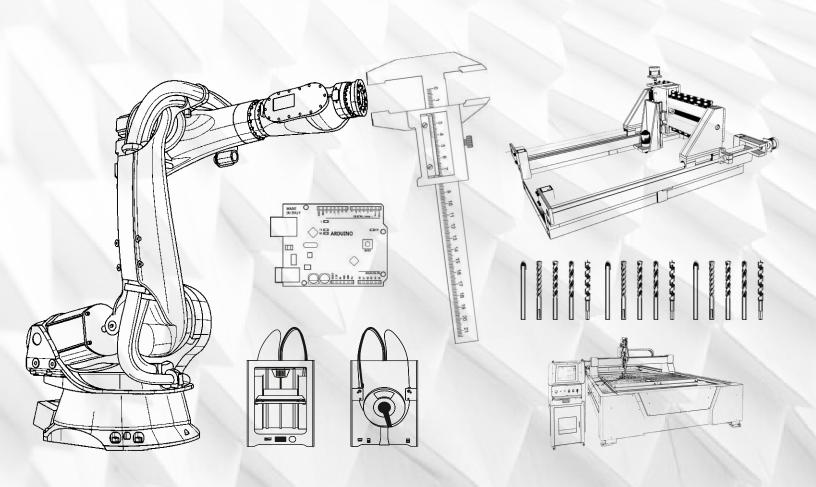
Digital fabrication **Control of the control of th

By ARTs, ARTCs, and RhinoFabStudios





Today we thank all the certified RhinoFabStudios that participated in this construction. This year, we have created this portfolio called "RhinoFabStudio Showcase" in order to include the most outstanding projects manufactured in RhinoFabStudios around the world and thus build community and dissemination.

Hoy agradecemos a todos los RhinoFabStudios certificados que participaron de esta construcción. Este año, hemos creado este portafolio llamado "RhinoFabStudio Showcase" con el fin de incluir los proyectos más sobresalientes fabricados en los RhinoFabStudios alrededor del mundo y así construir comunidad y difusión.



- + Rhino Jewelry CAD
- + University of New Mexico SA+P
- + Akiyo Matsuoka Inc.



• Name: Akiyo Matsuoka

•Email: akiyo@akiyomatsuoka.com LE

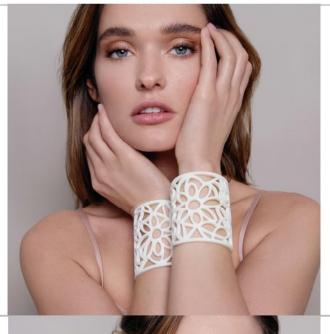
Ompany: Akiyo Matsuoka Inc.
 Website: leonany.com, akiyomatsuoka.com

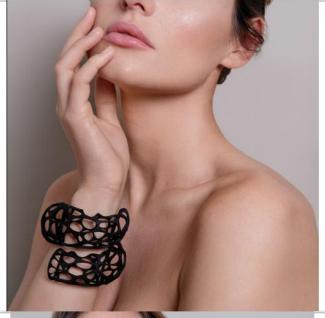
City: New York

• Country: U.S.A.

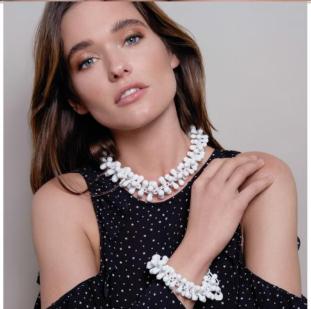
• Project Info: Designed with Rhino and Grasshopper. Printed with Selective Laser Sintering 3D printer.

Available at www.leonany.com.











• Name: Akiyo Matsuoka

•Email:_akiyo@akiyomatsuoka.com L E

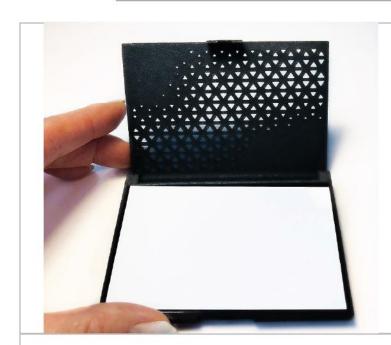
Company: Akiyo Matsuoka Inc.
 Website: leonany.com, akiyomatsuoka.com

City: New York

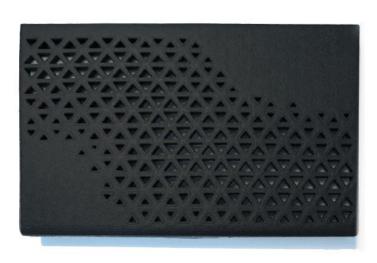
Country: U.S.A.

• Project Info: Business card case with hinges. Designed with Grasshopper and Rhino. Printed with Selective

Laser Sintering 3D printer. Available at www.leonany.com











•Name: Gary Dawson

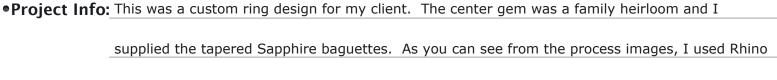
• Email: gary@garydawsondesigns.com

•Company: Rhino Jewelry CAD

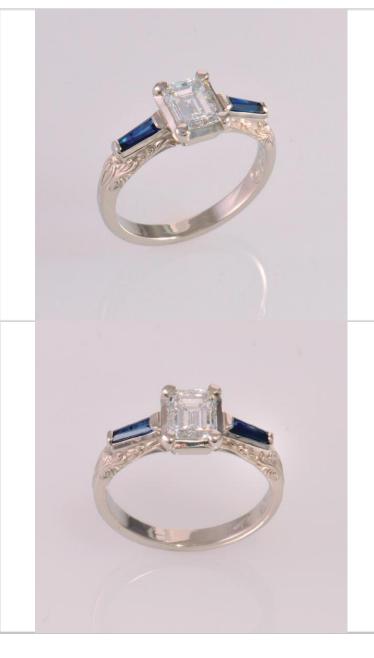
•Website: https://www.rhinojewelrycad.com/#/

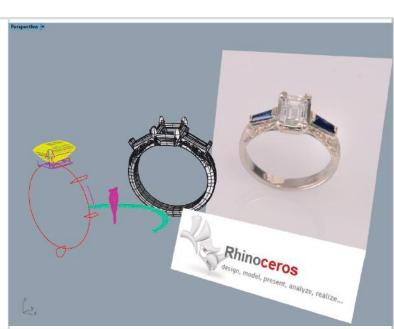
•City: Eugene, Oregon

•Country: USA



throughout in designing this ring. It was then printed on a DLP 3-D printer and cast in white gold









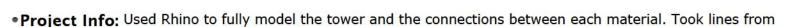
• Name: Alec Vittitow + Stephen Mora (Instruct • Email: sedmora@unm.edu

Company: University of New Mexico SA+P

• Website: saap.unm.edu

City: Albuquerque NM

Country: USA



Make 2D for laser cut files and utilized Rhino Cam for CNC milling to create the model.









• Name: Stephen Mora + Tim Castillo

• Email: sedmora@unm.edu

Company: University of New Mexico SA+P

• Website: saap.unm.edu

City: Albuquerque, New Mexico

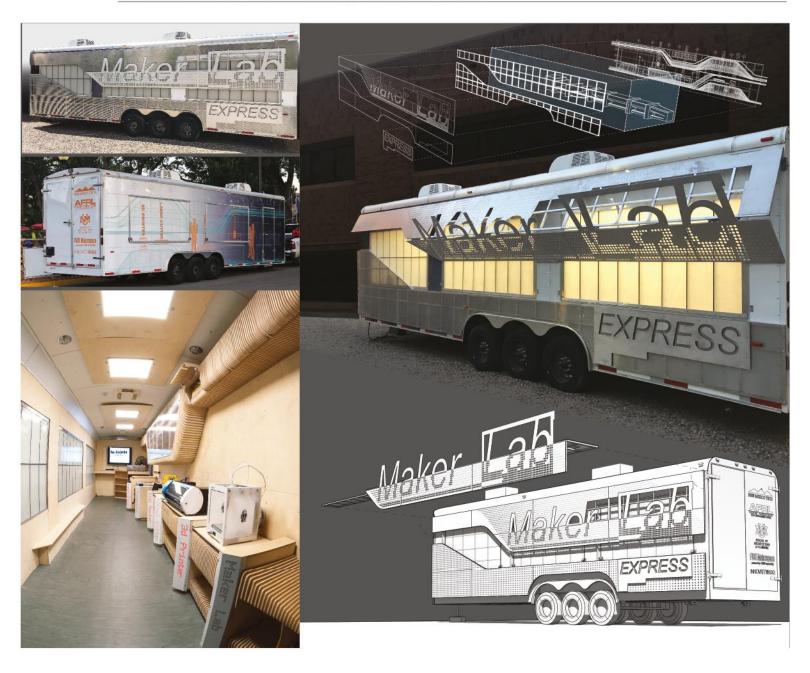
Country: USA



• Project Info: The Maker Lab Express was designed and modeled primarily in Rhino and CNC cut using Rhino

CAM. It is intended to introduce kids to new methodologies of creation and inspire them to

engage in current and emerging professions in STEM.





