Art Gallery

Venue
Macau University of Science and Technology Avenida Wai Long, Macau
Room 108, Library Building, Block N, 1st Floor, Services Communication Area

Dates & Times
- 5 December 2016: 10:00 – 19:00
- 6 December 2016 – 7 December 2016: 10:00 – 18:00
- 8 December 2016: 10:00 – 16:00

Agitato
Project Agitato attempts to represent the evolving music information within a single image frame, in the hope to capture the subjective and perceptual qualities of time expressed in music. The title of the project, named from the music term agitato, depicts the restless agitated style of the music. Each image in this series is generated based on a musical passage from Nicolas Scherzinger’s ‘inter-sax-tive’. For a given moment in time, its spectrum of frequencies is analyzed and used as the input to construct visual elements with various characteristics. As the music progress, the visual elements accumulate and are composed into a single image that reflects the music material within a defined duration of time, allowing viewers to perceive music passage from a single viewpoint, rather than as a linear experience of time.

Artist(s):
Rebecca Ruige Xu, Syracuse University
Sean Hongsheng Zhai, Red Dot Blue Square LLC

Convolution by Wild System
A child-sized robot sits immersed in a full-room projection of an evolving audiovisual virtual environment. The robot ‘talks’ to the virtual environment, telling of its impressions and what it would like to see and hear. People come and go, talking with the robot about the virtual environment, and showing it pictures on their phones. The robot learns these impressions and talks of them to the virtual environment, which evolves in response.

Convolution by Wild System is a unique artwork where a robot collaborates with humans to create an ever-evolving immersive audiovisual virtual environment.

The resulting artwork dissolves the boundaries between computational and physical phenomena, displaying an aesthetic that is a real hybrid of the physical and the digital, of human and machine learning, of natural and artificial intelligence, and of real and synthetic.

Artist(s):
John McCormick. Deakin University, Australia.
Adam Nash, RMIT University, Australia.
**Time Machine**

Time Machine is a work constructed on the principles of zoetropes. Through the use of a 200w motor to control speed and rotation, in combination with a pulsating strobe light, the artists create the optical illusion that 15 separate frames of an animation are actually connected. A small step motor added to the work references a number wheel, which spins separately from the animation, so that that the viewer understands the work as being about expanded time.

**Artist(s):**
YouSuk Kim, Soongsil University
HuiBeom Yu, Soongsil University
JungHwan Sung, Soongsil University

**The Unbearable Lightness and Heaviness of Being**

In the sculptural installation, “The Unbearable Lightness and Heaviness of Being”, rapid prototyping machines were used to print the 3D forms; these sculptures are installed in unique formations with other natural materials.

This work contains conceptual and formal contradictions. Conceptually, it embodies an existence of opposing forces - depicting organisms in flight, but rooted. Structurally, the natural and synthetic are fused; fragile, intricate forms made of plastic and advanced digital technologies are juxtaposed with organic matter.

**Artist(s):**
Yuko Oda, New York Institute of Technology

**Journey through the centre_01**

My digital sculptures are born out the direct manipulation of geometry in a multi-dimensional cyber space where material, as we understand it, does not exist. In the cyber environment 3D entities may be encouraged to behave in ways not achievable through physical means, being located in an area that exists beyond the imagination and everyday experience. These virtual sculptures, made manifest through 3D printing technology, are grounded in a material form and act as a vehicle which transports us to this strange and wonderful “other place” where unpredictable and surprising events occur. It is as if modelling space with light, in an environment where physics play no part, freeing form from material constraints, and transcending our given understanding of how objects behave in the world.

**Artist(s):**
Professor Keith Brown, Manchester Metropolitan University, Faculty of Art & Humanities, Manchester School of Art, Dept. Fine Arty
**One-Stroke**
A character is a two-dimensional symbol. Also, it is a static image. But we cannot write a character without moving our bodies and spending time. Thus, character potentially has a time axis. In order to reveal this time axis, the device called "Mojigen" was created. Mojigen writes alphabets in the air by the trajectory of the coil springs operated by eight robot arms. By changing the point of view, we can notice that a character has a time axis with dynamic moves.

**Artist(s):**
Yuichiro Kastumoto, Interactive & Digital Media Institute, National University of Singapore

*This research is supported by the National Research Foundation of the government of Singapore under a funding initiative from the Interactive Digital Media Programme Office.*

**MovISee**
MovISee is a digital software for people to create personal visual outputs. We use a depth camera to create mixed reality for people to explore the selected information and ultimately transform their understanding the ability of their body movement to create composite customized visual outputs. In short, it is a system to recreate information and explore personal creativity. The results reveal the sedimentary relative movements through filming; time and space are deconstructed to the extent that meaning is shifted and interpretations become multifaceted; multi-layered images are created in which the fragility and instability of our reality is questioned.

