## COLLISIONnine BOTbits\*

## Jewett Arts Center Gallery

Wellesley College, Wellesley MA

Curated by jackbackrack with Dan Paluska and Brian Knep

Exhibit: Feb 16 - Mar 8, 2006

Opening Reception: Thursday, Feb 16, 2006, 4.30-6.00pm

#### Introduction

The Collision Collective and Wellesley College present *Collision Nine Botbits*, an experimental exploration of art and technology. Collision Nine, the ninth event in the Collision series, showcases art from artists from MIT and beyond who use new technologies in their work. Nine pieces of art are presented by joe dahmen, ammon embry-pelrine, chris fitch, rob gonsalves, john hart, jackbackrack, elizabeth marley, dan roe, erica von schilgen, william tremblay, and ryan wartena.

C9 was originally presented at Art Interactive Jan 27 - Feb 12. C9 had the largest number of pieces of recent Collisions and represented a wide range of techniques and concepts! In contrast, this C9 Botbits show is a C9 sampler focusing on art pieces with robotic elements.

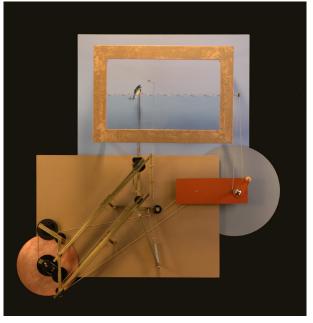
In general, Collisions are a showcase of envelope-pushing artwork in an interactive workshop/laboratory format. The artwork often involves never before tried technologies, concepts and installation approaches. It is an opportunity for Collision colluders to experiment and show new ideas and techniques and to discuss their work with and gather feedback from the public.

#### **Exhibits**

Tantalus Mackerel (2005)

Chris Fitch

Arlington, MA United States chrisfitch@rcn.com



Brass, fiberboard, lithotin cans, garolite XX, misc. hardware.

Approx. 54in X 54in

The story of Tantalus has been, since its Greek origins, a consistently applicable metaphor for the human condition. Tantalus angered the gods by trying to feed them the flesh of his own son, passed off as ambrosia. For this, he was chained to the bottom of a lake that reached to his chin. With luscious grapes drooping from vines above his nose, starving Tantalus was unable to enjoy either food or drink, as they were pulled away whenever he reached.

I wont go on about how I think this relates to American culture today, which suffers from a kind of self-inflicted hunger from unrealistic expectations. Nor will I attempt to make any connection between the story of Tantalus and our current global problem with mercury levels in deep sea fish, and how we are our own gods and are punished by our own actions when we poison our own food supply.

Let me just say, instead, that this piece is about a frustrated fish trying to catch a bug.

<sup>\*</sup>http://www.collisioncollective.org

#### Pigeons (2005)

#### Joe Dahmen Boston, MA USA jdahmen@mit.edu



birdseed, suit, video approx 3'x5'

Pigeons are often considered a public nuisance because they thrive where humans live in greatest density. Although they are often ignored by other inhabitants of the city, the behavior of pigeons can be read as a reflection of and commentary on the urban environment. The piece seeks to reverse the common treatment of pigeons, acknowledging their status as residents of the city while attempting to learn about the urban environment from them. Pigeons investigates the relationship of birds to the urban environment through video captured while wearing a special suit covered in birdseed. Exchanges on Boston Common with pigeons, which were recorded by surveillance cameras installed on the suit and an external observer, form the basis of a video documenting the piece.

Pigeons was developed in the Interrogative Design Workshop at the Center for Advanced Visual Studies (CAVS), MIT.

Pulling Pears from the Pond (2006)

erica vonSchilgen jamaica plain, MA USA vonicadesigns@yahoo.com



 $\begin{array}{c} {\rm mixed~media} \\ {\rm 3'x~2.5'} \end{array}$ 

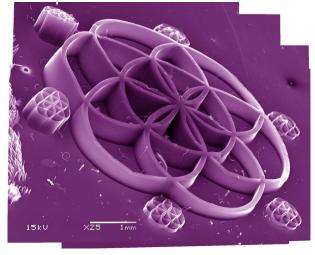
This mechanical collage is part of a series of works that incorporate found images and movement, creating an environment where the viewer can step into a place of child-like discovery. When the viewer triggers a push button the motor starts and a crank shaft turns, which makes each character in the collage move. A story is told in the movement.

# Growing Architecture: Initial Experiments (2005)

# Growing Architecture Collective

Earth

ryanwartena@yahoo.com



carbon nanotubes, laser print, wood, acrylic, LEDs 2 @ 2' x 2', box 6"x6"x6"

Architecture = Collective (plus) Nature (plus) Technology

By continuous technological intervention, the scripting

of space can be implemented by the machine, an architecture will grow in accord with algorithm, environment, materials and natural forces resulting in bottom-up assembly of systems of both static and dynamic geometries.