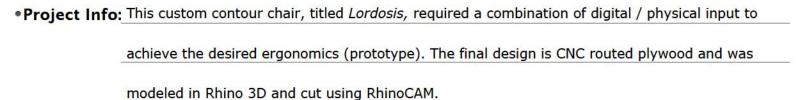
• Name: Garret Schultz, Instructor: Stephen Mc • Email: garretschultz24@gmail.com

Company: University of New Mexico SA+P

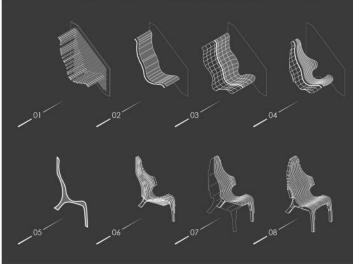
• Website: saap.unm.edu

• City: Albuquerque, NM

Country: USA











- + McNeel Miami
- + Universidad Pontificia Bolivariana
- + LOBO Designer
- + UTRNG
- + Tec de Monterrey
- + SI CAD-CAM



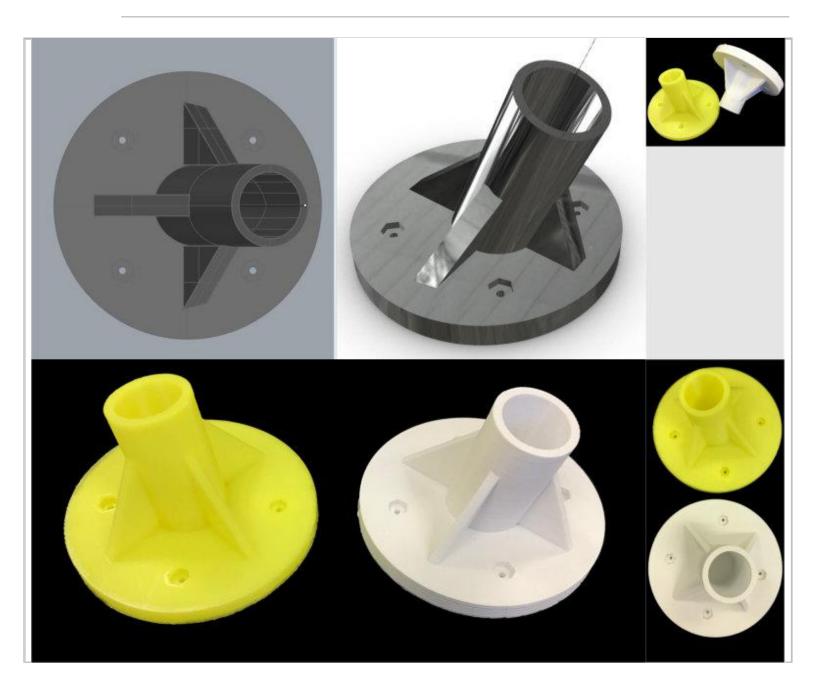
• Company: McNeel Miami • Website: www.McNeelMiami.com

•City: Miami, Florida

•Country: USA



• Project Info: Designed with Rhino 6 and Grasshopper, printed with ABS filament.





• Name: Parametric Hat • Email: andres@mcneel.com

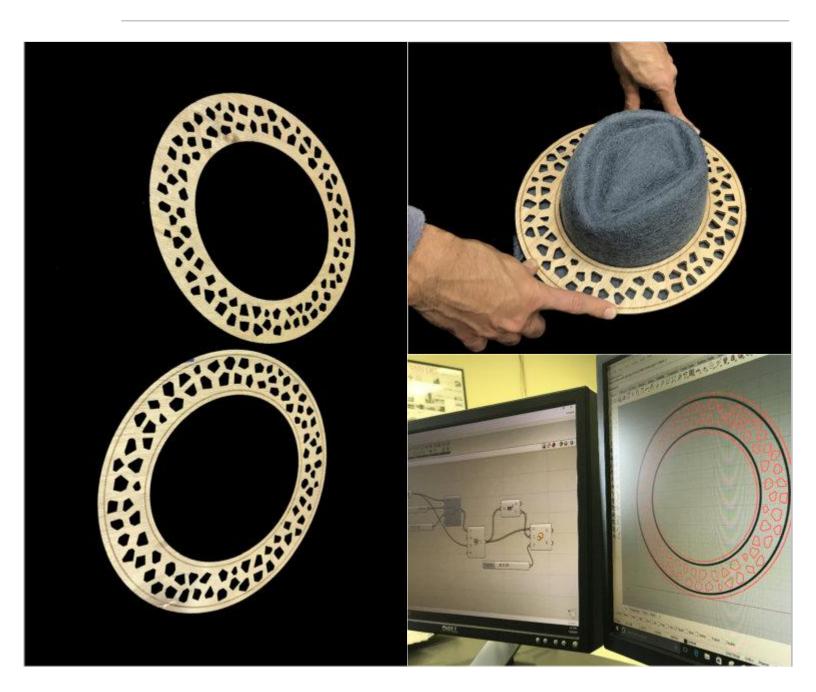
• Company: McNeel Miami • Website: www.McNeelMiami.com

•City: Miami, Florida

•Country: USA



Laser.





•Name: Skateboard

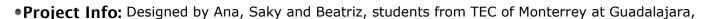
• Email: andres@mcneel.com

•Company: McNeel Miami

• Website: www.McNeelMiami.com

•City: Miami, Florida

•Country: USA



during their Minor in Design and Fabrication at McNeel Miami's RhinoFabStudio. The pattern was

done with Paneling Tools for Grasshopper.











• Name: Parametric Lamp • Email: andres@mcneel.com

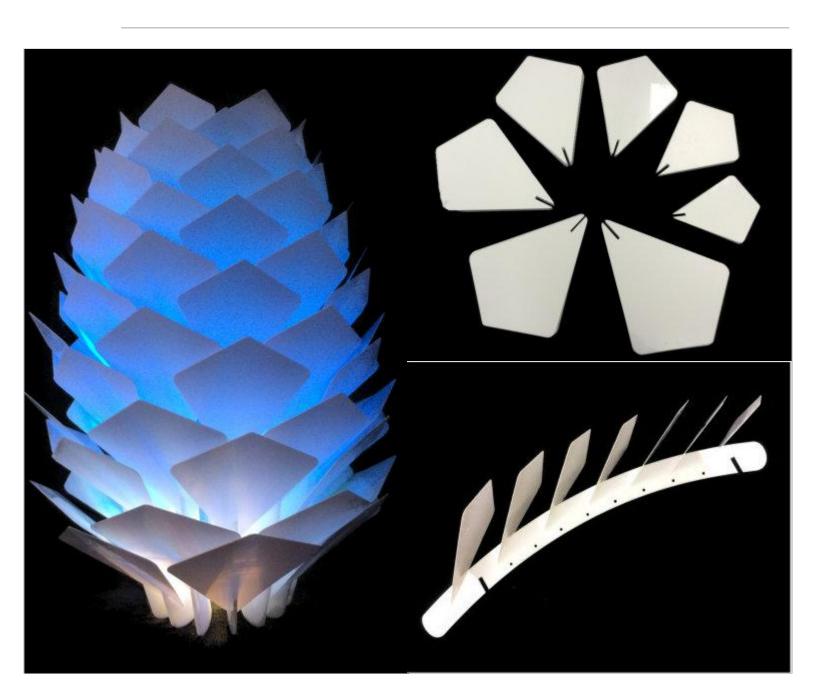
• Company: McNeel Miami • Website: www.McNeelMiami.com

•City: Miami, Florida

•Country: USA



• Project Info: Designed with Rhino and Grasshopper and cut with a Trotec Laser





• Name: Injection mold for chocolates • Email: andres@mcneel.com

• Company: McNeelMiami

•Website: www.McNeelMiami.com

•City: Miami, Florida

•Country: USA



• Project Info: Designed in Rhino and then 3D printed the injection molds to make chocolate lollipops.









