

Vincent Cavez

Curriculum Vitae

Academic Position

2025-present **Postdoc**, *Stanford HAI, Graduate School of Education*, Stanford University, USA.
Advisor: Hari Subramonyam

Education

- 2025 **PhD**, *Inria Saclay*, Paris-Saclay University, France.
Computer Science (*Human-Computer Interaction*)
Thesis: *Designing Pen-based Interactions for Productivity and Creativity*
Advisors: Emmanuel Pietriga and Caroline Appert
<https://theses.hal.science/tel-04986694>
- 2020 **Master's Degree**, Paris-Cité University, France.
Mathematical Engineering and Statistics - with high honours
Thesis: *Contributions to the development of an embedded object finder for the visually impaired*
Advisors: Antonin Goude and Oscar De La Cruz
- 2019 **University Degree**, Paris-Saclay University, France.
Creation and Development of Innovative Start-ups
- 2018 **Bachelor's Degree**, Paris-Saclay University, France.
Mathematics - Modelization Specialization

Publications

- 2026 Xintian Fu, **Vincent Cavez**. 2026.
CHI EA **Opportunities to Support Musicians' Score-based Practice with Context-Specific Annotations on Tablet**. Extended Abstracts of the 2026 CHI Conference on Human Factors in Computing Systems (CHI EA '26), April 13–17, 2026, Barcelona, Spain.
<https://dl.acm.org/doi/10.1145/3772363.3798332>
- 2026 Momin N. Siddiqui, **Vincent Cavez**, Sahana Rangasrinivasan, Abbie L Olszewski, Srirangaraj Setlur, Maneesh Agrawala and Hari Subramonyam. 2026.
IUI **Teaching Spell Checkers to Teach: Pedagogical Program Synthesis for Interactive Learning**. To appear in IUI '26: Proceedings of the 31st International Conference on Intelligent User Interfaces.
<https://arxiv.org/abs/2512.12115>
- 2025 **Vincent Cavez**, Catherine Letondal, Caroline Appert and Emmanuel Pietriga. 2025.
CHI **EuterPen: Unleashing Creative Expression in Music Score Writing**. In CHI Conference on Human Factors in Computing Systems (CHI '25), April 26–May 01, 2025, Yokohama, Japan. ACM, New York, NY, USA, 16 pages.
<https://doi.org/10.1145/3706598.3713488> (acceptance rate: 24.9%, 1249/5014)
- 2024 **Vincent Cavez**, Catherine Letondal, Emmanuel Pietriga, and Caroline Appert. 2024.
CHI **Challenges of Music Score Writing and the Potentials of Interactive Surfaces**. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24). Association for Computing Machinery, New York, NY, USA, Article 728, 1–16.
<https://doi.org/10.1145/3613904.3642079> (acceptance rate: 26.3%, 1060/4028)

2024 **Vincent Cavez**, Caroline Appert, and Emmanuel Pietriga. 2024. **Spreadsheets on Interactive Surfaces: Breaking through the Grid with the Pen**. ACM Trans. Comput.-Hum. Interact. 31, 2, Article 16 (April 2024), 33 pages.
TOCHI <https://doi.org/10.1145/3630097>

Workshop Papers

- 2026 **Vincent Cavez**. 2026.
CHI WS **Structural Interaction for Generative User Interfaces**. In *Generative UI meets HCI*, Workshop at the CHI Conference on Human Factors in Computing Systems (CHI '26), April 13–17, 2026, Barcelona, Spain. CEUR Workshop Proceedings.
https://www.vincentcavez.com/img/pdfs/Structural_Interaction_Gen_UI.pdf
- 2026 **Vincent Cavez**. 2026.
CHI WS **How Structure Mediates Creative Activity Traces**. In *Herding CATs: Making Sense of Creative Activity Traces*, Workshop at the CHI Conference on Human Factors in Computing Systems (CHI '26), April 13–17, 2026, Barcelona, Spain.
https://www.vincentcavez.com/img/pdfs/Structural_Interaction_CAT.pdf

Posters

- 2026 **Teaching Spell Checkers to Teach: Pedagogical Program Synthesis for Interactive Learning**. LSTD@25, Stanford Graduate School of Education
LSTD@25 <https://www.vincentcavez.com/img/pdfs/LSTDPoster.pdf>
- 2024 **Designing Pen-based Interactions for Productivity and Creativity**. RJC IHM 2024, AFIHM
RJC IHM <https://www.vincentcavez.com/img/pdfs/RJCPoster.pdf>

Mentoring

- 10/2025–
present **Marielle Zheng**, *Msc Student - Learning Design and Technology*, Stanford University, USA.
Supporting Children with Developmental Language Disorder Using Narrative-Based Language Intervention through AI-assisted Storytelling
- 09/2025–
present **Anika Rajaram**, *Intern from Harker High School*, Stanford University, USA.
Facilitating the Learning of Mechanics through the Generation of Widgets from Sketches
- 06/2025–
present **Momin Siddiqui**, *Visiting Research Assistant from the Georgia Institute of Technology - HCI*, Stanford University, USA.
Supporting Spelling in Children with Dyslexia Using Structured Word Inquiry with AI-driven Dialogue
- 06/2025–
08/2025 **Kashif Imteyaz**, *Visiting PhD Student from Northeastern University - HCI*, Stanford University, USA.
Integrated Sketch and Code Approach for the Development of Physics Games
- 05/2025–
08/2025 **Xintian Fu**, *MSc Student - HCI*, Paris-Saclay University, France.
Supporting Musicians' Score-based Practice with Context-Specific Annotations on Tablet
- 02/2024–
08/2024 **Noémie Hanus**, *MSc Student - HCI*, Paris-Saclay University, France.
Itinerary-driven Interaction for Map Navigation on Mobile

