

Tied Threads

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A TERMINAL PROJECT

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in partial fulfilment of the requirements for the degree of

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“Tied Threads,” a project prepared by Peiyue Lu in partial fulfillment of the requirements for the Master of Music degree in the School of Music and Dance. This terminal project has been approved and accepted by:

Chi Wang, Chair of the Examining Committee

Date

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Accepted by:

Director of Graduate

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Tied Threads

TABLE OF CONTENTS

1. PDF file titled “Peiyue_TerminalProject_Contents”
2. PDF file titled “Tied_Threads_Project_Description”
3. PDF file titled “Tied_Threads_Performance_Instruction”
4. MOV file titled “Tied Threads.mov” – performance of the piece
5. AIF file titled “Tied Threads.aif” – audio recording of the piece
6. Files that along with “test123_0303j2.ktl” in folders are titled:
 - “flute_Shaku” – contains 9 audio files
 - “From Kyma Folder” – contains 4 audio files
 - “HA_ES_flag_p” – contains 7 audio files
 - “long” – contains 11 audio files and 1 Kyma spectrum file
 - “Percussion” – contains 10 audio files and 2 Kyma spectrum files
 - “Section2” – contains 5 audio files
 - “Short” – contains 14 audio files
 - “Woodblocks Samples” – contains 8 audio files
7. KTL file titled “test123_0303j2.ktl” – Kyma Timeline file to perform piece
8. Max Patch file titled “Double GT 8”

ABSTRACT

Tied Threads is an interactive composition for two Gametrak controllers and Symbolic Sound's Kyma. The title of the piece reflects two layers of meanings: first, the performance actions of the piece concentrated on pulling out and tying up the strings from the Gametrak controllers; second, *Tied Threads* is derived from a Chinese idiom “丝丝入扣”, which can be translated as “all threads neatly tied up”. “丝丝入扣” has the metaphoric meaning of doing things with meticulous care and flawless artistry, and often used to describe literature, artistic work, and music that are regarded as exquisite, deliberate and vivid.

In this project, I intend to re-imagine ways of controllers' performance embodiment and ways to engage data streams. By incorporating microphone stands and two Gametrak controllers in different physical placements, I am able to create unique data streams, performance actions, and sound control mechanisms. Two Gametrak controllers function as the data acquirement interface of the data-driven instrument system, through the software layer created in Max and sound producing algorithm created in Kyma. The data streams controlled by the Gametraks are eventually routed to multiple musical parameters. For instance, pulling strings and breaching threshold can trigger musical events swinging strings up-down and left-right can change the pitch, timbre, and time index of the sound in this composition. The data from Gametrack controllers are derived using custom software created in Max/MSP and then sent to Kyma via high-resolution MIDI protocol. Sound materials used in *Tied Threads* are recordings of Shakuhachi, Bamboo flutes, percussions, and processed mechanical sound.