DRAWING MACHINES

SIGGRAPH 2013 Educator’s Workshop
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Instructor Contact Info

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Jim Campbell’s Algorithm

INPUT
- WIND
- RAIN
- TEMPERATURE

PROGRAM
- INPUT INTERPRETER
- ALGORITHMS (INVISIBLE)
- MEMORY (INVISIBLE)

OUTPUT
- OUTPUT CONTROLLER
  - NUMBER DISPLAY
  - DYNAMIC GRAPH
  - DYNAMIC LIGHTING

COMPUTER SYSTEM

Electronic Kinetic Art
Mechanical Drawing Machines

Jean Tinguely
Metamatic
1959

http://www.youtube.com/watch?v=GOo5uq2fH6g
Mechanical Drawing Machines


Mechanical Drawing Machines

http://www.youtube.com/watch?v=5yumD0ezoVE
Mechanical Drawing Machines

Alfred Hoehn
Switzerland

http://www.youtube.com/watch?v=dPZ-Mpbn37U

http://www.fi.edu/learn/sci-tech/automaton/automaton.php?cts=instrumentation
Maillardet's Automaton

Computer Controlled Machines
Computer Controlled Machines

http://www.dwbowen.com/
Computer Controlled Machines

SIGGRAPH Art Gallery

Robert Twomey, 2013

Whew!

- A lot of variation in kinetic art drawing machines
- That’s just a sampling...
  - Random drawing machines
    - powered by pendulums, wind, mail carriers, etc.
  - Mechanical drawing machines
    - hand-cranked, motor driven, wind-up, etc.
  - Reactive drawing machines
    - use environmental sensors of some sort
  - Computer controlled drawing machines
    - range from random to precise
Our Agenda

- Activity one: Make sure everybody is up and running
  - Connect Arduino to an LED
  - Blink and fade the LED

- Activity two: Basic building blocks
  - Connect Arduino to a sensor (Potentiometer)
  - Connect Arduino to a servo

- Activity three: Have at it!
  - Use tools from Activities one and two to make your own drawing machine!

Our Target
Another Possible Target

Extra Slides

- Only if there's time...
Mechanical Drawing Machines

Tim Knowles
England


Mechanical Drawing Machines

Tim Knowles
England

Computer Controlled Machines

http://storyteller.allesblinkt.com/
Computer Controlled Machines

http://www.youtube.com/watch?v=T0EAvqCdP2s

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