• Name: Tea Storage Box

• Email: andres@mcneel.com

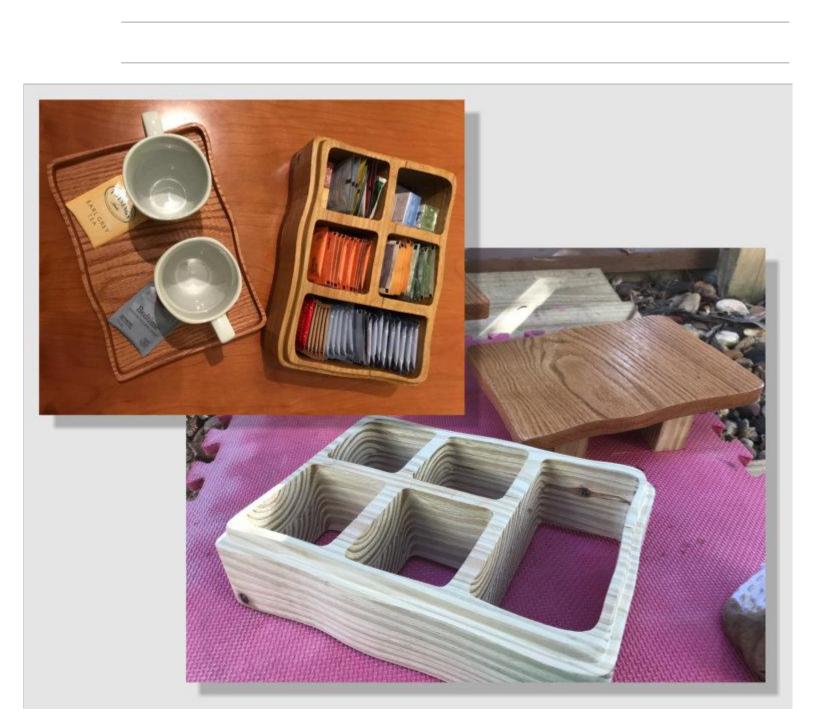
•Company: McNeel Miami

•Website: www.McNeelMiami.com

•City: Miami, Florida

•Country: USA







• Name: Luis Beltran Lobo Ubrina

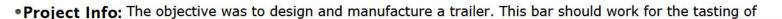
• Email: luisbeltran88@gmail.com

Company: Freelancer

• Website: be.net/LOBO_Designer

City: Santiago

Country: Chile



beer, in indoor and outdoor spaces. Using music as a resource, people around were attracted by

the trailer. Designed antirely and fabricated using Rhinoceros, including files for CNC and more.





• Name: Luis Beltran Lobo Ubrina

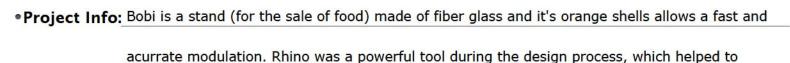
• Email: luisbeltran88@gmail.com

Company: Freelancer

• Website: be.net/LOBO_Designer

City: Santiago

Country: Chile



achieve an amazing shape and unite all the requirements requested for the client in one shape.





• Name: Luis Beltran Lobo Ubrina

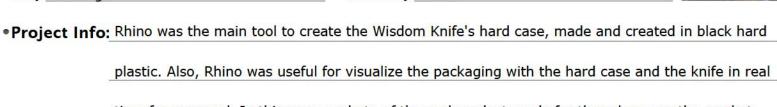
• Email: luisbeltran88@gmail.com

Company: Freelancer

• Website: be.net/LOBO_Designer

City: Santiago

Country: Chile







• Name: Design and manufacturing of a dry ele • Email: ara 0588@hotmail.com, ingarturo@gma

Company: IPN-UTRNG

• Website: www.utrng.edu.mx

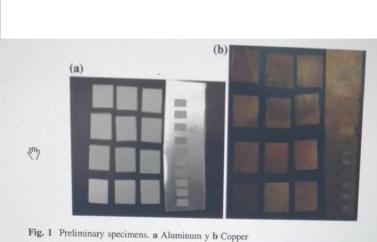
City: Iguala, Gro.

Country: Mexico



microneedles, our FABSTUDIO designed and fabricated it with the sisma laser the complete

research was published in the book: Improved Performance of Materials: Design and Experiment





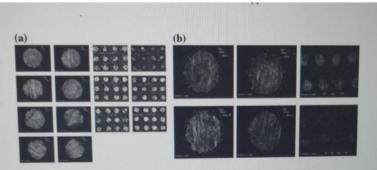
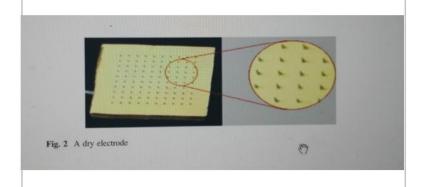


Fig. 5 Preliminary specimen made with a aluminum and b copper







• Name: Arturo Flores

• Email: ingarturo@gmail.com

•Company: UTRNG

• Website: www.utrng.edu.mx

City: Iguala, Gro.

Country: Mexico



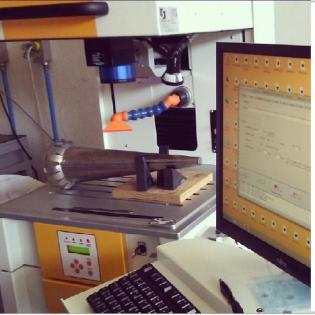
made in Rhino and two machines were used, a VMC Hass VF-1, running the code genereted from

RhinoCAM and a Laser SISMA Big Smark.











Name: Conmemorative plates

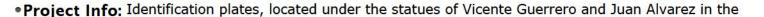
• Email: ingarturo@gmail.com

Company: UTRNG

• Website: www.utrng.edu.mx

City: Iguala, Gro.

Country: Mexico

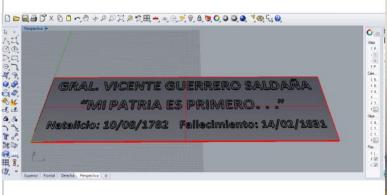


museum of the national flag in Iguala Guerrero, city known as the crib of the Mexican flag.

Designed in Rhinoceros, RhinoCAM and fabricated in Hass VF-1.











• Name: Tutor for tomatoes plants.

• Email: ingarturo@gmail.com, itoledoh@utrng.e

Company: UTRNG

• Website: www.utrng.edu.mx

• City: Iguala, Gro.

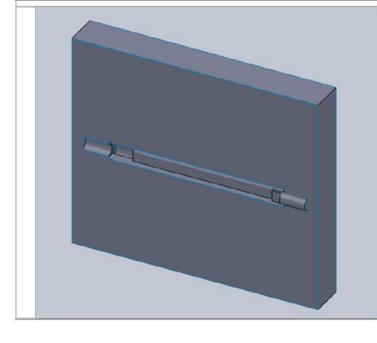
Country: Mexico



•Project Info: In several crops are used tutors (large stick) betwen the plants grow, most of the times in México they use otate trees, in this project we designed and builded a mold for a modular tutor made of recicled plastic. Designed in Rhino and the CNC code was made in RhinoCAM and the mold was build in steel, using the VMC Hass VF1











• Name: Tutor for tomatoes plants.

• Email: ingarturo@gmail.com, itoledoh@utrng.e

Company: UTRNG

• Website: www.utrng.edu.mx

City: Iguala, Gro.

