Technology Enhanced Learning of Musical Instrument Performance

From 2016-02-01 to 2019-01-31, closed project | TELMI Website

Objective

Learning to play a musical instrument is mostly based on the master-apprentice model in which the student’s interaction and socialization is often restricted to short and punctual contact with the teacher followed by long periods of self-study resulting in high abandonment rates. In such a learning model, modern technologies are rarely employed and almost never go beyond audio and video recording.

The main aim of the TELMI project is to study how we learn musical instruments, taking the violin as a case study, from a pedagogical and scientific perspective and to create new interactive, assistive, self-learning, augmented-feedback, and social-aware systems complementary to traditional teaching. As a result of a tightly coupled interaction between technical and pedagogical partners, the project will attempt to answer questions such as “How will the musical instrument learning environments be in 5-10 years time?” and “What impact will these new musical environments have in instrument learning as a whole?” The general objectives of the TELMI project are: (1) to design and implement new interaction paradigms for music learning and training based on state-of-the-art multi-modal (audio, image, video and motion) technologies, (2) to evaluate from a pedagogical point of view the effectiveness of such new paradigms, (3) based on the evaluation results, to develop new multi-modal interactive music learning prototypes for student-teacher, student only, and collaborative learning scenarios, and (4) to create a publicly available reference database of multimodal recordings for online learning and social interaction among students. The results of the project will serve as a basis for the development of next generation music learning systems, thereby improving on current student-teacher interaction, student-only practice, and furthermore providing the potential to make music education and its benefits accessible to a substantially wider public.

Related information

Result In Brief

Music learning tunes in to the wisdom of sports methodologies

Report Summaries

Periodic Reporting for period 2 - TELMI (Technology Enhanced Learning of Musical Instrument Performance)
Coordinator

UNIVERSIDAD POMPEU FABRA
PLACA DE LA MERCE, 10-12
08002 BARCELONA
Spain
EU contribution: EUR 748 375
See on map

Activity type: Higher or Secondary Education Establishments
Contact the organisation

Participants

UNIVERSITA DEGLI STUDI DI GENOVA
VIA BALBI 5
16126 GENOVA
Italy
EU contribution: EUR 393 750
See on map

Activity type: Higher or Secondary Education Establishments
Contact the organisation

ROYAL COLLEGE OF MUSIC
PRINCE CONSORT ROAD
SW7 2BS LONDON
United Kingdom
EU contribution: EUR 608 175
See on map

Activity type: Higher or Secondary Education Establishments
Contact the organisation

HIGHSKILLZ LIMITED
27 WESSEX GARDENS
NW11 9RS LONDON
United Kingdom
EU contribution: EUR 513 750
See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

SAICO INTELLIGENCE S.L.
MURALLA DE LA PRESO 1, 3R, 2A
08302 MATARO
Spain
EU contribution: EUR 353 375
See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation