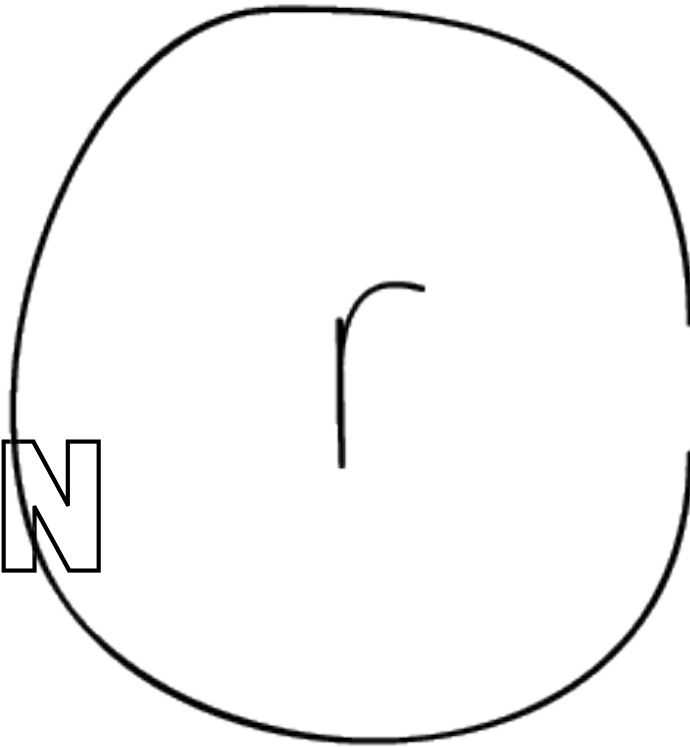
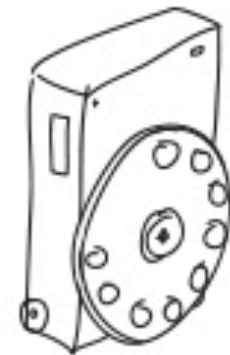
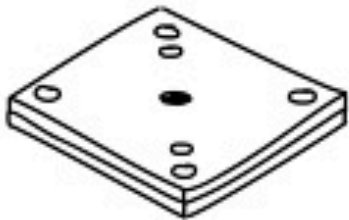


RICHARD

CLARKSON







New York + New Zealand product & furniture designer. Currently a Masters candidate at School of Visual Arts in New York, Richard has a Bachelor of Design Innovation in Industrial Design from Victoria University of Wellington. With a family background in farming and metal working industries Richard's designs offer an innovative perspective on traditional materiel ideologies and combine them with new technologies and opportunities.



Cloud Lamp
Cotton, Cloth Cord & Arduino.

On one hand, 'Cloud' is an Arduino-controlled, motion-triggered lightning & thunder performance. On the other, it is a music-activated visualizer and suspended speaker unit."

Acting as both a semi-immersive lightning experience, or as speaker with visual feedback, this nightlight/nightspeaker hybrid introduces a new discourse for what a nightlight could be.

Richard writes: "Advances in physical computing and interaction design hardware over recent years have created a new breed of smartobjects, which are gaining more and more traction in the design world.



ALSO!
Plywood, Carts, Rope & Acrylic
Here, Boom, Mask, Tiny, Warp & Lift

An interactive design intervention at WantedDesign, which the 16 SVA Products of Design MFA students designed, constructed and exhibited in the three weeks leading up to NY Design Week. Originally developed for Sinclair Smith's five-week Design Performance studio intensive, and the 2013 NYCxDesign festival. Through a constantly moving set of mobile interventions, visitors to the Wanted show participate in an unfolding narrative around storytelling, celebration, digital mediation, sustainability, and scale, each expanding the conversation around design beyond form, function and materiality and inviting those not familiar with the design world to actively take part in it.

VIDEOS

CLOUD MOTION SENSOR



<http://vimeo.com/54237175>

CUBE <http://vimeo.com/67526285>



BLOSSOM



<http://vimeo.com/84466106>

VIMEO

Recent advances in 3D printing now allow the simultaneous deposition of different build materials in a single print. In a similar way to nature, materials can be distributed seamlessly within objects for structural and functional advantage. “Blossom” explores the blending of two materials with varying physical properties transitioning from flexible to rigid. The variation offers an opportunity to generate complex forms and dynamic structures that are impossible to make by any other means.

The research into applications of these Digital Materials™ has resulted in what is believed to be the world’s first inflatable 3D print. Forcing air into the cavities of the print causes it to ‘bloom’ and thereby reveal the complexity of its physical structure. INDN 441 Supervisor: Tim Miller – Creative Digital Manufacturing. School of Design, Victoria University of Wellington. victoria.ac.nz/design

Designer: Richard Clarkson.

Supervisor: Tim Miller.

