roudaut (Bristol University, 30%)
 Subject Physically flexible control
 Impact 11 publications, among them 2 ACM CHI, 1 Honorable mention award
 Career Defended January, 28th 2020
 Post-doc with Daniel Ashbrook
 at the University of Copenhagen (from January 2020)

JUAN PABLO ROSSO PIRELA (October 2015 – December 2018)
 Involvement Co-advised (45%) with Laurence Nigay (45%)
 and Matt Jones (Swansea University, 10%)
 Subject Distant interaction in the physical world:
 Shape-changing TUI on mobile devices
 Impact 4 publications, among them 1 best paper award at ACM IHM,
 and 1 honorable mention award at ACM CHI
 Career Defended on December 14th, 2018
 UI designer and developer
 at [Kheoos](#) start-up company

WILLIAM DELAMARE (October 2011 – October 2015)
 Involvement Co-advised (50%) with Laurence Nigay (50%)
 Subject Techniques for interacting with augmented physical targets
 Impact 7 publications, among them MobileHCI'13 (AR: 23%) and EICS'13 (AR: 22%)
 Career Defended on November 2nd, 2015
 Post-doc with Pourang Irani at HCI Lab,
 University of Manitoba (2016-2017)
 Post-doc with Xiangshi Ren
 Kochi University of Technology, Japan (2017-2019)
 Now assistant prof. at [ESTIA](#) since 2019

Engineers

AURÉLIEN CONIL (November 2020 – March 2022 + January 2023 - March 2023)
 Involvement Full supervision (100%)
 Subject Miniaturization of the KnobSlider prototype
 Impact 1 Patent “Dispositif de contrôle tangible à géométrie variable” (FR2301674)

Master students

FOUAD GASMI (February – June 2025)
 Involvement 100%
 Subject Pneumatic wearable interfaces

FOUAD GASMI (January – July 2024)
 Involvement Co-advised (50%) with Zhuzhi Fan
 Subject Pneumatic wearable interfaces

HSIU-FAN CHIEN (February – May 2022)
 Involvement Co-advised (50%) with Aurélien Conil
 Subject Miniaturization of the KnobSlider

LAURA PRUSZKO	(March – September 2019)
Involvement	Co-advised (60%) with Julien Bourgeois (20%) and Benoît Piranda (20%)
Subject	Investigating the size of small robots for user interaction
FLORIAN ARGAUD	(January – July 2019)
Involvement	Co-advised (50%) with Sybille Caffiau (50%)
Subject	Shape-changing interfaces for older adults, application to the smart home
MATTHIEU LE FLOHIC	(June – August 2018)
Involvement	Co-advised (50%) with Alexandra Voit (50%)
Subject	Ambient notifications through shape-change in domestic environments
MAXIME ISNEL	(January – June 2018)
Involvement	Co-advised (30%) with Sybille Caffiau (60%)
Subject	Shape-changing interfaces for older adults, application to the smart home
BENJAMIN DÉFOSSÉ	(January – June 2018)
Involvement	Co-advised (30%) with Sybille Caffiau (60%)
Subject	Shape-changing interfaces for visually impaired users, application to the smart home
ZYTA WAWRZEŃCZYK	(February – June 2016)
Involvement	Co-advised (30%) with Laurence Nigay (30%) and Andrzej Duda (40%)
Subject	Using radio signals for interaction
JUAN PABLO ROSSO PIRELA	(February – June 2015)
Involvement	Co-advised (60%) with Laurence Nigay (20%) and Matt Jones (Swansea University, 20%)
Subject	Distant interaction in the physical world: Shape-changing TUI on mobile devices
Career	PhD student (awarded Université Joseph Fourier scholarship)
NICOLAS BELLEVILLE	(February – May 2015)
Involvement	Full supervision (100%)
Subject	Shape-changing Tangible Interaction: From a slider to a knob
SILVAN CABOT	(February – June 2014)
Involvement	Co-advised (70%) with Cédric Masclet (G-SCOP Laboratory, 30%)
Subject	Opportunities of a slider in the non-dominant hand for WIMP interactions
Career	Start-up Founder
ÉMILIE ANNWEILER	(February – June 2007)
Involvement	Co-advised (40%) with Laurence Nigay (30%) and Joo Hwee Lim (I2R Singapore, 30%)
Subject	Mixed reality game on mobile phone
Career	Continued in a development team in Singaporean company (Aksaas Pte Ltd)