The application illustrated here follows the crystalline method, where carbon nanotubes follow a surface pattern of a catalyst film of Fe/Al2O3 where hydrocarbon (Ethylene, C2H4) decomposition takes place in an atmosphere also containing hydrogen and argon at 750 C. The combination of these tuned environmental conditions, reactants and catalysts and the process of energy minimization through crystallization results in the carbon nanotube structures presented. The first image is a test pattern of rectangular columns of different aspect ratios and the second picture consists of structures known as the seed of life and is the basis of the sacred geometric set (from which all crystal structures, the reproduction process, music theory and many other informational systems may be derived).

The methods and materials are only of the essence of constructing Growing Architecture. The other is the collective effort. We choose to put our heads together and collectively manifest. These samples and pictures, these boxes and frames, these words and ideas have all been a collective effort.

We are all more than we are named and so are you. In conjunction with architects, computer scientists, urban planners, chemical engineers, builders, material scientists, designers, mechanical engineers, and the artists in all of us, we are bringing to the world an accessible art form, and its natures ancient way to build and live.



Video Camera, Computer with Custom Software, Video Projection 3' x 6' x 3'

PixelPusher is an interactive video installation that continuously solves a real-time pixel puzzle. The user can change the size and speed of the pixels (puzzle pieces) by adjusting two sliders on a command console. The viewers image is captured by a web camera connected to a hidden CPU, processed, and displayed on a rearprojection screen. The system continuously processes the video stream by quantizing the image to the specified pixel size. Each group of (4x4) pixels forms a puzzle to be solved concurrently. The video projector, rotated 90 for a portrait style, is positioned under the floor. The projection screen is mounted on a steel frame. The web camera is mounted over the screen. The sliders on the command console are connected to an OOPIC controller to be read continuously by the CPU.

PixelPusher (2006)

#### **Rob Gonsalves**

Wellesley, MA USA robgonsalves@gmail.com http://www.deepdevices.com

#### Perseverate (2006)

# William Tremblay

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Aluminum, steel, fabric, plastic model kit, computer

8 \* 6 \* 3 ,

Perseveration is a repetitive response or thought after the cessation of the original stimulus. It is the consequence of unwavering resolve... Following verification on dot blots, 68 clones were confirmed with clear differences in expression between workers and soldiers. Workers have three developmental potentials: status quo molts in which they remain as workers; differentiation into the single-star presoldier stage (followed immediately by forced molting into the soldier stage); or differentiation into Six-Sigma, eyeless third-form reproductives that assume identical functions as second-form reproductives. Differentiation of the soldier caste is associated with a tremendous increase in body mass and musculature; particularly in the head, where a large muscle mass is required to drive the enlarged mandibles. We identified four externally implanted directive transcripts with high expression in soldiers: 1.) I will always place the mission first. 2.) I will never accept defeat. 3.) I will never quit. 4.) I will never leave a fallen comrade. The presence of logos, URLs or other information identifying private companies or other nonfederal entities does not constitute an endorsement by the Department of the Army or the Department of Defense. Raw materials such as iron can also be extracted from the ground.

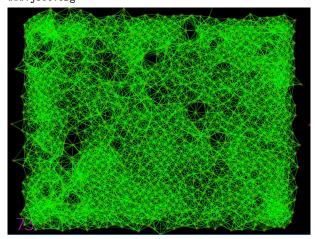
There is nothing at all behind the curtain, except

what's on TV.

#### Social Fabric (2006)

### jackbackrack

Cambridge, MA USA jackbackrack@gmail.com www.jbot.org



3d animation on computer, two lcd panels, one box 16x36x4in

A living skin created out of engineered emergence of a couple thousand mobile robots illustrating the tension between the individual and the community. The tissue fibers are formed by the radio connectivity of each robot. The robots attempt to live harmoniously but rebellious individuals create tears in the social fabric.

Social Fabric is written in a new programming language, called Proto, for describing group behaviors and engineering emergent phenomena. In this language behaviors can be mixed and in this artwork, individual and community oriented behaviors are expressed and combined.

The Proto language is joint work with Jake Beal. Thanks to Fran Trainor for help building the display case.

# Dragonfly With Leash (2005)

# Dan Roe

Cambridge, MA USA roedan@gmail.com http://www.danroe.net/



steel, solar engine 17 x 11 x 8"

This simple but sturdy solar dragonfly should readily make its way over a wide variety of urban terrain, and requires only minimal maintainance. This is a 3rd generation dragonfly, and the most powerful to date, with large light-gathering wings and a delicate though damage-resistant design.

Since this specimen was built with no on/off switch, it is advisable that it be kept on its leash.