Country: Mexico



• Project Info: In several crops are used tutors (large stick) betwen the plants grow, most of the times in México they use otate trees, in this project we designed and builded a mold for a modular tutor made of recicled plastic. Designed in Rhino and the CNC code was made in RhinoCAM and the mold was build in steel, using the VMC Hass VF1











•Name: Coral Ring • Email: alealfaro@tec.mx

Company:

Tec de Monterrey

•Website: www.gda.itesm.mx/concentraciondejoyeria/

• City: Guadalajara, Jalisco

Country: México

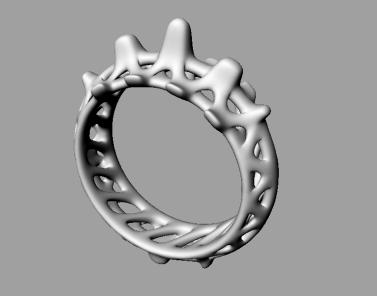


Silver ring inspired by the natural growth of coral.

Class: Basic jewelry design and manufacturing techniques. Tecnológico de Monterrey

Designer Juan Carlos Banda / Professor PHD Alejandra Alfaro Suzán.











•Name: Ring

alealfaro@tec.mx • Email:

•Company:

Tec de Monterrey

•Website: www.gda.itesm.mx/concentraciondejoyeria/

•City: Guadalajara, Jalisco

•Country: México

•Project Info:

Ring made using Rhinoceros for 3D printing and casted in silver.

Class: Basic jewelry design and manufacturing techniques. Tecnológico de Monterrey

Designer Diana López Caballero / Professor PHD Alejandra Alfaro Suzán.









•Name: Hidden light

• Email: alealfaro@tec.mx

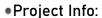
Company:

Tec de Monterrey

•Website: www.gda.itesm.mx/concentraciondejoyeria/

• City: Guadalajara, Jalisco

Country: México



Silver ring with an internal hidden compartment for a LED mechanism.

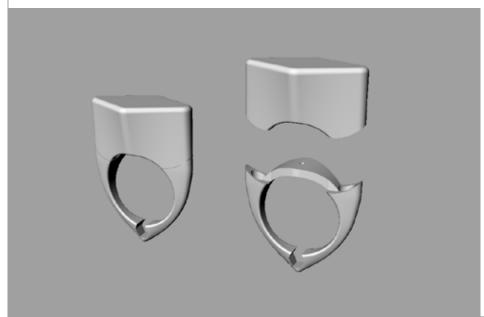
Class: Basic jewelry design and manufacturing techniques. Tecnológico de Monterrey

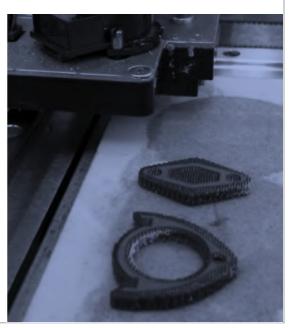
Designer Omar Avilez

Professor PHD Alejandra Alfaro Suzán.











• Name: Heart for chocolate mould

• Email: adrianjuarez@sicadcam.com

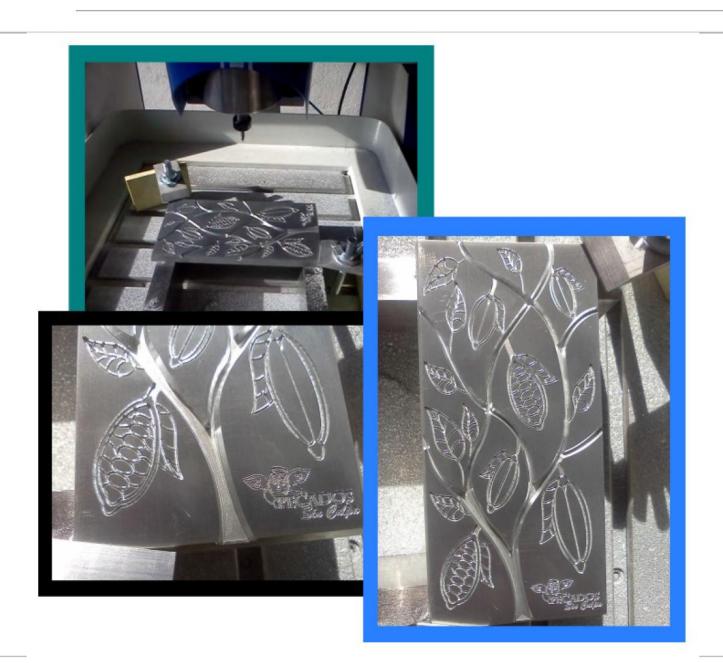
• Company: Servicios de Ingeniería CAD-CAM • Website: www.sicadcam.com

• City: Ciudad de México

Country: México

• Project Info: Heart made of zamac for chocolate injection mold, RhinoCeros modeling, RhinoCam machining

on SICONO CNC machine





• Name: Wax injection mould for jewellery • Email: adrianjuarez@sicadcam.com

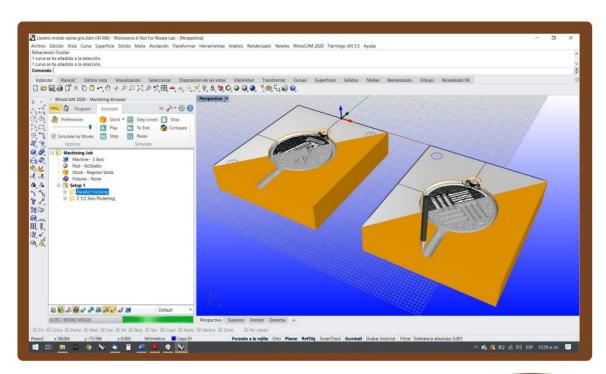
• Company: Servicios de Ingeniería CAD-CAM • Website: www.sicadcam.com

• City: Ciudad de México

Country: México

• Project Info: Mold made of polyurethane resin to inject wax for lost wax casting in jewelry, RhinoCeros

modeling, RhinoCam machining on SICONO CNC machine









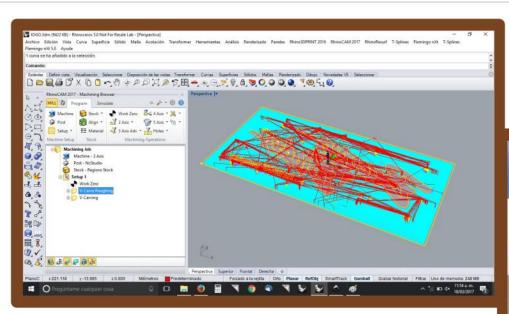
• Name: Steel hot stamping die • Email: adrianjuarez@sicadcam.com

•Company: Servicios de Ingeniería CAD-CAM •Website: www.sicadcam.com

City: Ciudad de México

Country: México

• Project Info: Steel hot stamping die, RhinoCeros modeling, RhinoCam machining on the SICONO CNC machine









•Name: Bicycles cut in the FabStudio

•Company: RhinoFabStudio UPB

•City: Medellín

• Email: ovidio@mcneel.com

• Website: http://rhino3dcolombia.ning.com

•Country: Colombia



• Project Info: Between GW (Colombian private bicycle company), F&C (wood seller) and Área Metropolitana

(government entity), Tour Pura Vida in research partnership with UPB and RhinoFabStudio.





• Name: Bicycles cut in the FabStudio

• Email: ovidio@mcneel.com

•Company: RhinoFabStudio UPB

• Website: http://rhino3dcolombia.ning.com

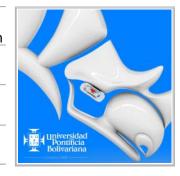
City: Medellín

• Country: Colombia

• Project Info: Between GW (Colombian private bicycle company), F&C (wood seller)

and Área Metropolitana (government entity), Tour Pura Vida in research partnership

with UPB and RhinoFabStudio.