**Artist(s):**
Yen-Ting Cho, National Cheng Kung University

**Bodygraphe**
Bodygraphe is an interactive, visual music application that unifies gestural computing with live performance art. Dancers become instruments and conductors that wholly generate graphics and sounds that correspond with their movements in real time. This video is the result of a process in computational aesthetics that explores the relationship between the body and form. Most specifically, we were inspired by visual art avant-gardes that prioritized expressive geometry, such as the Neo-concrete movement of the 1950s. Through this project, we seek to make an aesthetic statement while also offering new implications for research regarding the interconnectivity between body and technology.

**Artist(s):**
Esteban Garcia Bravo, Purdue University
Tim McGraw, Purdue University
Aaron Zernack, Castle Bravo Tapes
**Forces in Equilibrium**
Forces in Equilibrium explores how equilibrium is formed out of chaos. The installation is comprised of two components. In the first component, a sensor is mounted under the top of a pedestal. When magnets are moved on the pedestal, images and sound on a nearby display become wild and unstable, as if the magnet has unusual powers. The second component is a seesaw controlled by a servomotor. When laser light lands on the seesaw, it tilts accordingly, as if the light has weight. The art works show both magnetic force and laser light as not merely ethereal but as entities capable of affecting images, sounds and movements.

**Artist(s):**
Wei-Chun Chen, Taipei National University of the Arts
Su-Chu Hsu, Taipei National University of the Arts
Yu-Hsiung Huang, Taipei National University of the Arts

**Light Storm PLUS**
In the analogue world, electronic signals are based on waveforms. Transmissions of sound waves, light waves, and water waves, all use waveforms to transmit vital information directly related to energy distribution, making waveforms an integral part of our daily lives. The art work Light Storm PLUS uses power generated by waveforms to control the motor of a high-speed rotation device transmitting electroluminescent (EL) cold light. The artwork replicates the shape of wave forms in the real world, thus the light waveforms fluctuate with same rhythm as they do in the analog world. Through interacting with the artwork, people sense that their bodies are key to the transmission of data, as they become active components in the feedback loop, but also become part of the mechanism of transmission.

**Artist(s):**
He-Lin Luo, National Taiwan University
I-Chun Chen, Tapaei National University of Arts
Yi-Ping Hung, National Taiwan University

**Criss-Crossing The Divine/Interactive Spiral Vortex Paint Game**
Criss-Crossing The Divine/Spiral Vortex Paint Game is an interactive game installation conceived to address the ever-expanding religious intolerance fueling global wars. Attendees use interactive wands to curate topic-words and assign more or less importance to each topic they select. The player receives color coded scripture perspectives parsed from the individual’s search. No search results are the same. Directed to a website, the player learns from which 46,000 scriptures within The Old Testament, The New Testament, The Hindu Rig Vedas, The Quran, and Buddhist Texts, their color-coded text results originated.

**Artist(s):**
Nina Yankowitz, Artist & Director
Peter Koger, Software & Game Designer
Barry Holden, Project Coordinator
Mauri Kaipainen, Database Designer

Medallions
This work is a series of 3D-printed wall plaques featuring ornate shapes generated procedurally. The main purpose of this project is to sublimate a traditional beauty found in decorative ornaments into a modern algorithmic art by using a combination of procedural approach in Computer Generated Imagery (CGI) and 3D-printing technology which has been growing rapidly. Each medallion was generated by using metaballs which are a kind of modeling method in CGI. A drawing algorithm for metaballs was modified and optimized for generating ornate relief-like objects in this project. Also, regular-polygonal shapes were used for the process of density calculation in drawing metaballs. Generated patterns were converted into 3D models, and the models were 3D-printed finally.

Artist(s):
Joe Takayama, Musashino Art University

Notations
For the work, CYCLE, viewers can pluck the interactive kinetic instrument to instantly compose music and produce clefs on the projection screen. The clefs on the screen appropriate from the ancient clefs used in Gregorian Chants of the 15th century. Composed of these ancient clefs and tabs, each note is presented through squares, belonging to unaccompanied monophonic music clefs. The interactive mechanical instrument creates clefs using Arduino, Adafruit, Processing, Max/MSP, Bluetooth, LED, 3D printing, acrylic, and metal tubes, enabling viewers to instantly play the instrument on-site and create various clefs. The music generated is instantly converted into the correct clefs, which are projected onto the screen. When there are no viewers present, it will automatically play and present the sounds and clefs previously created by viewers, expressing the digital aesthetics of interactive technology art and collaborative creation, and imbuing digital kinetic instruments with more cultural and musical qualities.

