

Gestural Melody: New Tools for Music Composition

Innovative Instructional Technology
from Purchase College

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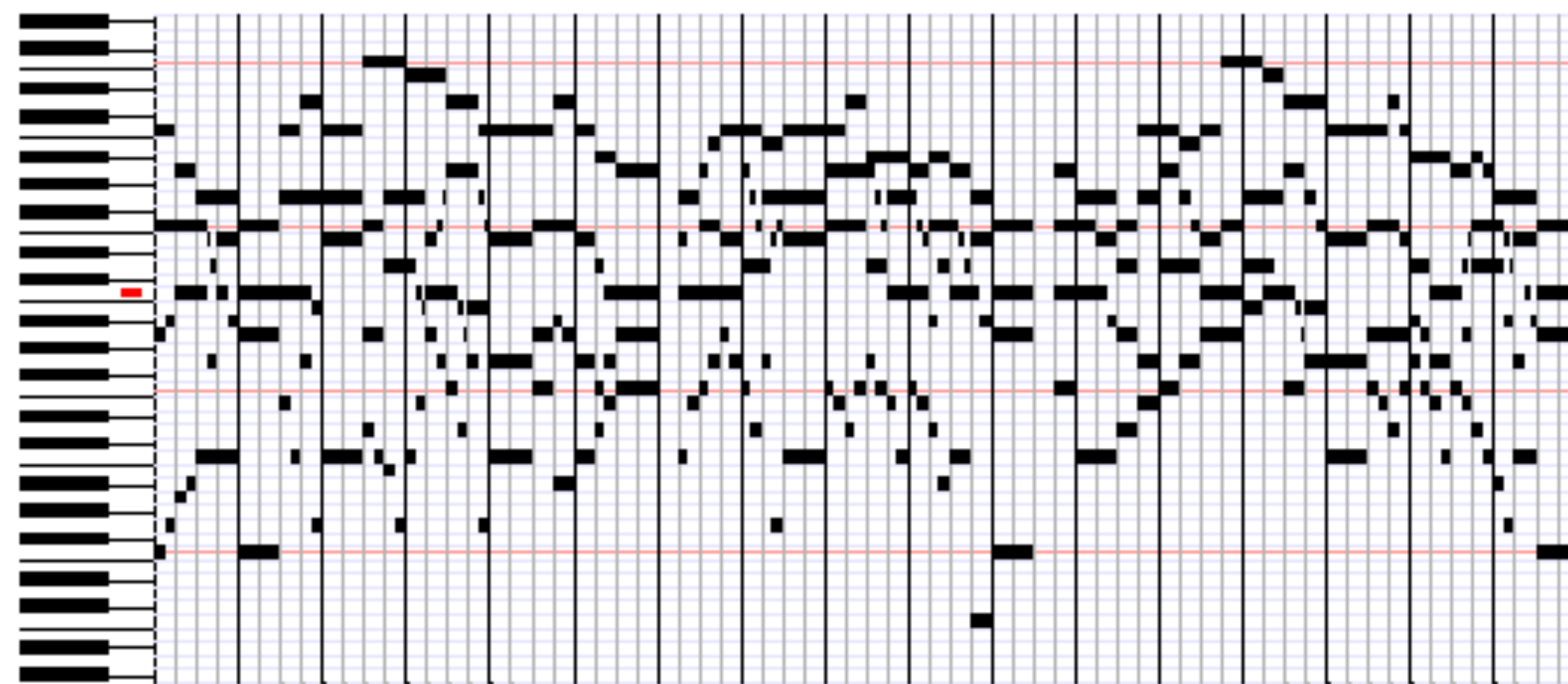
Keith Landa, Director of Teaching, Learning and Technology Center

Introduction

Melody is one of the most elusive techniques of the art of music. The teaching of melody remains as elusive as melody itself.

While technology has created significant change in music, current music software still requires a long, steep learning curve that can discourage melodic inspiration.