•City: Medellín

• Name: Grasshopper chair • Email: ovidio@mcneel.com

•Company: RhinoFabStudio UPB •Website: http://rhino3dcolombia.ning.com

• Country: Colombia

• Project Info: Final Grasshopper class project. Teacher: Jose Ovidio Cardona. Students: Juan Camilo

Bermúdez / Juan Fernando Estrada / Andrés Palacio / Luisa María Hernández / Natalia Milena

Naranjo / Mateo Zuluaga









Name: Morfolámparas

• Email: ovidio@mcneel.com

•Company: RhinoFabStudio UPB •Website: http://rhino3dcolombia.ning.com

•City: Medellín

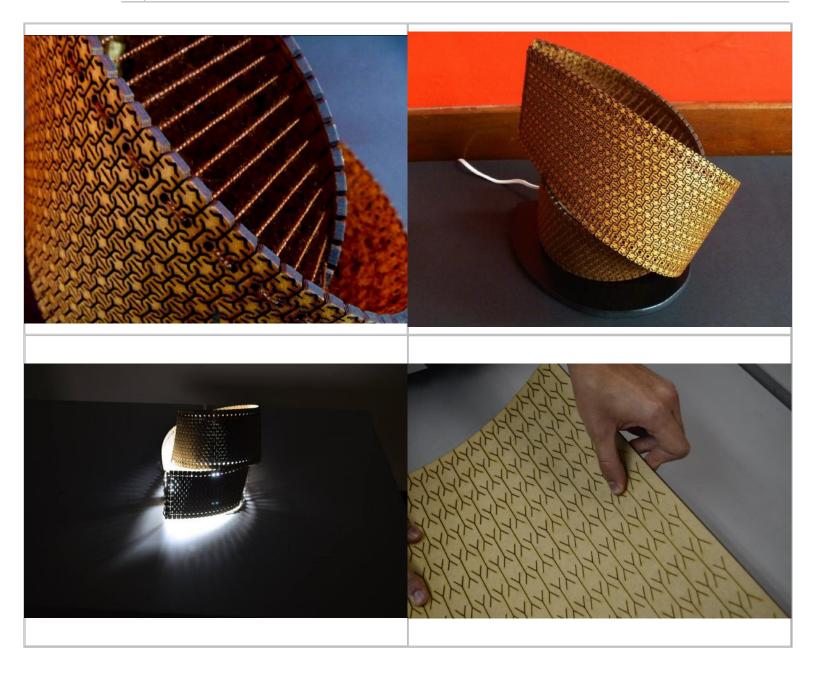
• Country: Colombia



• Project Info: Final class project: Flexibility of rigid sheets through experimentation with laser cutting. Teacher:

Andrés Valencia y David Torreblanca / Students of the class: Optativa en Morfología

Experimental.





- + InstituteForComputationalDesign
- + Claudia Del Priore
- + Sapienza Design Factory
- + Controlmad
- + Antonio Turiello

- + Siemen Cuypers
- + RM Gioielli
- + AUREASERVICE Design Studio
- + Fablab Catania



•Name: Claudia Del Priore

• Email: claudia@claudiadelpriore.com

Company: Claudia Del Priore

• Website: www.claudiadelpriore.com

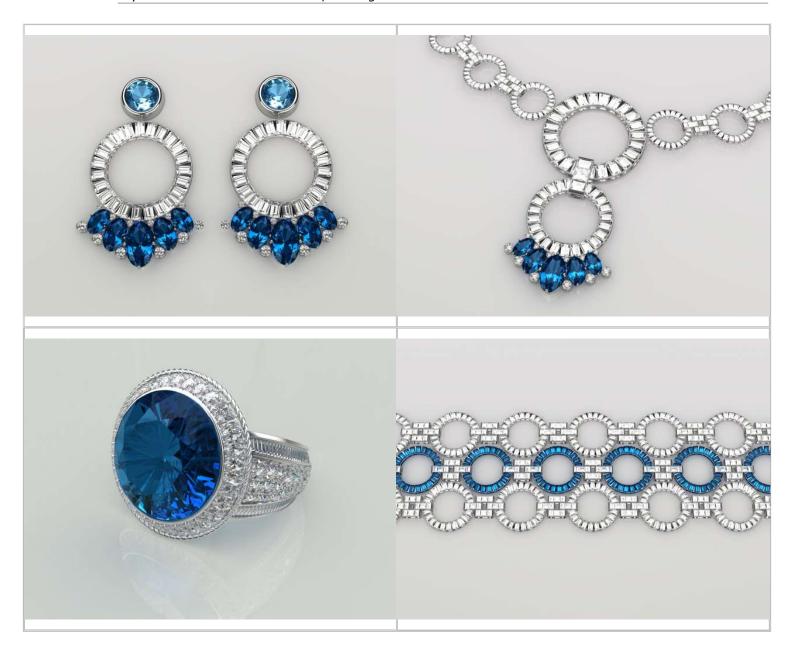
City: Lausanne

• Country: Switzerland

• Project Info: Deep Blue is a collection where the circular shape and white and blue colors predominate. The

sky, the ocean, diamonds and sapphires, the white and blue combination that is so good for our

eyes. Created with Rhinoceros, Rhinogold and rendered with Brazil.





• Name: Claudia Del Priore

• Email: claudia@claudiadelpriore.com

•Company: Claudia Del Priore

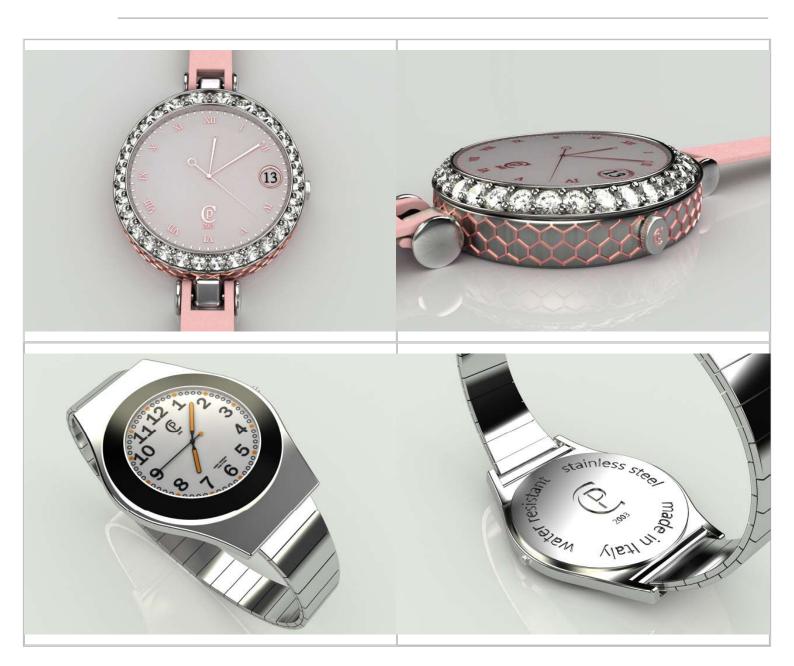
• Website: www.claudiadelpriore.com

•City: Lausanne

• Country: Switzerland

• Project Info: Watches collection (Honeycomb model and Arcturus model). Created with Rhinoceros and

Rhinogold. Grasshopper was used to create the honeycomb cells.





Name: BUGA Fibre Pavilion

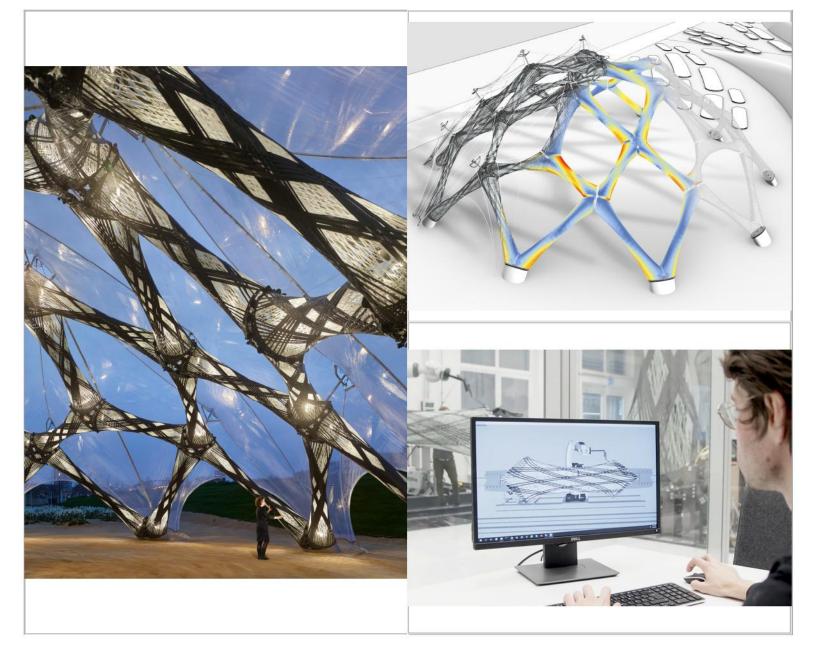
• Email: serban.bodea@icd.uni-stuttgart.de

Company: InstituteForComputationalDesign
 Website: www.icd.uni-stuttgart.de/?p=22271

City: Stuttgart

Country: Germany

• Project Info: Rhino and Grasshopper were used in design and simulation to develop the potential of additive manufacturing of large-scale, core-less fiber composite structures. Fast and highly automated robotic fabrication processes were numerically controlled directly from Rhino and Grasshopper.





