

Piano Label Annotation

1. pD0uq9QP8eo.mp3
 2. **8ufle2PEr4g.mp3**
 3. D9omvI0XJis.mp3
 4. gFjP2hxa0M.mp3
 5. hv5bDIHw5Y.mp3
 6. y8rgDq0ckd0.mp3
 7. FIBcVa32mjl.mp3
 8. z0nd5Qn4VzU.mp3
 9. xIZJaDRNSKX.mp3
 10. fdHWEdX0zA.mp3
 11. tsa0R2kvuxo.mp3
 12. SrPM5wIG27c.mp3
 13. zK-5grB504.mp3
 14. PkNLTxMfgr8.mp3
 15. 6ePT9gm5ESA.mp3
 16. hrZiZoov06k.mp3
 17. rkuheKLyIBU.mp3
 18. kEHz_6ICTA.mp3
 19. TXQaechWuQ.mp3
 20. PDQRgglg*_k.mp3
 21. zxA-hA0ZJ1A.mp3
 22. oT940lwe9M.mp3
 23. YV6EugTTUKM.mp3
 24. XPMvVF58kct.mp3
 25. njQrIn5QV0s.mp3
 26. x8Pjhv0E9o.mp3

Tagging: 8ufle2PEr4g.mp3 → **Max Audio Length: 30s**

0:00 / 0:30

분위기가 달라짐 피아노 솔로가 아님

Skip Tagging
 1) If mood changes
 2) If not piano solo

Tag List

Bright (밝은) Happy (행복한)
 Cute (귀여운) Playful (장난스러운)
 Upbeat/Energetic (신나는, 활판)
 Dreamy (몽환적인) Mysterious (신비로운)
 Emotional (감성적인) Relaxing/Calm (편안한, 차분한)
 Sad (슬픈) Dark (어두운) Tense (긴장감 있는) Scary (무서운)
 Epic (웅장한) Intense/Grand (화려한, 장엄한)
 Passionate (열정적인) Powerful (강력한)
 Easy (쉬운) Difficult/Advanced (어려운)
 Speedy (빠른) Laid-back (느긋한)
 Jazz (재즈)
 New-age (뉴에이지) Pop-Piano Cover(팝피아노커버) Classical(클래식)

x 5 groups
 15 Annotators
 Total 230 data per person,

Submit

Figure 1: Annotation interface used in the PIAST-AT dataset.

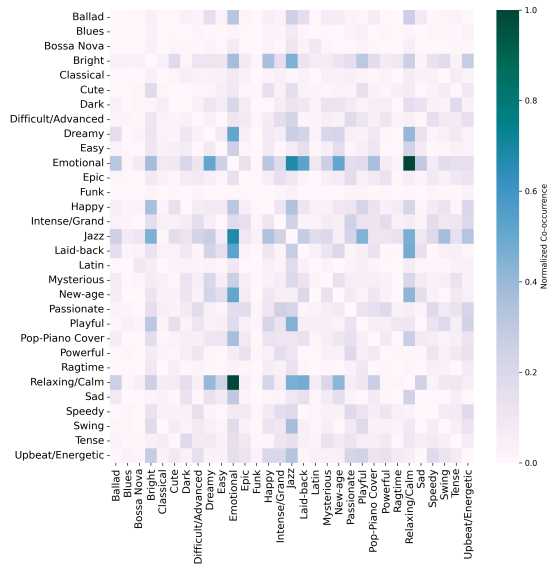


Figure 2: Co-occurrence between tags in the PIAST-AT dataset.

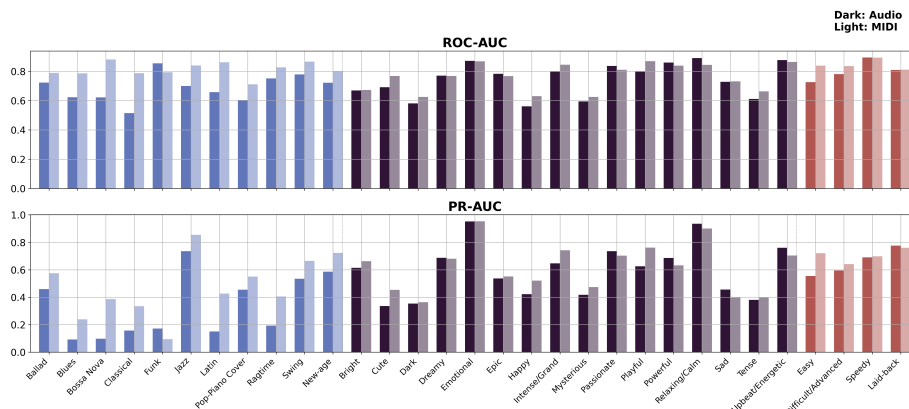


Figure 3: ROC-AUC and PR-AUC scores for each tag in tag-to-music retrieval performance. The darker bars represent audio performance, while the lighter bars represent MIDI performance.

Tag-wise Result Analysis

Figure 3 shows the ROC-AUC and PR-AUC scores for both audio and MIDI models across the tags. As shown in Figure 3, both models exhibited relatively low PR-AUC scores for genre tags. This low performance is likely due to data imbalance, as some genre tags are underrepresented in the PIAST-AT. Despite this imbalance, the MIDI model still performed significantly better than the audio model in most genre tags, suggesting that the MIDI model is more effective in capturing rhythmic characteristics in the music.

For emotion/mood tags and style tags, the performance difference between audio and MIDI was not as pronounced as for genre tags. However, for the “Cute” and “Easy”, the MIDI model is slightly more distinct. This indicates that MIDI data is particularly adept at capturing the nuances associated with those characteristics.