Bachelor students

RYMA LAHLOU	(June-August 2025)
Involvement	100%

	Subject	Prototyping for interactive dancing
THIBAUT LEONE		(June-August 2024)
	Involvement	Co-advised (20%) with Alix Goguy (40%) and Ophélie Jobert (40%)
	Subject	Programmation d'interface modulaire
DUONG DANG KHOA DANG		(June-July 2023)
	Involvement	Co-advised (40%) with Baptiste Reynal (30%) and Thomas Pietrzak (30%)
	Subject	Comparison of physical and haptic dials
RAFAEL MASCARENHAS		(June-July 2023)
	Involvement	Co-advised (40%) with Ophélie Jobert (30%) and Alix Goguy (30%)
	Subject	Modeling of experimental 3D scenes
ALEXIS SANSON		(October-December 2022 + June-July 2023)
	Involvement	Co-advised (30%) with Zhuzhi Fan (70%)
	Subject	Pneumatic wearable interfaces
	Impact	ACM IHM'24 best paper award
CAMÉLIA PROST		(May-July 2022)
	Involvement	100%
	Subject	Mobile touch interaction
	Impact	ACM CHI'24 publication
THOMAS RAMES		(May-June 2022)
	Involvement	Co-advised (30%) with Zhuzhi Fan (70%)
	Subject	Pneumatic interfaces
	Impact	ACM IHM'24 best paper award
THOMAS ACHARD		(May 2021)
	Involvement	Co-advised (30%) with Laura Prusko (70%)
	Subject	Modular Systems
ÉMERIC COUDEVILLE		(June 2019)
	Involvement	100%
	Subject	Shape-changing interfaces
HARIS CAUSEGIC		(December 2016 – May 2017)
	Involvement	Co-advised (33%) with Alexandra Voit (33%) and Hyunyoung Kim (33%)
	Subject	Ambient notifications through shape-change in domestic environments
ANDREAS KORGE		(November 2016 – April 2017)
	Involvement	Co-advised (33%) with Miriam Greis (33%) and Hyunyoung Kim (33%)
	Subject	Shape-changing tangible interfaces to communicate uncertainty
BENJAMIN LAUSENAZ		(April – June 2015)
	Involvement	Co-advised (50%) with Yann Laurillau (50%)
	Subject	Suitability of various tangible devices for various visual tasks
DAMIEN BARBUT		(February – June 2007)
	Involvement	Co-advised (30%) with Laurence Nigay (70%)

Subject Mixed reality mobile game

Responsibilities in Scientific Community

<i>Role</i>	<i>Venue or Funding agency</i>	<i>Year</i>
General Chair	ACM TEI	2025
Organizer	AFIHM Working Group on reconfigurables UIs	2023 – 2024
Program Chair & Guest Editor	ACM IHM	2019
	IEEE Pervasive Computing Magazine’s special issue on <i>Physical Computing: Flexible and Shape-Changing Interfaces</i>	2017
Program Committee Member	ACM CHI (“Interacting with Devices: Interaction Techniques & Modalities” subcommittee)	2023
	ACM CHI (“Interacting with Devices: Interaction Techniques & Modalities” subcommittee)	2022
	ACM CHI (“Interaction Techniques, Devices and Modalities” subcommittee)	2021
	ACM TEI	2021
	ACM Mobile HCI	2018
	ANR CE33	2018
	ACM CHI (“Interaction Techniques, Devices and Modalities” subcommittee)	2017
	ACM MUM	2016
Doctoral Consortium Chair	ACM IHM	2018
	ACM Mobile HCI	2017
Poster Chair	ACM MobileHCI	2020
Demonstration Chair	ACM IHM	2014
Registration Chair	ACM MobileHCI	2021
Organizer of scientific events	ACM IHM’24 Workshop on reconfigurable UIs	2024
	First computer graphics × HCI day	2021
	ACM IHM	2019
	French Human-Computer Interaction summer school (RJC-IHM)	2015
	ACM IHM	2009

Reviewer

- Conferences
 - ACM CHI 2011, 2013–2026,
 - ACM UIST 2014, 2018, 2019, 2020, 2025,
 - ACM TEI 2017, 2018 (WiP), 2021
 - ACM DIS 2018, 2025,
 - UbiComp 2010 (adjunct), 2013,
 - ACM Mobile HCI 2012, 2013, 2014, 2015, 2018, 2019,
 - ACM ITS/ISS 2010, 2011, 2013, 2015, 2018, 2020
 - IFIP Interact 2011, 2013, 2015, 2017, 2021, 2023
 - ACM AVI 2008, 2012, 2014,
 - ACM IUI 2014, 2017,
 - ACM Nordi’CHI 2016, 2020, LBW 2022
 - ACM EICS 2010, 2014, 2019⁴
 - ACM IHM 2015, 2016, 2024, 2025,

⁴Since 2017, EICS proceedings are published as part of the PACM journal. Reviews are reported here as both conference and journal reviews.