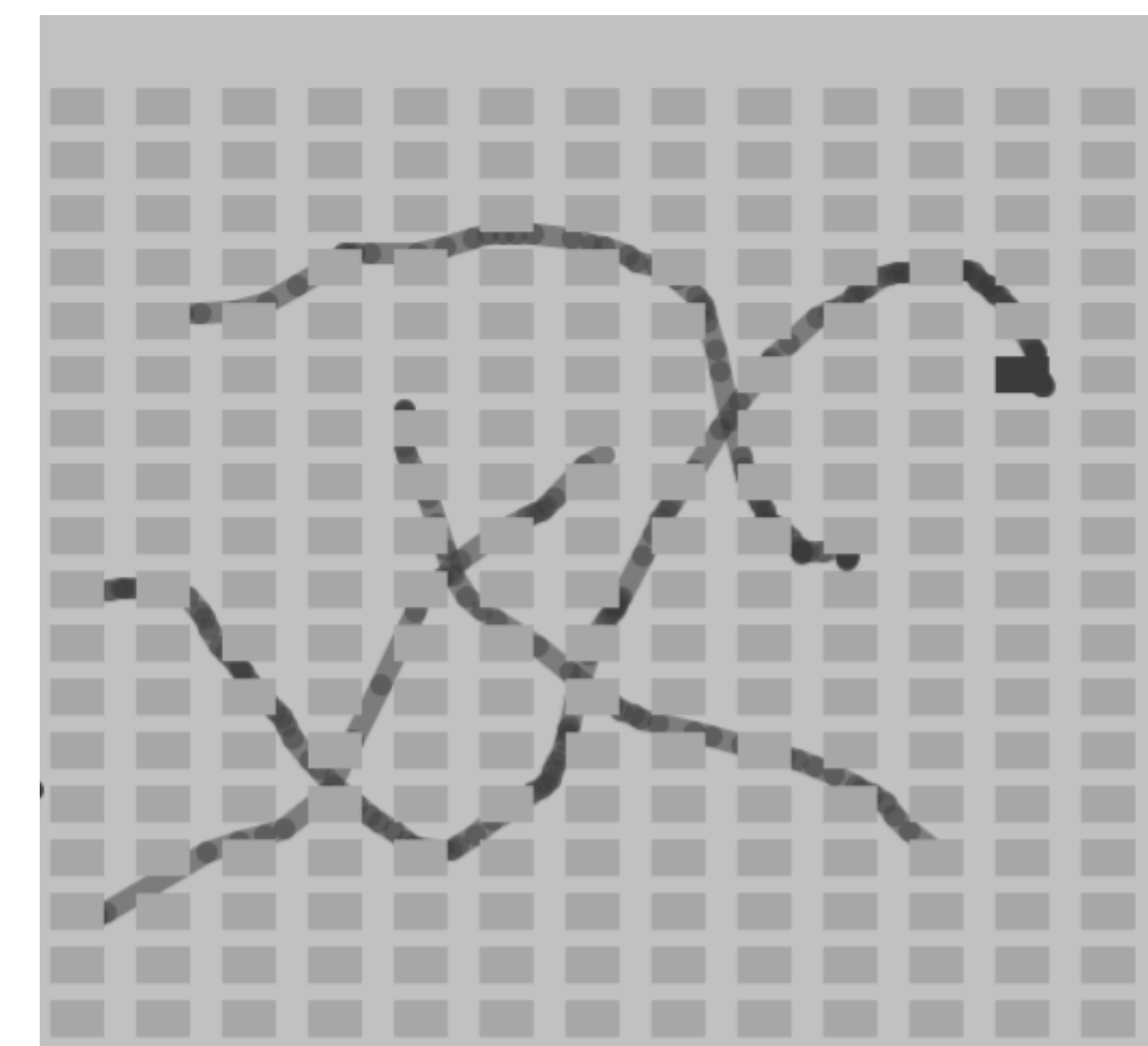
Current technological tools easily overwhelm the quotients of musical play that attract and engage us, while conventional music notation assumes strict graphical rubrics of pitch, temperaments and temporal subdivision.



