Rhino 3D zine
JANUARY 2024

FibR's Robotic Elegance in Architectural Design Through the Texoversum Project

Nathan Neufeld's Transcendent Monarch Butterfly Installation

Book Discoveries: Rhino 7.0 for Jewelry Volume I & II by Dana Buscaglia

From Giant Scanners to Handheld Wonders, Mike Annear's 3D Scanning Odyssey

McNeel HQ

Headquarters, North America
& Pacific

146 N Canal St, Suite 320
Seattle, WA 98103 USA

McNeel South East US & Latinoamérica

Southeastern United States
& Latin America

1538 NW 89th Court
Miami, FL 33172 USA

McNeel Europe

Europe, Middle East
& Africa

Roger de Flor, 32-34, bajos
Barcelona, 08018 España

McNeel Asia

146 N Canal St, Suite 320
Seattle, WA 98103 USA

support@mcneel.com

Get Rhino 8

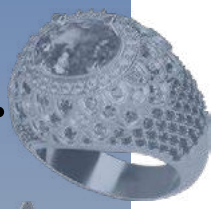
Rhino license keys work for both Mac and Windows!
All licenses are permanent and do not expire.

Select your region

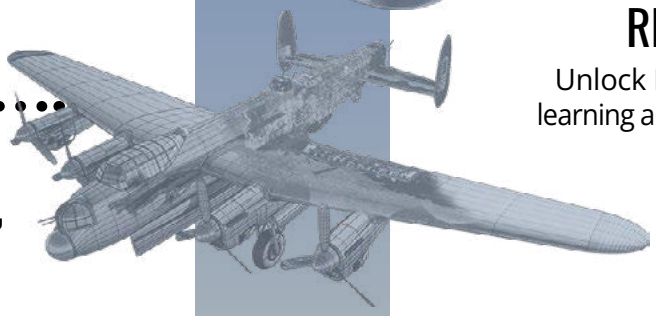
Image by Gijs de Zwart

*All products are shipped electronically. Prices include support and service releases for the current version. There are no maintenance fees.

7.
food4Rhino
Learn about RhinoArtisan and Wallacei.



12.
From Giant Scanners to Handheld Wonders, Mike Annear's 3D Scanning Odyssey
Explore 3D scanning's evolution as Scan2Model's founder pioneers precision and innovation, leaving a mark on the industry's transformative journey.



16.
Learning: LearnGrasshopper
Discover Kris' platform, providing high-quality online training, free guides, and weekly insights.

20.
Rhino3D Education
Discover the three-dimensional design with 'Archicad Grasshopper' by expert instructors from PAZ Academy and 'Intro to Rhino 8'.

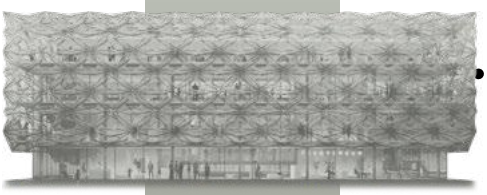
24.
Tips, Tricks, & resources about Grasshopper
Dive into this section for short video tutorials on Grasshopper.

10.
Rhino Tips & Tricks
Unlock Rhino's full potential by learning about these tips and tricks.

14.
Events
Get ready for these upcoming design events.

15.
Book Discoveries
Discover 'Rhino 7.0 for Jewelry Volume I & II' by Dana Buscaglia

18.
FibR's Robotic Elegance in Architectural Design Through the Texoversum Project
Discover how FibR's innovative approach transforms construction with sustainable fiber composites.



22.
Nathan Neufeld's Transcendent Monarch Butterfly Installation, "Migration"
A transcendent art installation on Kansas City's Argosy Parkway bridge, symbolizing the enchanting journey of monarch butterflies.

25.
Gallery
Explore the Rhinoceros Forums Gallery, where captivating images bring creativity and innovation to life.

www.Rhino3Dzine.com

Rhinozine

Share your knowledge.
Expand your network.
Connect with fellow enthusiasts.