- ACM Multimedia 2010,
- ICPR 2012,
- Ubimob 2013,
- SIGGRAPH ASIA 2025,
- The Engineering of Mixed Reality Book 2009
- Journals
 - ACM *IMWUT* (previously A* UbiComp conference) 2022
 - Taylor & Francis *Human Computer Interaction* 2015
 - Elsevier *International Journal of Human-Computer Studies* 2013,
 - Springer *Personal and Ubiquitous Computing* 2013,
 - IEEE *Transactions on Visualization and Computer Graphics* 2021,
 - IEEE *Transactions On Affective Computing* 2016,
 - IEEE *Computer Graphics and Application* 2012,
 - IEEE *Pervasive Computing* 2017 (Special Issue on Physical Computing: Flexible and Shape-Changing Interfaces),
 - ACM *Journal on Computing and Cultural Heritage* 2013,
 - ACM Proceedings on Human Computer Interaction (HCI) 2019⁴,
 - ACM Transaction on Computer-Human Interaction (TOCHI) 2024,
 - Hermès *Technique et Science Informatiques* 2009 2011,
- Funding organizations
 - ERC (European Research Council) Starting Grant 2023
 - ANR (Agence Nationale de la Recherche) 2014, 2016, 2018, 2022, 2023
 - Région (Nouvelle) Aquitaine 2014, 2019, 2021
 - FWO (Research Foundations Flanders) 2014 2015
 - [French-German University](#) 2016
 - [LabEX Digicosme](#) 2021
 - [Initiatives de Recherches à Grenoble Alpes](#) 2021

Thesis and Diploma Committees

In addition to the juries of my own PhD students, I was invited to the following thesis committees:

Role	Level	Name	Institution	Year
Reviewer (7)	Habilitation (<i>HdR</i>)	Samuel Huron	Télécom Paris Tech	2025
	PhD (15)	Yang Liu	Telecom Paris Tech	2025
		Raphaël Perraud	INRIA Lille	2025
		Mannu Lambrichts	Hasselt University, BE	2024
		Eva Mackamul	INRIA Lille	2023
		Brice Parilusyan	IRIT, Da Vinci Innovation Center & Lynxter	2023
		Ambre Assor	INRIA Bordeaux	2023
		Elio Keddissseh	Université de Toulouse	2021
		Camille Dupré	Uni. Paris Saclay	2025
		Raphaëlle Kerbrat	EnsadLab	2023
		Pierre Bégout	IMT Atlantique & ENIB, Brest	2022
		Adnane Guettaf	Université de Lille	2022
		Zhuoming Zhang	Télécom Paris Tech	2022
		Rajkumar Darbar	Université de Bordeaux	2021
		Marc Teyssier	Télécom ParisTech	2020
Sylvain Pauchet	ENAC	2019		
Mathieu Le Goc	AVIZ, INRIA and Université Paris Sud	2016		

Final Product and Interaction Design Diploma (DSAA) at Pole Supérieur de Design in Villefontaine (2015)

PhD advisory committee

- [Thomas Juldo](#), De Vinci & ISIR (2024)
- [Madalina Nicolae](#), Saarland University & Ecole Supérieure d'Ingénieurs Léonard de Vinci (2023, 2024)
- Yang Liu, Telecom ParisTech (2023, 2024)
- [Raphaëlle Kerbrat](#), EnsadLab (2021 & 2022)

Lab [HCERES](#) evaluation

- [ISIR](#) (2023)

Hiring Committees (for assistant professor positions)

- # 805 at LaBRI Université de Bordeaux (2024)
- # 1388 at ISTIC Rennes 1 University (2016)
- # 1690 at Polytech Nantes (2016)

Active member in the scientific community

- Invited member of the [scientific committee of the GDR Robotique](#)
- Took part in the 2017 [Dagstuhl seminar on Shape-Changing Interfaces](#)
- Member of AFIHM (French association for Human-Computer Interaction) and ACM.
- Member of the [board of AFIHM](#) (2014 – 2016 and 2022–), as deputy secretary (2014), secretary (2015), vice-president (2022) and president (2023).
- Took part in the French Human-Computer Interaction students meeting in November 2006 (RJC-IHM'06).

