Vincent Cavez

Curriculum Vitae

I am a french Postdoctoral Scholar in Human-Centered AI and Education at Stanford University. Under the supervision of Hari Subramonyam, I design AI and pen-based interfaces to support speech-language pathologists in tracking progress and optimizing interventions with their patients.

Education

2025 PhD, Inria Saclay, Paris-Saclay University, France.

Human-Computer Interaction

Research Topic: Designing Pen-based Interactions for Productivity and Creativity

Advisors: Emmanuel Pietriga and Caroline Appert

2020 Master's Degree, Paris-Cité University, France.

Mathematical Engineering and Biostatistics - with high honours

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

Research

- 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** TOCHI **Surfaces: Breaking through the Grid with the Pen.** ACM Trans. Comput.-Hum. Interact. 31, 2, Article 16 (April 2024), 33 pages. https://doi.org/10.1145/3630097
- Vincent Cavez. Supervisors: Oscar De La Cruz and Antonin Goude. **Contributions to the**Master's **development of an embedded object finder for the visually impaired.** INGIMA France.
 Thesis

Advisorship

- 05/2025- Touch Gestures to Support Score-based Musical Practice, ILDA Team, Paris-Saclay
- 08/2025 University, France.

MSc Student: Xintian Fu

08/2024 France.

MSc Student: Noémie Hanus

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- Fall 2024 **Teaching Assistant Design of Interactive Systems**, *M1–M2 HCI*, Paris-Saclay University.
 - Professor: Wendy Mackay
- Fall 2024 **Teaching Assistant Introduction to HCI**, *L2 CS*, Paris-Saclay University.
 - Professor: Michel Beaudouin-Lafon
- Winter 2023, **Teaching Assistant Winter School**, *M1 HCI*, Paris-Saclay University.
- Winter 2024 Professor: Vanessa Peña-Araya
 - 01/2016- Teaching Assistant Mathematics, 7th to 9th Grade, Mondétour Middle School.
 - 07/2017 Teacher: Marie Decamps

Outreach

- 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-Pierred'Oléron, France.
 - https://rjc2024.afihm.org/
- 05/2024 Creativity 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

- 04/2025 VIS 2025, Reviewer.
- 10/2024 CHI 2025, Reviewer.
- 07/2024 ACM SIGCHI Paris Chapter, Elected Website Chair.
- 05/2024 CHI 2024, Reviewer, Session Chair.
- 03/2024 Paris-Saclay University Council of the Doctoral School, Elected Representative.
- 03/2024 Paris-Saclay University Pole Committee of the Doctoral School, Elected Representative.
- 02/2024 Inria Saclay Center Committee, Elected Representative.
- 06/2023 Visu2023, Student Volunteer.
 - https://journee-visu.github.io/2023/

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 JavaScript (D3.js, React Native), HTML, CSS, Python (OpenCV, TensorFlow, Scikit-learn), Languages R (Tidyverse, rvest, devtools), Swift, Go

Creative Logic Pro X, Ableton Live, Adobe Premiere Pro, Final Cut Pro, Adobe Illustrator, Software Blender

Operating Mac OS, Windows, Linux, RaspberryPi OS, Arduino OS Systems

Languages

French Native

English Fluent