

PIG Dataset (Piano Fingering Dataset)

version 1.2 (2022/5/12)

Webpage: <http://beam.kisarazu.ac.jp/research/PianoFingeringDataset/>

1. Introduction

Thank you for downloading **PIG Dataset**!

PIG Dataset is publicly available data for academic research on piano fingering. **Only nonprofit, academic use is allowed.** It is a collection of classical piano pieces with annotated fingerings for every musical note. Upon the use of **PIG Dataset**, we kindly ask every user to **explicitly cite/mention the following paper**. Thank you for your understanding and we hope that you find the dataset useful.

Eita Nakamura, Yasuyuki Saito, Kazuyoshi Yoshii
Statistical Learning and Estimation of Piano Fingering
Information Sciences, Vol. 517, pp. 68-85, 2020. [arXiv:1904.10237]

2. Data Format

The dataset contains musical scores in PDF and one or more fingering files in the text format for each musical score. A fingering file is a list of musical notes and each note (corresponding to each line of the file) has the following information:

(note ID) (onset time) (offset time) (spelled pitch) (onset velocity) (offset velocity)
(channel) (finger number)

Onset and offset times are in seconds. The **spelled pitch** follows the convention that A4 \approx 440Hz. Sharps and flats are denoted by # and b (e.g. F#3, Ab5, Bbb2, C##5, etc.). The spelled pitch does not necessarily match the score notation, but it is equivalent to the score-notated pitch when it is reduced to an integer pitch. Onset and offset velocities represent intensity of notes as for MIDI. The channel is 0 if the note is played with the right hand and 1 if it is played with the left hand.

Notation for the **finger number** is as follows. For a right-hand note, it is indicated by 1 = right thumb, 2 = right index finger, ..., 5 = right little finger, as in the standard music notation. For a left-hand note, negative numbers are used: -1 = left thumb, -2 = left index finger, ..., -5 = left little finger. **Finger substitutions** are indicated with the symbol '_'. For example, 3_1 means that the note is first pressed by the right middle finger, which is substituted by the right thumb.

The timing and velocity values are obtained from performance data synthesized from score editing software. They do **not** represent the actual values in human performances.

3. Folder structure and list of musical pieces

All score PDF files are in **ScorePDF** folder and all fingering files are in **FingeringFiles** folder. The list of musical pieces with corresponding file IDs is given in **List.pdf** and **List.csv** files.

4. Updates

(22/5/12, version 1.12) Minor corrections in fingering data for 029-5, 032-2, and 032-3. Many thanks to Mr. David Randolph for finding the errors.

5. Visualizer

There is a visualizer that can be used for observing and comparing the fingering files in the dataset. The visualizer works on browsers such as Google Chrome, Safari, Firefox, Microsoft Edge, etc. You can use the visualizer at <https://fingeringdata.github.io/FingeringVisualizer.html>

6. Contact

For any **inquiries** or **feedback** of **PIG Dataset**, please contact one or both of the following persons.

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7. Acknowledgements

We would like to thank Dr Shinichi Furuya and Dr Kazuyoshi Yoshii for their cooperation in data preparation. We are also grateful to many other cooperators who contributed to providing fingerings and setting up data.

This project is partially supported by JSPS KAKENHI Nos. 15K16054, 16H02917, 16K00501, and 16J05486.