Popularization and public relations

- Co-organization of the [Filles et Maths-Info](#) day since 2022, targeting high school female students
- Chief Editor of the magazine of the Laboratoire d'Informatique de Grenoble in 2013-2014, targeting partners (both paper - 250 copies - and online).
- Member of [Narkolepsy](#) in 2009, a Grenoble-based association: organization of PLAY IN, first edition of a pluridisciplinary game-related event during which spectators are encouraged to perform (re)creative disobedience, technological reinvention of everyday life, and reappropriate freely the urban environment.
- Member of the 2007/2008 editorial board of « Visions Croisées », multidisciplinary general-public magazine focusing on research in Grenoble Universities.

Local involvement

- Member of the [Persyval-3 Steering Committee](#) (since 2024)
- Leader of the [LIG “Ethics & gender equity” group](#), funding from CNRS INS2I of 3.5k€/year, nov. 2021 – 2025
- Member of the [LIG “Ethics & gender equity” group](#) (2020 –),
- Management of research group's meetings, writing workshops and presentations (2010 – 2015),
- Member of the LIG communication group (2012 – 2014),
- Management of the hardware and lab/demo room (2009 – 2010).

Dissemination

My actions around dissemination resolves around two mains axes: open science and gender issues.

Websites for dissemination, and for reproduction and replication

- [Data and code for replication and reproduction of my research](#) (2020 – ongoing)
- [Digital material and instructions on how to build the ExpanDial prototype](#) (2019)
- [Digital material and instructions on how to build the KnobSlider prototype](#) (2018)

- [Digital material to build the zoomable slider prototype](#) (2015)
- [Digital material to build the SplitSlider prototype](#) (2017)
- [Molecular HCI Website](#) gathering references of modular interactive systems (2021)
- [Collection of everyday reconfigurable objects](#) (2018)
- [Taxonomy of gesture guiding systems](#) (2015)

Press articles

- **Revue i-mag** (n. 45, 2010, in French) special issue on women in computer science ("TIC au féminin"): <https://www.ensimag-alumni.com/articles/revue-i-mag-n-45-tic-au-feminin>

Web articles

- **South Wales Evening Post Website** (2016) article on our co-author Matt Jones mentioning our ACM CHI 2016 paper *Emergeables: Deformable Displays for Continuous Eyes-Free Mobile Interaction*: <http://m.southwales-eveningpost.co.uk/smartphone/story-29672239-detail/story.html>
- **INRIA Grenoble website** (2016, in French) article about FabLabs and the prototypes of our ACM CHI 2016 paper *Emergeables: Deformable Displays for Continuous Eyes-Free Mobile Interaction*: <http://www.inria.fr/centre/grenoble/actualites/des-boutons-tangibles-emergeant-de-nos-telephones-tactiles>
- **CNRS INS2I website** (2016, in French) article about shape-changing devices in HCI ("Une forme qui s'adapte au fond") mentioning our ACM CHI 2016 paper *Emergeables: Deformable Displays for Continuous Eyes-Free Mobile Interaction*: <http://www.cnrs.fr/ins2i/spip.php?article1987>
- **Elsevier SciTech Connect** (2016) article ("Smartphone market stagnating? Time to break the glass and seek disruptive solutions") about our ACM CHI 2016 paper *Emergeables: Deformable Displays for Continuous Eyes-Free Mobile Interaction*: <http://scitechconnect.elsevier.com/smartphone-market-stagnating-seek-disruptive-solutions/>
- **Article on the ENSIMAG website** (2017) to report on my CNRS Bronze Medal and invite female students to do research: <http://ensimag.grenoble-inp.fr/recherche/celine-coutrix-medaille-de-bronze-du-cnrs-2017-877621.kjsp>
- **Article on the website of Universität Stuttgart** (2017) to report on my Humboldt fellowship: <https://www.beschaefigte.uni-stuttgart.de/uni-aktuell/meldungen/coutrix/>
- **CNRS INS2I website** (2019, in French) article about a projet mixing material sciences and HCI : <https://ins2i.cnrs.fr/fr/cnrsinfo/projets-80prime-six-projets-coordonnes-par-des-chercheurs-de-lins2i>

Industry

- **Salon Global Industrie** (2019) demo and video presentation of [KnobSlider](#) at the Research booth of the Auvergne-Rhône-Alpes area
- Patent (February 23, 2023) "Dispositif de contrôle tangible à géométrie variable" (FR2301674)

