

Pianoforte Performance Assistant: A Computer Aided Evaluator for Piano Playing

C. K. Sooriya Arachchi¹, G. Hemachandra²

^{1,2}School of Computing, Asia Pacific Institute of Information Technology, Colombo 2, Sri Lanka
chathura_ksa@live.com¹, gamindu@apiit.lk²

Abstract—Evaluation of piano playing has long been the domain of music experts. The need for evaluative feedback on piano playing far outweighs the avenues available for such feedback, in the light of limited access to expertise. However, computer aided piano performance evaluation, which could supplement traditional evaluation by experts, is still not widely available.

Pianoforte Performance Assistant (PPA) is a computer aided evaluator which compares performance at a piano to the score indicated on sheet music.

The music score, in PDF format, and a MIDI representation of the piano player's rendition of the score are inputs to PPA.

PPA provides two forms of evaluation. The first form of evaluation highlights errors made by the performer through visualising the alignment of notes in the music score to the notes played by the performer. The second form of evaluation visualises the deviation of piano playing from the sheet music through piano roll notation.

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