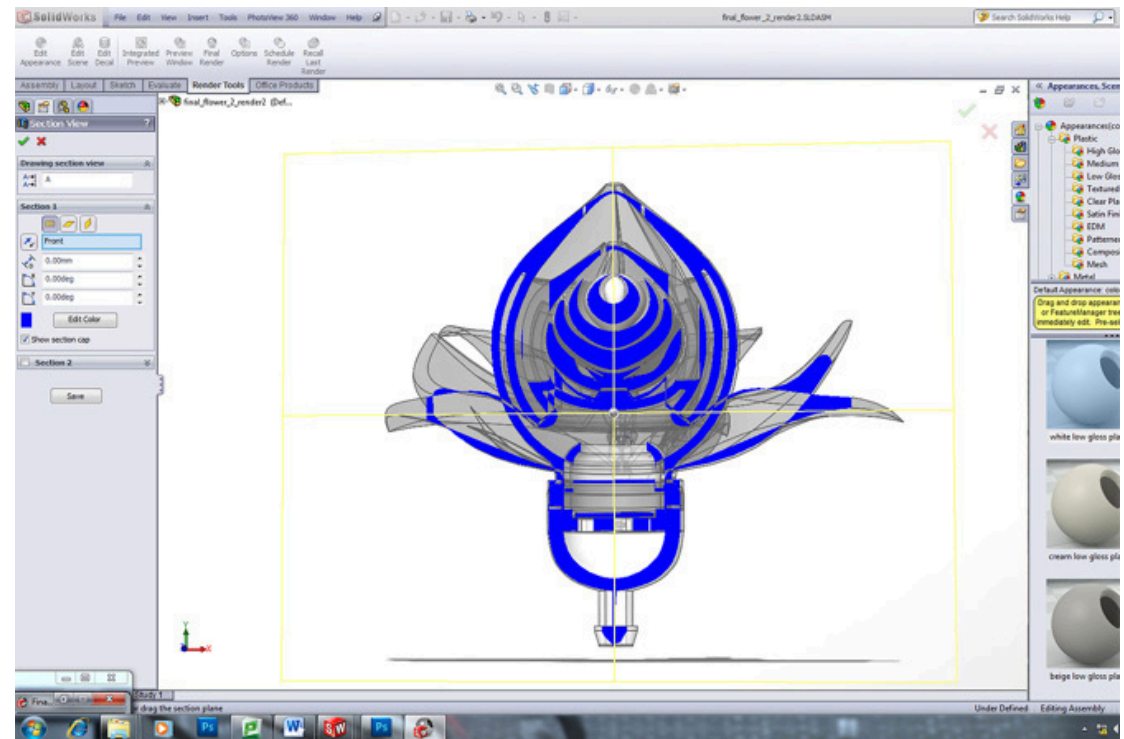
Video: Szliárd Ozorák.t

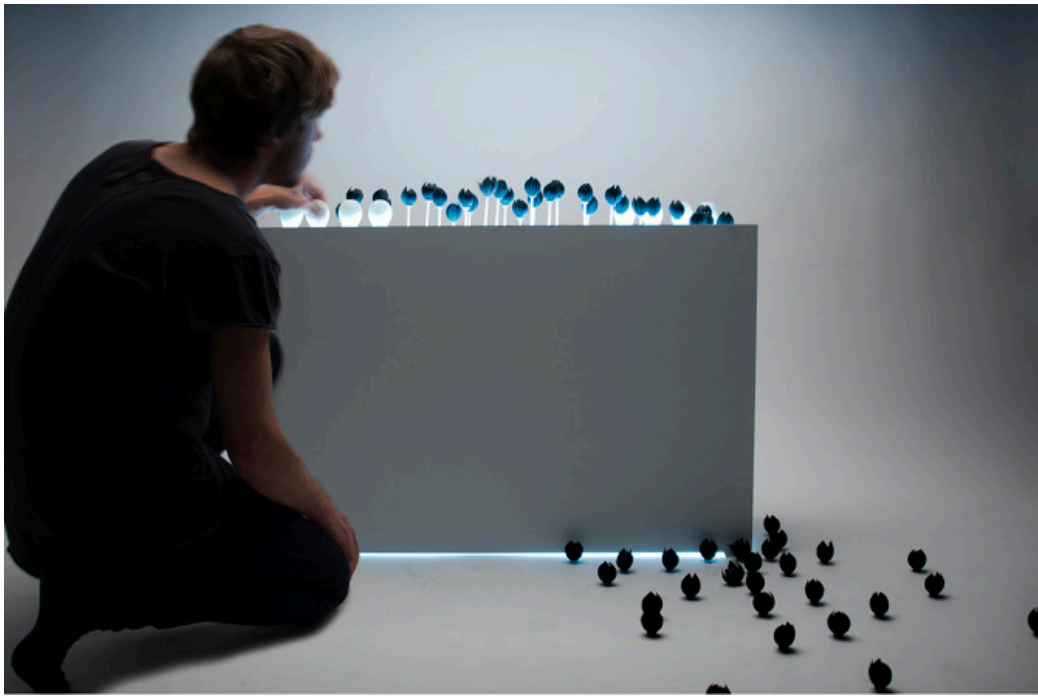


TRENDLAND

Richard Clarkson designed complex 3D-printed flowers blooming like real flowers. Recent advances in 3D printing now allow the simultaneous deposition of different materials in one single print. “Blossom” explores this blending of materials from flexible to rigid.

