

Vincent Herrmann

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 Vincent Herrmann |  [vincentherrmann](https://vincentherrmann.github.io)

Lugano, Switzerland

EDUCATION

- **PhD in Artificial Intelligence** 2020–2025
The Swiss AI Lab IDSIA, University of Lugano Lugano, Switzerland
 - Working on Artificial Curiosity, Representation Learning and Reinforcement Learning.
Supervised by Prof. Dr. Jürgen Schmidhuber
- **Master of Arts in Music Informatics** 2017–2020
University of Music Karlsruhe Karlsruhe, Germany
 - Grade: 1.2
- **Master of Music in Piano Performance** 2017–2019
University of Music and Performing Arts Stuttgart Stuttgart, Germany
 - 1.0 with distinction (best possible grade)
- **Bachelor of Music in Piano Performance and Composition** 2010–2015
University of Music and Performing Arts Stuttgart Stuttgart, Germany
 - 1.0 with distinction (best possible grade)

WORK EXPERIENCE

- **Lecturer** 2022–Present
University of Music Karlsruhe Karlsruhe, Germany
 - Teaching courses on deep learning and generative modeling for music
- **Lecturer** 2021–2022
University of Music and Performing Arts Stuttgart Stuttgart, Germany
 - Teaching piano performance, substituting for Prof. Michael Hauber
- **Master Student** 2019–2020
Bosch Center for Artificial Intelligence Renningen, Germany
 - Research on generative models of symbolic music
- **Research and Teaching Assistant** 2018–2020
University of Music Karlsruhe Karlsruhe, Germany
 - Teaching tutorials on music-related AI programming
- **Research Assistant** 2016–2017
University of Music and Performing Arts Karlsruhe Stuttgart, Germany
 - Analyzing performance data from a computerized grand piano
- **Freelance Work** 2011–Present
 - Pianist, composer, arranger, and consultant for interactive live-electronic projects

PROJECTS

- **Generative Transformer-based Models of Symbolic Polyphonic Music** 2020
Master Thesis supervised by Prof. Dr. Christoph Seibert [Master Thesis](#)
 - Grade: 1.0
- **Immersions - How Does Music Sound to Artificial Ears?** 2019
Project that explores how music is perceived by AI systems
 - Awarded Outstanding Demonstration Award at NeurIPS 2019

PUBLICATIONS (SELECTION)

- Vincent Herrmann, Róbert Csordás, Jürgen Schmidhuber (2025). **Measuring In-Context Computation Complexity via Hidden State Prediction**. In *ICLR 2025 Building Trust in LLMs Workshop* [Oral].
- Dylan R. Ashley*, Vincent Herrmann*, Zachary Friggstad, Jürgen Schmidhuber (2024). **On the Distillation of Stories for Transferring Narrative Arcs in Collections of Independent Media**. In *IEEE TPAMI*.
- Vincent Herrmann, Francesco Faccio, Jürgen Schmidhuber (2024). **Learning useful representations of recurrent neural network weight matrices**. In *ICML 2024* [Oral].
- Vincent Herrmann, Louis Kirsch, Jürgen Schmidhuber (2023). **Learning one abstract bit at a time through self-invented experiments encoded as neural networks**. In *IWAI 2023* [Oral].
- Francesco Faccio*, Vincent Herrmann*, Aditya Ramesh, Louis Kirsch, Jürgen Schmidhuber (2023). **Goal-Conditioned Generators of Deep Policies**. In *AAAI 2023* [Oral].
- Vincent Herrmann (2020). **Visualizing and sonifying how an artificial ear hears music**. In *PMLR post proceedings*, NeurIPS 2019.
- Vincent Herrmann (2019). **Immersion - How Does Music Sound to Artificial Ears?**. In *NeurIPS 2019 Machine Learning for Creativity and Design Workshop*.
- Vincent Herrmann (2017). **Wasserstein GAN and the Kantorovich-Rubinstein Duality**. Blog post.
- Vincent Herrmann (2016). **Wavelets - From Filter Banks to the Dilation Equation**. Published on *dsprelated.com*.
- Vincent Herrmann (2016). **Wavelets - Vanishing Moments and Spectral Factorization**. Published on *dsprelated.com*.

* signifies shared first-authorship

HONORS AND AWARDS

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|---|------|
| • NeurIPS R0-FoMo Workshop Best Paper Award <i>For "Mindstorms in natural language-based societies of mind"</i> | 2023 |
| • ICML Decision-aware RL Workshop Award <i>For "Goal-Conditioned Generators of Deep Policies"</i> | 2022 |
| • KAUST Rising Stars <i>Speaker at the first KAUST Rising Stars Symposium</i> | 2022 |
| • NeurIPS Outstanding Demonstration Award <i>For "Immersion - How does Music sound to Artificial Ears?"</i> | 2019 |
| • Finalist at the International Piano Competition Ferruccio Busoni, Bolzano | 2015 |

SKILLS

- **Machine Learning Frameworks:** PyTorch, jax
- **Machine Learning Research:** Experience with training and fine-tuning foundation models, reinforcement learning agents, running large scale experiments, mechanistic interpretability and advanced visualization techniques
- **Programming Languages:** Python, C, Swift, Max/MSP, PureData, JavaScript, Java
- **Music Software:** Logic Pro, Ableton Live, Finale, Dorico
- **Other Tools:** Adobe Photoshop, Illustrator, InDesign

LANGUAGES

German: Native
English: Proficient
Italian: Basic
Latin, Ancient Greek: Rusty