

October 6, 2022

Via Hand Delivery

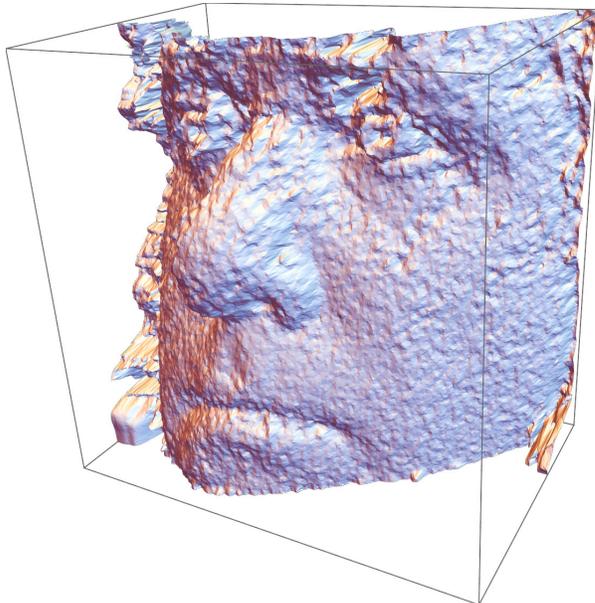
Tool Dissectional, LLC
2311 W. Empire Ave.
Burbank, CA 91504

Re: Computer vision opportunity
Unsolicited proposal

Dear TOOL,

This follows my letter of September 30, 2020 concerning an unsolicited proposal for scientific analysis with performance motion capture of portions of your catalog.

In the two years since my letter, I have been working on a novel computer vision system using stereoscopic industrial cameras to generate 3D models for use in statistical analyses as well as convolutional neural networks. The advantage of the new system is that it is completely passive and does not require any extra effort by or equipment for the subject/performer. I renew the proposal here, which would be a lot simpler and a lesser ask of you than the original suggestion of filming in a motion capture studio. As an example, here is a high resolution 3D model of a face generated purely from image processing of stereo pairs extracted from the industrial cameras that I use:



This 3D model is of extraordinarily high quality considering that the cameras are medium resolution and observe the scene completely passively, with stereo pairs such as these:



The ask here is simply to film one of the band's rehearsals with stereoscopic cameras on each player in order to generate and analyze 3D models of the band playing.

From this, I expect to process the images and generate 3D models that permit analysis of patterns during the performance. The research portion of the project hypothesizes that there are overarching universal patterns in the performance of music, which of course seems like a great fit for the mathematical elements of your songs. I am not sure what the analysis of the captured data will reveal before it is captured, but whatever it shows could be novel and potentially result in publications regarding timing, geometric patterns, and similar components of musical performances. Although there is motion capture research out there in the context of music, I am not aware of any bands who are at the level of TOOL's technical ability having participated in any such research. I am also not aware of any computer vision-based statistical analyses of musical performances at this level, which is at 60 frames per second using a pair of small, medium resolution industrial cameras on each player:



Of course there is a profit motive here, however, that is secondary to the scientific study of musical performances. In that connection, I am prepared to (1) involve TOOL in every aspect of the research side of the project, if desired, which may include publications in music theory, (2) handsomely compensate the principal participants through a combination of up-front payments and

percentages, (3) pay for the entirety of the production including consultants, equipment, transportation, and so on, and (4) offer TOOL pre-publication review and also "final cut" on the released portions of the project.

The time frame is approximately Spring 2023 due to the complexities of putting the project together. The full proposal will be spelled out in detail in a subsequent letter in the event there is any interest in this concept. Please let me know your level of interest, if any; either way, I wish you the best and I would like to thank you for your continuing great work in music.

Sincerely,

Andrew G. Watters

Andrew G. Watters