Teaching

- 2024–2025 **Teaching Assistant - Design of Interactive Systems, M1–M2 HCI**, Paris-Saclay University.
Professor: Wendy Mackay
- 2024–2025 **Teaching Assistant - Introduction to HCI, L2 CS**, Paris-Saclay University.
Professor: Michel Beaudouin-Lafon
- 2022–2024 **Teaching Assistant - Winter School, M1 HCI**, Paris-Saclay University.
Professor: Vanessa Peña-Araya

2015–2017 **Teaching Assistant - Mathematics, 7th to 9th Grade**, Mondétour Middle School.
Teacher: Marie Decamps

Outreach

- 04/2026 **PreCHI Paris**, *Organizer, Session Chair*, Saclay, France.
<https://sites.google.com/view/paris-pre-chi26/home>
- 02/2026 **Learning Sciences and Technology Design 25th Anniversary Conference**, *Poster*, Stanford, USA.
<https://ed.stanford.edu/events/lstd-25>
- 11/2025 **ASHA Convention**, *Invited talk*, Washington DC, USA.
<https://convention.asha.org/>
- 04/2025 **ParaCHI Paris**, *Organizer, Speaker, Session Chair*, Paris, France.
<https://sites.google.com/view/para-chi-paris25>
- 02/2025 **VISVAR Research Group**, *Invited talk*, Stuttgart, Germany.
- 10/2024 **11th Young Researchers in Human-Computer Interaction Meeting**, *Poster*, Saint-Pierre-d'Oléron, France.
<https://rjc2024.afihm.org/>
- 05/2024 **Foundation Interface Lab**, *Invited talk*, San Diego, USA.
- 02/2024 **Meetup of Junior Women in Maths and Computer Science**, *Animator*, Saclay, France.
<https://filles-et-maths.fr/rjmi/>
- 12/2023 **2024 3MT® Paris-Saclay University Competition**, *Finalist*, Saclay, France.
<https://www.universite-paris-saclay.fr/three-minute-thesis-competition-3mtr#home200832>
- 10/2023 **PreVis '23**, *Demo*, Saclay, France.
<https://www.aviz.fr/Events/Previs2023>
- 12/2022 **LISN's HCI Department Day**, *Speaker*, Saclay, France.
- 06/2022 **LISN Ph.D. Days**, *Organizer, Speaker*, Saclay, France.

Service

- 2026 **C&C 2026**, *Reviewer*.
- 2025 **CHI 2026**, *Reviewer, Associate Chair*.
- 2025 **VIS 2025**, *Reviewer*.
- 2024 **CHI 2025**, *Reviewer*.
- 2024–present **ACM SIGCHI Paris Chapter**, *Elected Webmaster*.
- 2024 **CHI 2024**, *Reviewer, Session Chair*.
- 2024–2025 **Paris-Saclay University Council of the Doctoral School**, *Elected Representative*.
- 2024–2025 **Paris-Saclay University Pole Committee of the Doctoral School**, *Elected Representative*.
- 2024–2025 **Inria Saclay Center Committee**, *Elected Representative*.
- 2023 **Visu2023**, *Student Volunteer*.
<https://journee-visu.github.io/2023/>

Awards & Honors

- 01/2026 **2 Special Recognition for Outstanding Reviews**, *CHI 2026*.
- 01/2024 **Special Recognition for Outstanding Review**, *CHI 2024*.

Extra-Curricular Activities

- 07/2022 **Creartathon22:** I participated in a creative hackathon within a multi-disciplinary team of five students to design a creative, intelligent and interactive artifact.
<https://creartathon.com/>
- 03/2021 **Cryptics:** I developed an R library for real-time cryptocurrency analysis.
<https://github.com/VincentKV/Cryptics>
- 2017–2019 **Student's Union Treasurer:** I managed the bookkeeping and budget forecasting of the union and took part in the organization of events for graduate and undergraduate students.
- Since 2010 **Music Composition:** I make electronic and orchestral music that I occasionally play live. I also compose movie soundtracks.
<https://lordaaron.bandcamp.com/>

Online Certificates

- 10/2021 **Information Visualization: Programming with D3.js**, *New York University*.
- 02/2021 **Data Manipulation at Scale: Systems and Algorithms**, *University of Washington*.
- 04/2019 **Machine Learning**, *Stanford University*.

Technical Skills

- Programming Languages **JavaScript** (D3.js, React Native), **HTML**, **CSS**, **Python** (OpenCV, TensorFlow, Scikit-learn), **R** (Tidyverse, rvest, devtools), **Swift**, **Go**
- Creative Software **Figma**, **Logic Pro X**, **Ableton Live**, **Adobe Premiere Pro**, **Final Cut Pro**, **Adobe Illustrator**, **Blender**
- Operating Systems **Mac OS**, **Windows**, **Linux**, **RaspberryPi OS**, **Arduino OS**

Languages

- French **Native**
- English **Fluent**