Dagstuhl-Seminar 22082

Deep Learning and Knowledge Integration for Music Audio Analysis

20. – 25. Februar 2022

Sun, Feb. 20, 2022
15:00-19:00 Reception open
From 19:00 Self-service check-in

Mon, Feb. 21, 2022
07:30-08:45 Breakfast
09:00–12:00 Programme
  • Welcome/overview by Meinard Müller
  • Self-introductions by participants
  • Stimulus talk by Rachel Bittner: Toward a new generation of source separation metrics
12:15 Lunch
14:15-17:45 Programme
  • Stimulus talk by Umut Simsekli: Let’s be brave: Some taboo topics that we need to talk
  • Stimulus talk by Juhan Nam: What is the future of audio representation for music?
  • Stimulus talk by Christof Weiß: Is deeper better? Towards reliable evaluation of music transcription
  • Discussing and planning program for next day
18:00 Dinner
19:30 Evening activities

Tue, Feb. 22, 2022
07:30–08:45 Breakfast
09:00–12:00 Programme
  • Stimulus talk by Geoffroy Peters: Do we need specific audio front-ends (for DL) or is 1D-Conv enough?
  • Stimulus talk by Dasaem Jeong: Expressive music performance
  • Group discussions in three subgroups
12:15 Lunch
14:15–17:45 Programme
  • Presentation of subgroup discussions
    Group 1: Integrating musical knowledge I
    Group 2: Integrating musical knowledge II
    Group 3: Teaching MIR
• Stimulus talk by Bob Sturm and Cynthia Liem: Responsible engineering
• Discussing and planning program for next day
18:00 Dinner
19:30 Evening activities

**Wed, Feb. 23, 2022**
07:30–08:45 Breakfast
09:00–12:00 Programme
• Stimulus talk by Yu Wang: Towards adaptive and interactive machine learning with minimal supervision
• Stimulus talk by Magdalena Fuentes: Generalization vs. customization
• Stimulus talk by Simon Durand and Daniel Stoller: Which task to rule them all?
• Discussing and planning program for next day
12:15 Lunch
13:15-18:00 Outdoor activities
18:00 Dinner
19:30 Evening activities

**Thu, Feb. 24, 2022**
07:30–08:45 Breakfast
09:00–12:00 Programme
• Stimulus talk by Gül Varol: A computer vision perspective
• Stimulus talk by Michael Krause: Soft alignment techniques for music information retrieval
• Stimulus talk by Sebastian Ewert: What is our problem?
12:15 Lunch
14:15–17:45 Programme
• Stimulus talk by Yigitcan Özer: Source separation of piano concertos with test-time adaptation
• Stimulus talk by Gaël Richard: Informed source separation in limited data settings
• Stimulus talk by Stefan Balke: Tame your KPIs with data science
• Stimulus talk by Meinard Müller: Combining NMF-based decomposition and neural network techniques
18:00 Dinner
19:30–22:00 Evening concert with classical music, Irish folk music, and jazz

**Fri, Feb. 25, 2022**
07:30–08:45 Breakfast
09:15–12:00 Programme
• Tutorial by Umut Simsekli: Deep learning theory
• Self-introductions by participants
• Wrap-up session
12:15 Lunch
13:00 Departure