Dissemination for gender equality

- Participation to interventions in [high school Marie Curie, Échirolles \(March 9th 2021\)](#), Grenoble
- Participation in [La Science taille XX elles](#) (2021–2025): exhibition and interventions in schools (Emmanuel Mounier and Eaux Claires high schools, Chamandier (Gières) and Fantin Latour (Grenoble) junior high)
- Presentation at [Filles et Maths-Info](#) day (January 19th 2022)

Teaching

From 2005 to 2024, I gave a total of **489.5 hours** of lectures, at:

- Universität Stuttgart (Computer Science and Architecture departments) in Stuttgart, Germany
- University Grenoble Alpes (UFR IM2AG, Polytech (Computer Science department), IUT2 (Computer Science department) and UFR ESE (Economics departments)) in Grenoble, France
- Grenoble-INP (ENSIMAG, Computer Science department) in Grenoble, France
- Aalto University (Department of Design) in Helsinki, Finland (one invited course)

I addressed a **large panel of students**, from 1st year to Master students, studying various domains like economics, computer science, design, architecture or IT for health.

I taught a **wide range of topics**, from Human-Computer Interaction, HTML/CSS, Javascript, Arduino, C, Databases and ACCESS to Microsoft and Open office.

My role ranged from assistant lecturer to coordinator of the course. I was involved in designing courses and their support materials, evaluations and grading. Since 2019, I am the **head of the “Artificial Intelligence for Graphics, Interaction, Vision and Robotics (AI4GIVR)” specialization at the Master of Science in Informatics at Grenoble.**

I also followed a teacher training program for 16.5 days during my doctoral studies.

(Detailed teaching on the next two pages)

Topic	Level	Background	Volume		Role	Location	Year
			Course	Project			
Human-Computer Interaction			7.5h	10.5h	Head of this course		2025-2026
			7.5h	9h			2024-2025
Scientific methodology and Experimental evaluation			3h		Designed parts of the course	Grenoble	2024-2025
			3h				2023-2024
			4.5h				2022-2023
			4.5h				2021-2022
Augmented reality and Virtual Reality: New Interaction Techniques	Research Master	Computer science	11h	15h	Head of these courses		2023-2024
			6h	10.5h			2022-2023
Methods to bring the human in the loop			9h	7.5h			2021-2022
			9h	4.5h			2023-2024
			7.5h	4.5h			2022-2023
			3h	9h			2021-2022

Topic	Level	Background	Volume		Role	Location	Year
			Course	Project			
Tangible Interaction: Introduction, Design and Prototyping	Research Master	Computer science	12h	9h	Designed course and evaluation		2020-2021
			12h	9h			2019-2020
			9h	3h			2018-2019
			9h	3h			2017-2018
			9h	3h			2016-2017
			6h	1h			2015-2016
			6h	1.5h			2014-2015
	Master		1.5h		Designed the course	Stuttgart ^a	2017-2018
			1.5h				2016-2017
			22.5h		Design and coordination	Stuttgart ^b	2016-2017
Multimodal and Mobile Interaction (JavaScript)	Professional Master			12h	Assistant		2014-2015
	Research Master			12h			2013-2014
Mixed Reality Systems	Master		4.5h	4.5h	Design and coordination	Grenoble	2012-2013
Human-Computer Interfaces	Master (EN-SIMAG)		16.5h	19.5h	Assistant		2011-2012
C language	Bachelor (1st year)			32h	Assistant, designed the exam		2007-2008
Arduino Prototyping	Master	Architecture	3h		Designed the course	Stuttgart ^c	2016
Human-Computer Interaction		IT for Health		16h	Assistant	Grenoble	2014-2015
Prototyping Tangible Interfaces		Design	1h		Designed the course	Helsinki	2009-2010
Web Sites Design				24h	Designed entire course and evaluation		2007-2008
Databases and ACCESS	Bachelor (3rd year)	Economics		20h	Assistant, designed the exam	Grenoble	2006-2007
Internet & eMails, and advanced office with Word, PowerPoint, & OpenOffice	Bachelor (2nd year)		48h		Assistant, designed part of the course		2006-2007
Office with Word, Excel	Bachelor (1st year)		74h		Assistant		2005-2006

^cPart of a [multimodal interaction for ubiquitous computers](#) lecture.

^d*Fachpraktikum*: Practical course with projects.

^ePart of a [Material and Structure](#) course.