Name: DokiDoki Restaurant

• Email: info@controlmad.com

• Company: Controlmad

Website: www.controlmad.com

• City: Madrid • Country: Spain

controli

• Project Info: Interior design of a japanese restaurant in Madrid. Furniture made of pinetree plywood milled

with our 3 axis CNC milling machine. Designed, manufactured and finished by controlmad. If you

like design and good japanese food this is your place.









• Name: Benches for Ikea Group Valladolid

• Email: info@controlmad.com

•Company: Controlmad

• Website: www.controlmad.com

•City: Madrid •Country: Spain

controlmad

• Project Info: Two benches for Ikea at Rio Shopping mall in Valladolid (Spain). Plywood 21mm. Designed by

controlmad in collaboration with Eriné Vardanyan. Manufactured by controlmad.





•Name: Rooftop

• Email: info@controlmad.com

Company: Controlmad

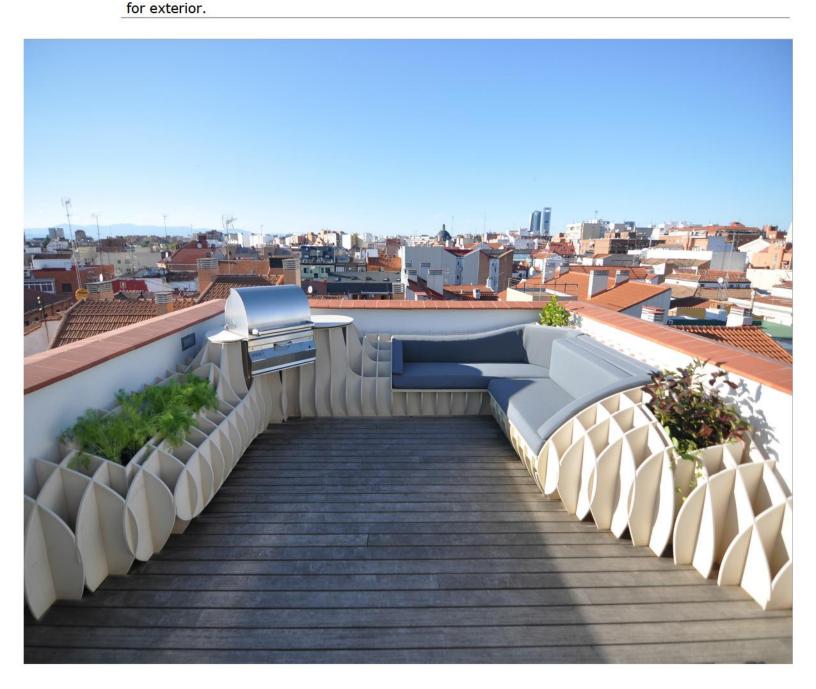
• City: Madrid

• Website: www.controlmad.com

Country: Spain

controlmac

• Project Info: This project creates a system of pieces in two directions where the client decides if he prefers a sofa, plants or as in the example, a bbq. The material is a type of wood-cement board suitable





• Name: Siemen Cuypers

• City: Oslo

• Email: siemencuypers@gmail.com

Company: Siemen Cuypers

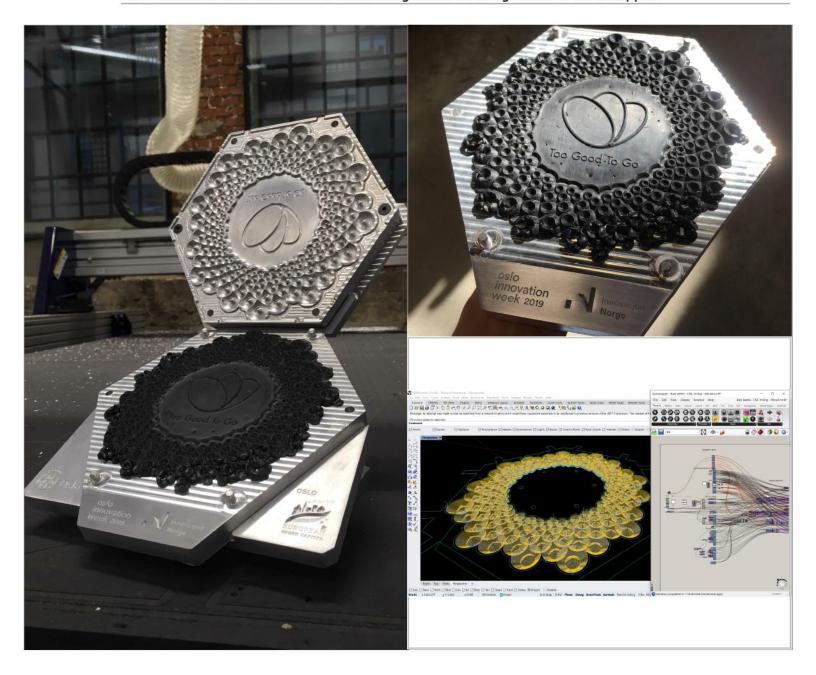
Website: www.siemencuypers.com

Country: Norway

• Project Info: An award for the winner of Oslo Innovation Week consisting of a Plastic Casting mold and the

winner casted in recycled plastic from the Norwegian marine industry. The design and the code

that runs the CNC-machine was made & generated using Rhino & Grasshopper.





•Name: LIGHTINVERSE

• Email: antonioturiello.blog@gmail.com

• Company: Antonio Turiello

• Website: antonioturiello.blogspot.com

• City: Salerno, Campania

Country: Italia



• Project Info: LIGHTINVERSE is a street furniture prototype (bollard light) thought to be water jet cut in steel.

Grasshopper was used in the parametric design of the idea and Rhinoceros in digital fabrication.





• Name: MOLECULART

• Email: antonioturiello.blog@gmail.com

Company: Antonio Turiello

• Website: antonioturiello.blogspot.com

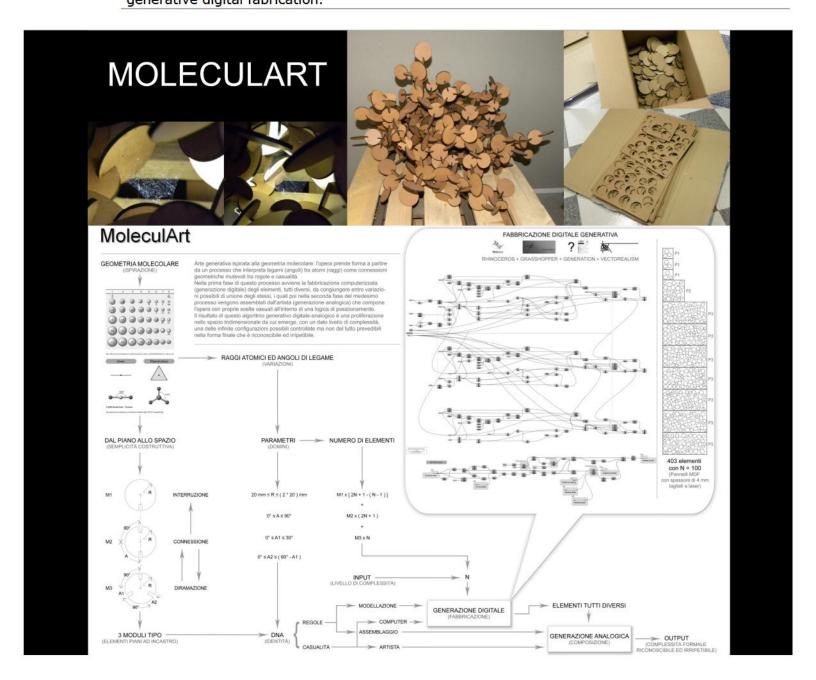
·City: Salerno, Campania

Country: Italia



• Project Info: MOLECULART is a generative art sculpture (molecular geometry inspired) in laser cut MDF wood.

Rhinoceros and Grasshopper have been used in the first phase of the generation process called generative digital fabrication.