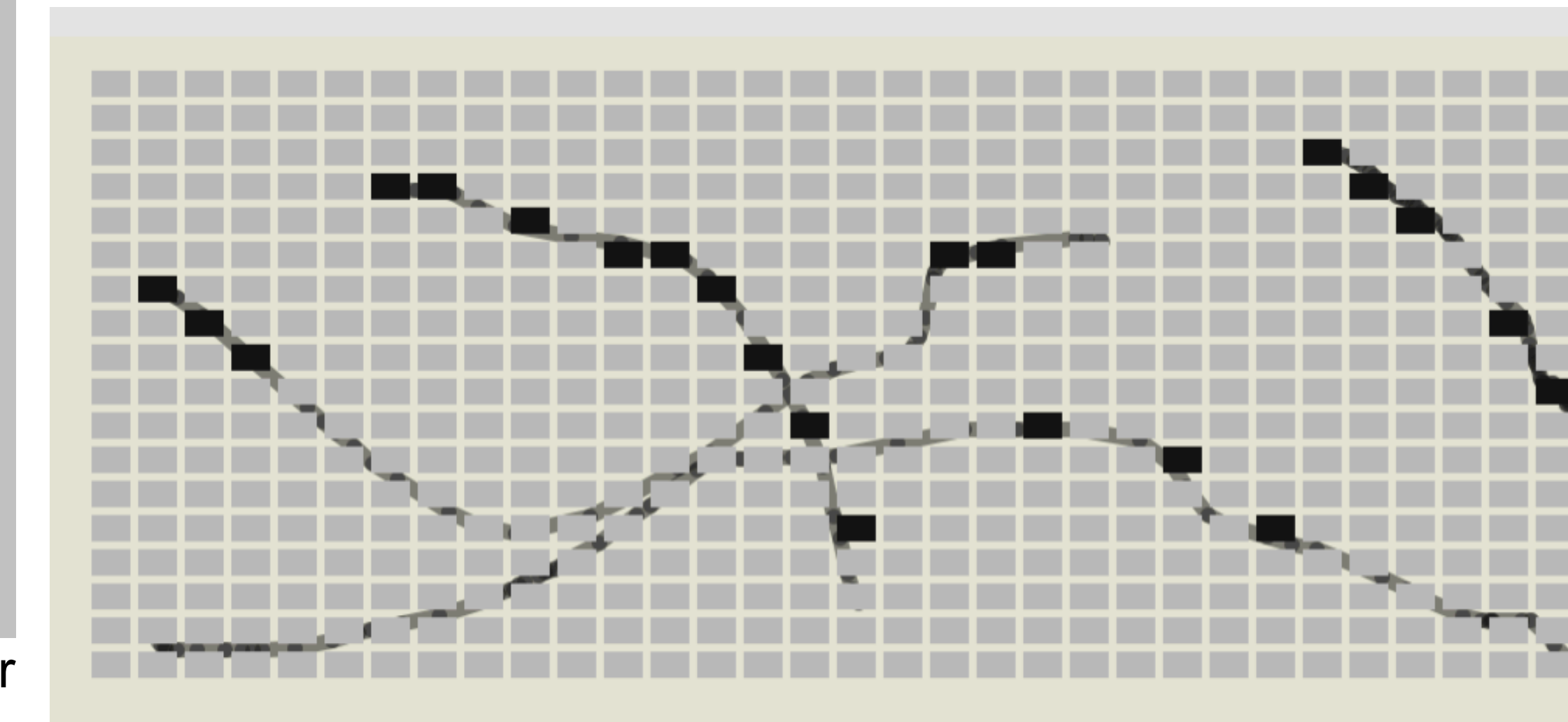
JS Bach, Fughetta in F major, BWV 901, excerpt, MIDI piano-roll notation



JS Bach, autograph, Concerto in G minor, BWV 1001, excerpt



Sensing finger gestures and mapping their locations on a grid.



Tracking monophonic note values based on gestures. Each column of blocks behaves individually with any new touch, replacing previous touches.