Artist(s):
Johnson Liew, Interactive programming and interface design
Jie-Jun Zhu, Visual design
Jia-Ying Chou, Interactive sound design
Sheng-Chieh Wang, Kinetic installation design
Pey-Chwen Lin, Supervisor and art director

C. Bacon
C. Bacon is a set of interactive moving images based on a series of paintings on the theme of “Crucifixion” by Francis Bacon(1909-1992). Starting with the mysterious aesthetic language of Francis Bacon, this work attempts to build dialogues between the virtual and reality, postmodern technology and contemporary authorship, and between machine and human.
Artist(s):
Wu Jiaru, City University of Hong Kong

Ink Fall
Ink Fall is a digital installation of ink painting of waterfall. From ancient times, China has a tradition of using ink to draw waterfall paintings. And the core concept of mountain and water paintings is never about accuracy or beauty of a moment. It is about the flowing atmosphere that make Chinese paintings unique. This installation, uses thousands of lines and hundreds of thousands of ink particles, to paint ink paintings on screen. Though expression methods have also changed dramatically in this digital age, what I want to show and communicate is almost the same as the ancient artists do in this piece. When fingers touch the painting(screen), ink streams will be separated by fingers, particles are also blasted, but the flow of ink continues. At the same time, the sound of koto rises and fused into the background music of birds and water flows harmoniously.

Artist(s):
Seph Li

Homes
Homes presents the interior spaces where people from the fishing village of Tai O live. The installation includes the everyday objects with which they surround themselves. Two LCD monitors show virtual interiors of two village houses. Visitors to the installation can wander these virtual interior spaces by using trackballs attached to each screen. A large photo showing the street where the houses are located is on a facing wall.

Artist(s):
Tamas Waliczky, City University of Hong Kong
Anna Szepesi, Independent curator
Jane Prophet, Goldsmiths College

Luminescent Tentacles
The Luminescent Tentacles is an interactive art that is inspired by waving tentacles of sea anemones under the sea. The 256 shape-memory alloy actuators react to hand movement and the top of the actuator softly glows like a bioluminescent organism. Each actuator is actuated by three shape-memory alloy wires. The actuator can bend in six directions by the combination of three currents. The control application interacts with fluid dynamics to realize a kinetic representation like a water ripple. The sound reaction to hand movement creates music. The Luminescent Tentacles provides a comfortable interaction like interacting with sea anemones.

Artist(s):
Akira Nakayasu, Kanazawa College of Art
**NARCISSUS**

NARCISSUS is an experimental video and series of large format prints created using the Kinect sensor and Processing 2.0. The works explore the nature of love and tension in the line. The ambiguity of perspective in 3D imagery makes it appear as if the main character in the piece is both lover and loved at the same time, reinforcing the idea of a passionate need that cannot be fulfilled. This work is inspired by a 1976 drawing of Colombian artist Luis Caballero, who died of AIDS in 1995, whose work was a painfully ecstatic, homo-erotic portrait of a generation that was just coming out of the closet. Almost 40 years later, we find ourselves in a Lipovetskian era, where narcissism appears to counterbalance the erotic angst. The actor’s performance is altered due to the usage of technologies that question the traditional role of the video camera’s single point of view.

**Artist(s):**
Santiago Echeverry, University of Tampa

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**Sympathist**

"Sympathist " attempts to explore scenery as imagined by our brains. In the installation of this bizarre illusion, the unique data and variables of brain waves cause changes in illusions, where brain activity is visualized like cyberspace. The digital age has made cyberspace possible. We devote most of our time into cyberspace to exchange information and knowledge with other people. The prevalence of mobile devices and virtual reality headsets demonstrates that we are getting closer to this illusory space. These thoughts directly influence our brain waves. The civilization which we are so proud of has instead led humanity increasingly further away from the environment. Our five senses, originally meant to accept natural frequencies, have been allured by uncoordinated artificial and digital frequencies, to the extent that we are forgetting our original feelings. People have fallen into the endless loop of cyberspace without realizing it.

**Artist(s):**
Wei-Peng Kuo  
Chia-Hsiang Lee  
Jian-Wun Jhemg