Vincent Herrmann

Education

2020– **PhD**, *The Swiss AI Lab IDSIA, USI*, Lugano.
supervised by Prof. Dr. Jürgen Schmidhuber

2017–2020 **Master of Arts**, *Institute for Music Informatics and Musicology, University of Music*, Karlsruhe, grade: 1.2.
in Music Informatics

2017–2019 **Master of Music**, *University of Music and Performing Arts*, Stuttgart, *1.0 with distinction (best possible grade)*.
In Piano Performance

2010–2015 **Bachelor of Music**, *University of Music and Performing Arts*, Stuttgart, *1.0 with distinction (best possible grade)*.
In Piano Performance and Composition

Master thesis

title *Generative Transformer-based Models of Symbolic Polyphonic Music*

grade: 1

supervisor Prof. Dr. Christoph Seibert

Work Experience

2019-2020 **Master Student**, *Bosch Center for Artificial Intelligence*, Renningen.
Research on generative models of symbolic music

2018-2020 **Research and Teaching Assistant**, *University of Music*, Karlsruhe.
Teaching tutorials on music-related AI programming

2016-2017 **Research Assistant**, *University of Music and Performing Arts*, Stuttgart.
Analysis of performance data from a computerized grand piano

2011- **Freelance Work**.
As pianist, composer, arranger and consultant for interactive live-electronic projects

Awards and Scholarships (Selection)

2019 **NeurIPS 2019 Outstanding Demonstration Award**.
For the project "Immersions - How does Music sound to Artificial Ears?"

2016-2019 **Fellow of the Live Music Now Foundation**.

2015 **Finalist at the International Piano Competition Ferruccio Busoni**.
In Bozen, Italy

2013 **Laureate at the TONALi Piano Competition Hamburg**.

2010	**"Humanism Today" Prize**.
	For classical languages
2007	**Composition Awards of the Jeunesses Musicales Germany**.
	Invitation to the national day of talents

Publications

Visualizing and sonifying how an artificial ear hears music, *2020*, PMLR post proceedings volume associated with the NeurIPS 2019 Competition and Demonstration tracks, peer-reviewed and accepted for publication.

Immersions - How Does Music Sound to Artificial Ears?, *2019*, NeurIPS 2019 Machine Learning for Creativity and Design Workshop.

Wasserstein GAN and the Kantorovich-Rubinstein Duality, *2017*, Blog-post.

Wavelets - From Filter Banks to the Dilation Equation, *2016*, Article at dsprelated.com.

Wavelets - Vanishing Moments and Spectral Factorization, *2016*, Article at dsprelated.com.

Languages

German	**native**
English	**proficient**
Latin, Ancient Greek	**rusty**

Computer skills

Machine Learning Frameworks	PyTorch, Tensorflow
Programming Languages	Python, C, Swift, Max/MSP/Jitter, PureData, JavaScript, Java
Software	Logic Pro, Ableton Live, Finale, Dorico, Adobe Photoshop, Illustrator, InDesign