GMI design

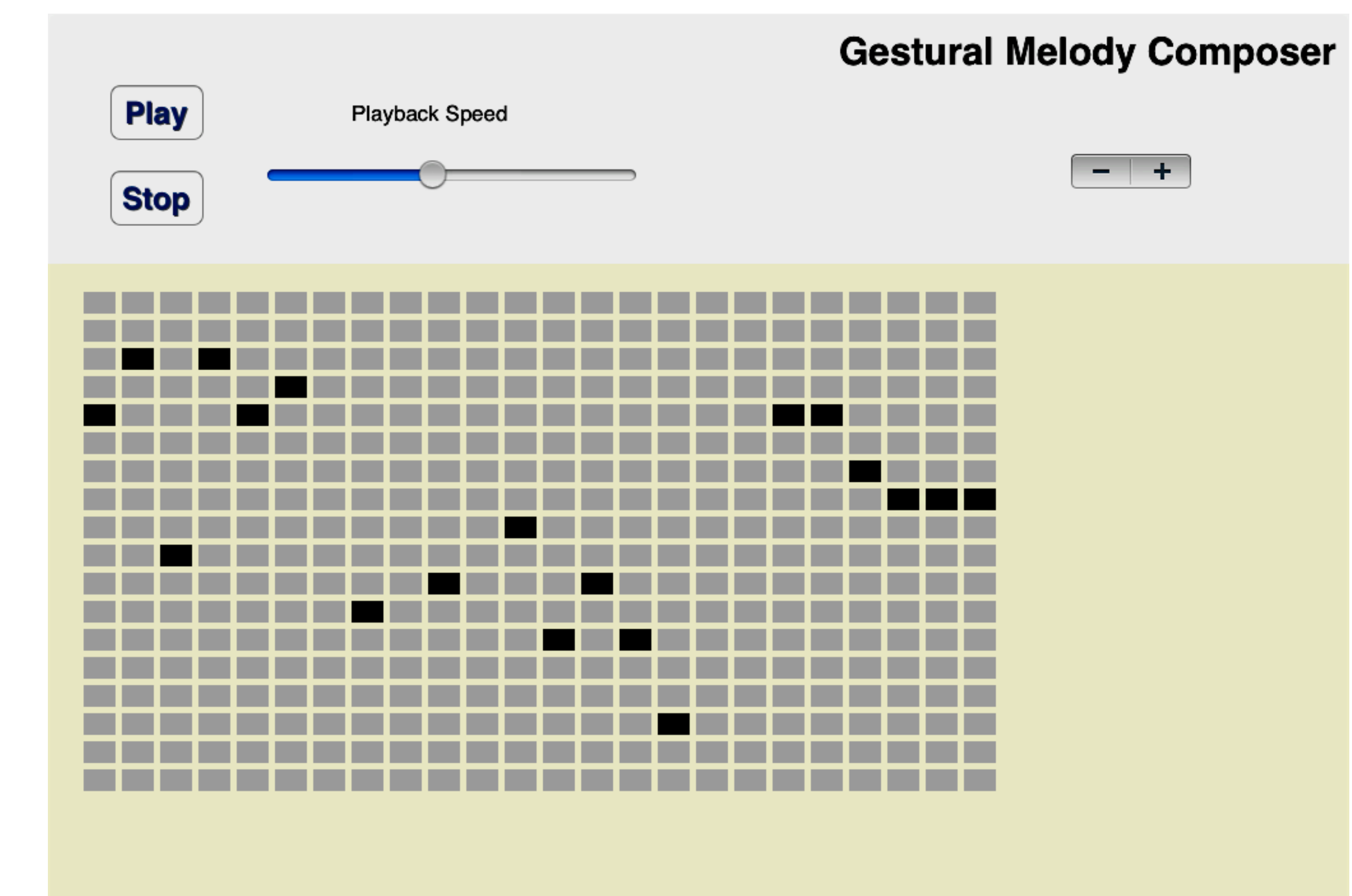
- iOS
- Xcode
- Objective C
- An array of arrays
- P8 + P4 compass
 - Variable tempo
 - Variable arrays
 - Loop/Edit
 - Monophonic
- Simple timbres

Gestural Melody Interface specifications

- shall be a learning tool that encourages melodic craft
- must incorporate transparency and ease
- must be intuitive and immediate
- should not allow complex timbres
- will use simple hand motions on a touch-activated tablet
- should not use notation or code entry in any way
- will encourage organic processes of musical play, variation and change
- must possess an open, clear GUI

GMI Evaluation

- Initial faculty evaluation complete
- Student beta-testing ongoing
- Pedagogical assignments given
- Beta evaluations designed
- Interest from Westchester United Cerebral Palsy Institute
- To be continued in summer and fall, 2013



Final product with Play/Stop buttons, playback speed control and adjustable number of notes in a playback loop.