• Name: ORGANICUBE

• Email: antonioturiello.blog@gmail.com

• Company: Antonio Turiello

• Website: antonioturiello.blogspot.com

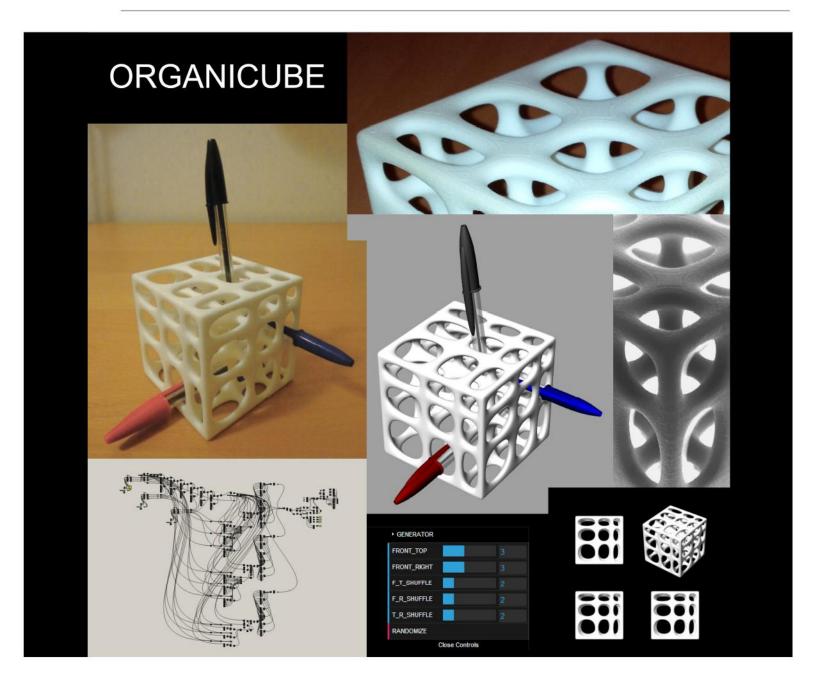
• City: Salerno, Campania

Country: Italia

Authorized Rhino Trainer

• Project Info: ORGANICUBE is a design product (penholder) in SLS 3d printed polyamide.

Rhinoceros and Grasshopper have been used in the 3d model configuration process.





• Name: Golden Lace Band

• Email: info@aureaservice.it

Company: AUREASERVICE Design Studio

• Website: www.aureaservice.it

City: Albizzate (VA)

Country: Italy



Paneling Tools components







• Name: Light Butterfly | Pencils Holder • Email: info@aureaservice.it

Company: AUREASERVICE Design Studio
 Website: www.aureaservice.it

City: Albizzate (VA)

Country: Italy



• Project Info: just an idea... the lightness of a butterfly: Pencils Holder modeled with Rhino SubD. FDM 3D Print

with Woodfill filament





Name: Virtualization Roman Fibula

• Email: info@aureaservice.it

Company: AUREASERVICE Design Studio

• Website: www.aureaservice.it

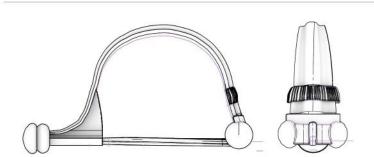
City: Albizzate (VA)

Country: Italy



hight resolution images of original (1st century a.C). 3D model will be kept printed scale 1: 1 in

bronzefill



TEXTURING





bump mapping



• Name: LAURA MANDRELLI

• Email: lauramandrelli1961@gmail.com

JA.

Company: RM Gioielli

• Website: robertomandrelli.wixsite.com

Rhinoceros 6

City: ROMA

Country: ITALY

• Project Info: Designed and engineered by Laura and Roberto Mandrelli Artisans in Rome

Artisans in Rome Made with Rhonoceros 6 Render with Brazil









•Name: Kabuto

• Email: alex.coppola7@gmail.com

•Company: Sapienza Design Factory

• Website: alexcoppoladesign.com

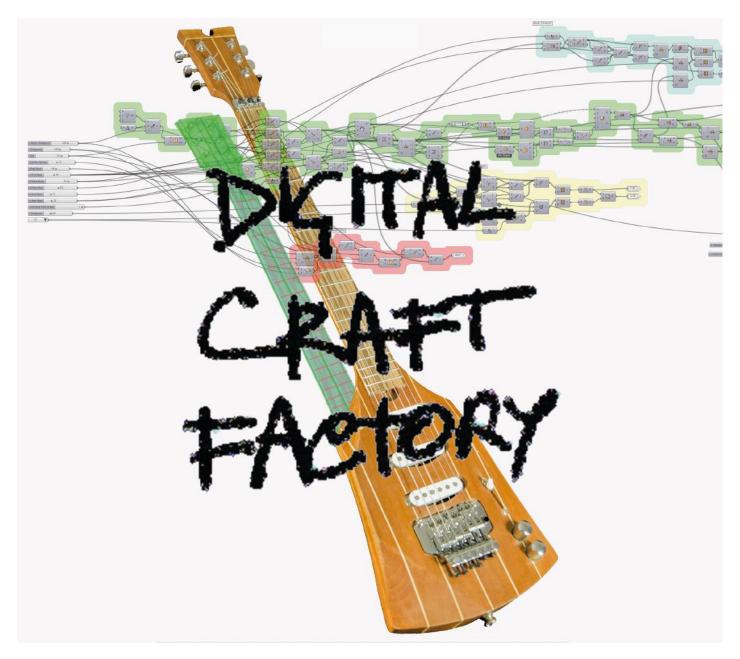
•City: Rome

Country: Italy



RhinoCAM by the research laboratory Sapienza Design Factory. The alghorytm wants to be an AAD







•Name: CARMEN RUSSO

•Email: CARMEN@FABLABCATANIA.EU

•Company: FABLAB CATANIA

Website: FABLABCATANIA.EU

City: CATANIA

•Country: ITALY



Lollipen (c) was born from the idea of combining a pen and a candy. has been tested by a Dutch speech therapist on children suffering from attention syndrome. The candy can be removed and replaced with a new one. it is washable. The project is looking for supporters and financiers.









• Name: Siemen Cuypers

• Email: siemencuypers@gmail.com

• Company: Siemen Cuypers for Artisan Tech • Website: www.siemencuypers.com

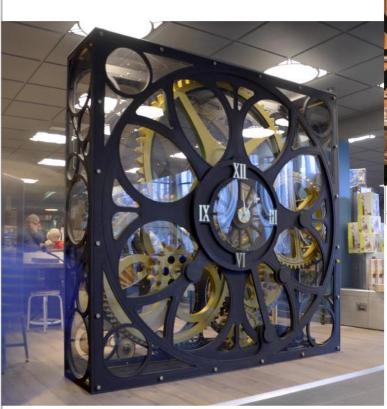
City: Oslo

Country: Norway

• Project Info: 2,4 x 2,4 x 0,6 meter working mechanical clock for the technical museum in Oslo. 3D-modeling,

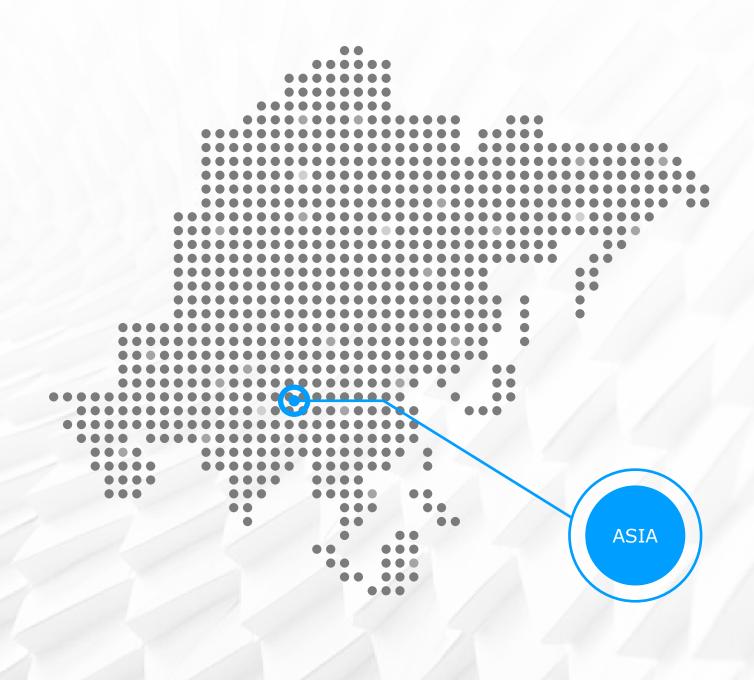
preparing CNC cutting files and assembly guides were made using Rhino. Calculating and drawing

of the gears was done using Grasshopper.