This is really going to change completely the way 3D printing is used in manufacturing and design as this variation offers a great opportunity to generate complex forms that were impossible to make before. “Seamless Blossom” is an interactive installation made without electronics, sensors or computer control but working only on air pressure. As users interact with small hand pumps the air is forced into curved, hollow petals that temporarily inflate and create a blossoming movement.





Clarkson said he chose a flower for this experiment because he wanted to model something organic from an entirely non-organic process



MATERIAL USED

3D Printer

Multi-Material 3D print (simultaneous deposition of different build materials in a single print)

Tango Black (Flexibel Rubber)

Curved, Hollow Petals

Air

Ink

Fullcure 720 (an almost crystal-clear, solid material)

Solidworks (design program)

http://www.core77.com/blog/digital_fabrication/richard_clarksons_awesome_blossom_is_blowing_up_the_story_behind_the_worlds_first_inflatable_3d_print_26354.asp

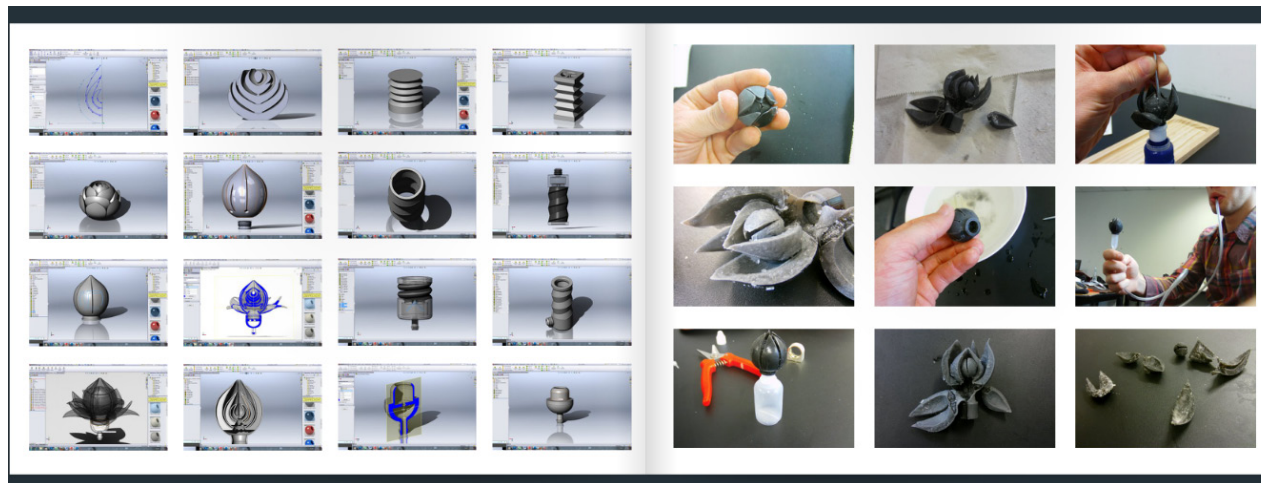
TECHNOLOGY USED

Blossom, the world's first inflatable 3D print, is an interactive installation with a group of closed flowers, blossoming when you pump air in them. The heart of the design is from mixed material, so it can be flexibel. The materials used try to get as close as possible to organic forms, The variation offers an opportunity to generate complex forms and dynamic structures that are otherwise impossible to make. Blossom specifically focused on two materials in particular: Tango Black (a rubbery, flexible material) and Fullcure 720 (an almost crystal-clear, solid material).

Each bloom was created uniquely in Solidworks. The petals are made of the flexibel material, and the heart of the more solid one. As air is pumped into the chamber in the heart of the flower, it causes the inside of the petal to push against the outside of the petal front of it. As each petal pushes on the one in front of it, the bloom blossoms.

DOCUMENTATION:

http://issuu.com/plarky/docs/clarkson_441_1



EXPERIENCE/INTERACTION

The flowers bloom like real flowers do when you gently push into the indicated airpump. As air is pumped into the chamber in the heart of the flower, it causes the inside of the petal to push against the outside of the petal front of it. As each petal pushes on the one in front of it, the bloom blossoms. The solid part stays still. People can push 4 airpumps which are connected to different flowers. It is an interactive installation. The effect is that Clarkson created something natural, organic, by something that is totally not organic but manufactured. There are no electronics, it works on air-pressure.

It almost becomes a game of finding the different colored insides of every flower.

