

Computer Music – Âm Nhạc Máy Tính

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1

2 Wikipedia

2.1 Wikipedia/computer music

“*Computer music* is application of **computing technology** in **music composition**, to help human composers create new music or to have computers independently create music, e.g. with **algorithmic composition** programs. it includes theory & application of new & existing computer software technologies & basic aspects of music, e.g. **sound synthesis**, **digital signal processing**, **sound design**, sonic diffusion, **acoustics**, **electrical engineering**, & **psychoacoustics**. Field of computer music can trace its roots back to origins of **electric music**, & 1st experiments & innovations with electronic instruments at turn of 20th century.

2.1.1 History

2.1.2 Advances

2.1.3 Research

2.1.4 Machine improvisation

2.1.5 Live coding

” – [Wikipedia/computer music](#)

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2.2 Wikipedia/transcription (music)

“A J. S. BACH keyboard piece transcribed for guitar. In music, *transcription* is practice of **notating** a piece or a sound which was previously unnotated &/or unpopular as a written music, e.g., a **jazz improvisation** or a **video game soundtrack**. When a musician is tasked with creating **sheet music** from a recording & they write down notes that make up piece in **music notation**, it is said: they created a *musical transcription* of that recording. Transcription may also mean rewriting a piece of music, either solo or **ensemble**, for another instrument or other instruments than which it was originally intended. **Beethoven Symphonies** transcribed for solo piano by **Franz Liszt** are an example. Transcription in this sense is sometimes called *arrangement*, although strictly speaking transcriptions are faithful adaptations, whereas arrangements change significant aspects of original piece.

Further examples of music transcription include **ethnomusicological** notation of **oral traditions** of folk music, e.g. Béla Bartók's and Ralph Vaughan Williams' collections of national folk music of Hungary & England resp. French composer Olivier Messiaen transcribed **birdsong** in wild, & incorporated it into many of his compositions, e.g. his **Catalogue d'oiseaux** for solo piano. Transcription of this nature involves scale degree recognition & harmonic analysis, both of which transcriber will need **relative** or **perfect pitch** to perform.

In popular music & rock, there are 2 forms of transcription. Individual performers copy a note-for-note guitar solo or other melodic line. As well, music publishers transcribe entire recordings of guitar solos & bass lines & sell sheet music in bound books. Music publishers also publish PVG (piano/vocal/guitar) transcriptions of popular music, where melody line is transcribed, & then accompaniment on recording is arranged as a piano part. Guitar aspect of PVG label is achieved through guitar chords written above melody. Lyrics are also included below melody.

2.2.1 Adaptation

2.2.2 Transcription aids

2.2.3 Automatic music transcription

” – [Wikipedia/transcription \(music\)](#)

3 Miscellaneous