- + Architechnologies, Inc.
- + Formforge



• Name: Parametric Ceiling & Shelves

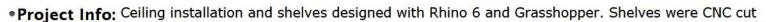
• Email: agdizon@thearchitechy.com

Company: Architechnologies, Inc.

• Website: architechnologies.com

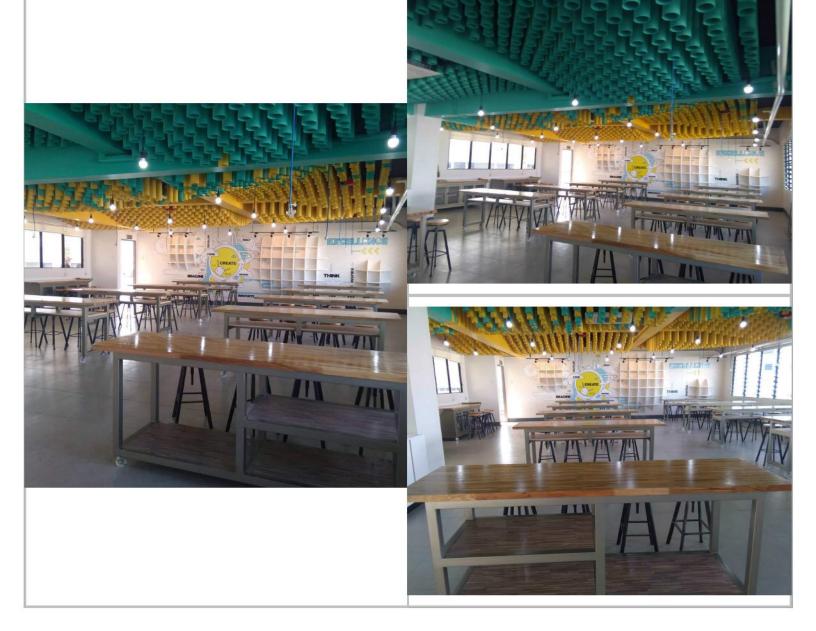
• City: Cebu City

Country: Philippines



with a Shopbot.







• Name: Abhinav Goyal

• Email: info@formforge.co

Company: Formforge

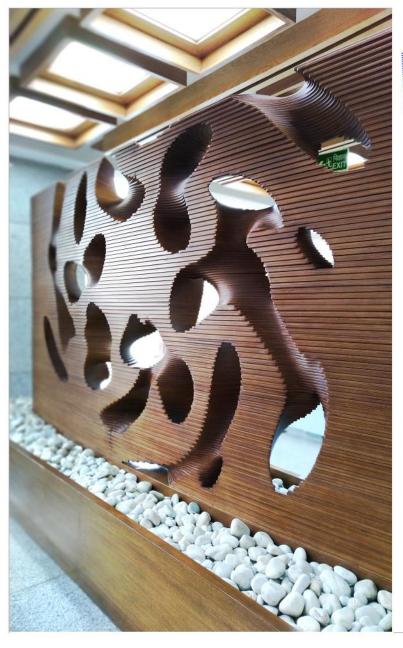
Website: https://www.formforge.co/

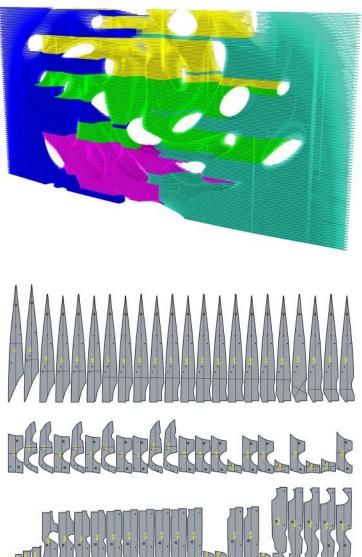
City: New Delhi

Country: India

•Project Info: Ant hill emerges as a structure of continuum. It represents the layers of intricately carved rigid shapes. This installation showcases the digitized process, at the same time conceals its underlying formative forces to produce something that seems effortless. As the name suggests, the concept behind this installation is changing manifestations from solid to fluid, probing the question of what fluidity designates.

Dimension-16ft. x 8ft. x 1.2ft. Material- Birch Ply







• Name: Abhinav Goyal

• Email: info@formforge.co

Company: Formforge

Website: https://www.formforge.co/

• City: New Delhi

Country: India

•Project Info: This statue is an ode to Mohandas Karamchand Gandhi, an Indian lawyer, anti-colonial nationalist, and political ethicist. It is sculpted and fabricated using algorithmic tools. The process used is slicing. All the unique laser cut pieces are fused together to form this complex and sophisticated statue. The output, hence, is highly detailed.

Dimension-7ft. x 4ft. x 4ft. Material- Birch Ply







• Name: Abhinav Goyal

• Email: info@formforge.co

Company: Formforge

Website: https://www.formforge.co/

City: New Delhi

Country: India

•Project Info: The design of Parachair is inspired by the phenomenon of rhythm, continuity and adaptation. The chair frame is constructed with one inch Ply Board, cut and milled with the help of 3axis CNC machine on a digitally generated pattern. Para chair is designed as responsive mass-customized furniture. Designed in computer platform the structure is scripted around 2 variables: The user's height and weight. The chair has two backbone panels and 45 unique components each numbered for its specific position. All the pieces are cut in CNC router and screwed together with the main frame.





• Name: Abhinav Goyal

• Email: info@formforge.co

Company: Formforge

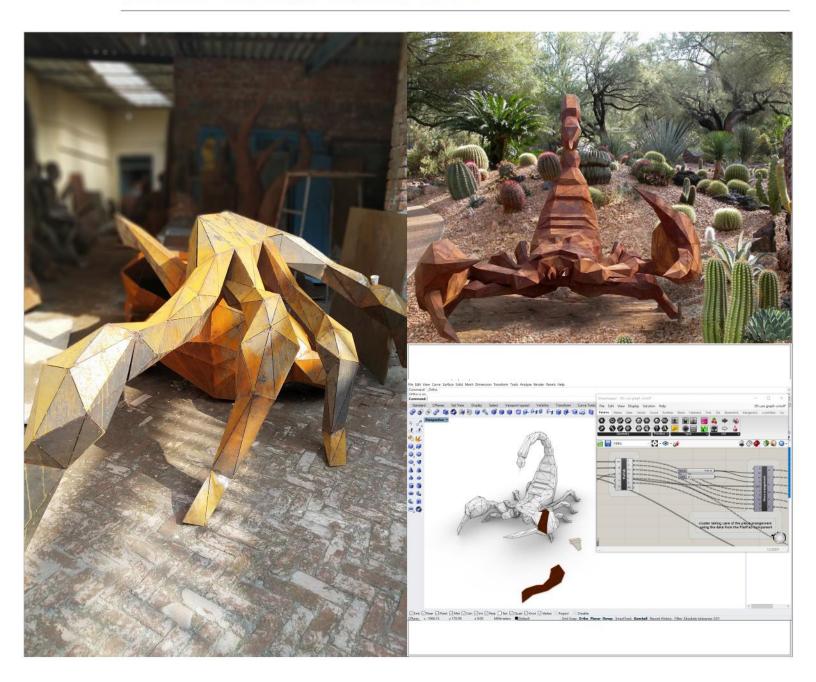
•Website: https://www.formforge.co/

City: New Delhi

Country: India

• Project Info: The Scorpion is a giant faceted sculpture located at in Hyderabad in an exotic cactus garden. This installation was done to complement the dry and arid nature of landscape with a contrasting corten steel finish. It weighs about 700 kg and 25 ft in length and 12 ft in height with open joints that illuminate in the evening. It constitutes 1475 unique faces with laser cut joints in stitch design.

Dimensions- 20ft.x 10ft.x 12ft. Material- Corten steel



Digital fabrication **Control of the control of th

By ARTs, ARTCs, and RhinoFabStudios

