Carillon
Rob Hamilton and Chris Platz

Carillon is a networked instrument/environment designed to be played by multiple performers. Hand gestures tracked by the Leap Motion control the motion of the instrument's gears, each of which drives a sound-generating process. Each interaction is further heightened through the depth of field displayed using the Oculus Rift HMD. The Carillon itself performs a sequence of bells (as carillons often do) while being accompanied by the laptop orchestra. All sounds generated by the Carillon are modified Risset bell models realized in Pure Data.

Carillon was created using the Unreal Engine. Special thanks to the team at Leap Motion for their support.

Mesocosm
Kenneth Qin, Trijeet Mukhopadyay

A microcosm is considered to be a miniature replica of a larger system, the macrocosm. But since any "-cosm" is inevitably contained within another, the prefixes "micro-" and "macro-" may only be used to describe the relative positions of two systems within a series of infinitely nested systems. *Mesocosm* features an ensemble of marimbas, oriental percussion instruments, and a harmonic soundscape to explore the way that we perceive scale.

Stanford Laptop Orchestra (SLOrk)

Stanford Laptop Orchestra (SLOrk) presents
SLOrk in the Bing (2015)

May 30, 2015, Saturday 7:30 p.m.
Bing Concert Hall, Stanford University

Ensemble
Luigi Balbo Bertone di Sambuy I Lewin Carey I Robert Colcord
Erica Fearon I Andrew Forsyth I Ethan Gellar
Matt Horton I Janna Huang I Trijeet Mukhopadyay
Tim O’Brien I Kenneth Qin I Nathaniel Shak
Trisha Shetty I Byron Walker

Ge Wang and Madeline Huberth, Directors
Farger of Former
Byron Walker, Erica Fearon, Robert Colcord

The paths of our lives are more predetermined than we would like to admit. We are born, we go to school, we work...we die.

Players move around the stage in colored shapes, triggering a rhythmic cacophony of sounds. From this interaction comes the title, "Colors and Shapes" in Norwegian.

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Sonic Canvas
Trijeet Mukhopadyay

Have you ever wondered what it would be like to paint music? Sonic Canvas couples the idea of real-time collaborative painting with generative music synthesis, bringing forth a dimension of artistic expression to the almost childlike act of finger-painting. Experience art in a new form.

Civitas
Luigi Balbo Bertone di Sambuy, Trisha Shetty

It all started from an instrument that sampled a field recording of Rome. From that, our piece has evolved into an ensemble of different sounds captured from cities of all over the world. Civitas is Latin for city, and this ambient, evocative piece captures the dynamic essence of the urban lifestyle. Using a combination of comb and bandpass filters, we add life to the recordings by transforming them into melodic pads.

Wyvern
Matt Horton, Andrew Forsyth

Chapter 1 - Soldiers at the Ready
Soldiers enter and prepare their bows.
Soldiers pull back their arrows.

Chapter 2 - The Wizards
Wizards enter and conjure their spells.
Wizards enter fighting stance.

Chapter 3 - War of the Factions
The factions take turns trading attacks.
Each side suffers losses.

Chapter 4 - The Dragon Awakens
The Dragon screams and flaps its wings.
The Soldiers and Wizards freeze in horror.

Chapter 5 - A Common Cause
Soldiers and Wizards attack the dragon together.
As a last resort, the Soldiers fire the trebuchet.

Chapter 6 - Honoring the Fallen
A single living Wizard conjures a healing spell.
The other Wizards join him in healing.
The Soldiers rise and disassemble their weapons.
They end their recovery together.

Gravity
Nathaniel Shak, Tim O'Brien

This piece explores the simple motif of bouncing balls. We journey through sonic spaces via different percussive sound material, creative time warping, and imposed harmonic structure of varying degrees through comb filtering. Invisible ping pong balls give way to stochastic rhythms, familiar harmonies, and unfamiliar trajectories before circling back to a chaotic, percussive denouement.

Lintelligent Birds
i. Sawteeth I
ii. Birds
iii. Distributed Birds
iv. Harmonized Birds
v. Bird Chorale/Solos
vi. Sawteeth II
Janna Huang, Lewin Carey, Ethan Gellar

Lintelligent Birds is a piece that utilizes OSC messaging over ethernet to manipulate recorded birdsong. The piece is focused on creating a sort of 'uncanny valley' effect, placing varied, minuscule changes on standard recordings of birdsongs across 13 laptops that sum together into something more alien. It is inspired in equal parts by Olivier Messiaen's study of birdsong and Gyorgy Ligeti's concept of micropolyphony.