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
CHI EA
Xintian Fu, **Vincent Cavez**. 2026.
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
IUI
Momin N. Siddiqui, **Vincent Cavez**, Sahana Rangasrinivasan, Abbie L Olszewski, Srirangaraj Setlur, Maneesh Agrawala and Hari Subramonyam. 2026.
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
CHI
Vincent Cavez, Catherine Letondal, Caroline Appert and Emmanuel Pietriga. 2025.
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
CHI
Vincent Cavez, Catherine Letondal, Emmanuel Pietriga, and Caroline Appert. 2024.
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/pdf/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/pdf/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/pdf/LSTDPoster.pdf
2024	**Designing Pen-based Interactions for Productivity and Creativity.** RJC IHM 2024, AFIHM
RJC IHM	https://www.vincentcavez.com/pdf/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**