Ready to be featured in Rhinozine? Don't hesitate – click HERE and send us your application today!

If you're eager to showcase your latest **project**, share a groundbreaking **plugin**, promote **courses** and **events**, recommend must-read **books**, or offer exciting **job opportunities**, we want to hear from you. Your expertise and insights could inspire our diverse readership!

CONTRIBUTORS & ACKNOWLEDGMENTS

Editor
Carola Trozzo

Review Team
Andrés González, Jackie Nasser, Ryan Brown, Dulce Chavez, Wendy Hemmelman, Jody Mills, and Sandy McNeel.

Designer
Carola Trozzo

Production Manager
Paula González

Marketing Coordinator
Lucia Miguel

Other Contributors
Christian Dierk, Moritz Dörstelmann, Mike Annear, Nathan Neufeld, Mary Fugier, Dana Buscaglia, Krzysztof Wojslaw, Morteza Karimi, Bob McNeel, Scott Davidson, Brian Gillespie, Julian Oquendo, and Niloofar Zaker.

Acknowledgments
- FibR **& Texoversum - (p. 18-19)**

Christian Dierk & Moritz Dörstelmann / University of Stuttgart / Karlsruhe Institute of Technology / TU Eindhoven / AllmannWappner / Menge Scheffler Architekten / Jan Knippers Ingenieure / Blocher Partners / Archis / Geplan Design / Schmelze+Partner

- Scan2model **- (p. 12-13)**

Mike Annear - Founder & Senior Modeler

- **'Migration' - (p. 22)**

Nathan Neufeld / Mol Mir

- **Rhino 7.0 for Jewelry Volume I & II (p. 15)**

Dana Buscaglia - Author

Images
Gijs de Zwart (p. 2-3); NASA (p. 5); **rhino3d.com** (p. 6 & 11); **food4Rhino** (p. 7); **rhinoartisan.com** (p. 8); **wallacei.com** (p. 9); Mike Annear (p. 12-13); **SimplyRhino**, **eventbrite**, **The Goldsmiths' Center**, **www.myssmc.org** (p. 14); Dana Buscaglia (p. 15); Krzysztof Wojslaw (p. 16); FibR GmbH, ICD/ITKE Stuttgart (p. 18-19); Nora Bukovits & Julian Oquendo (p. 20); **rhino3d.education** (p. 21); Nathan Neufeld (p. 22); nachetz, Cpiccioli, Adwait Dake, Quan Li, vladislav (p. 25); NASA (p. 27).

In the Cover
Texoversum by

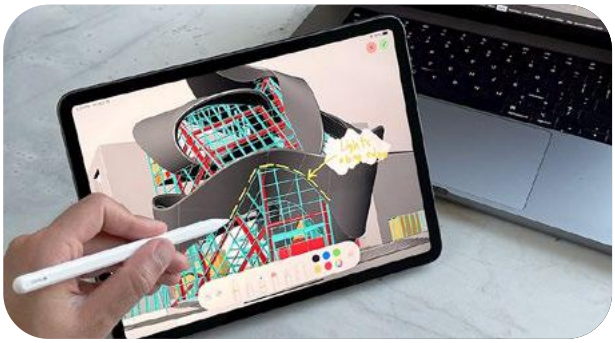
Contact Us
carola@mcneel.com

Corrections -

iRhino 3D

The official Rhino 3dm viewer for iOS.
View and present your work on your iPhone or iPad.

Download on the App Store



Completely Rebuilt

- Rewritten from the ground up, the new iRhino 3D performs and feels exactly like Rhino.
- Pan, zoom, and orbit with a tap or drag of your finger.
- Conveniently load models from your device or any cloud storage using a built-in file browser.
- Use the AR mode to see your model in space.
- Integrated markup tool lets you draw on top of a view.

Supports Many File Formats

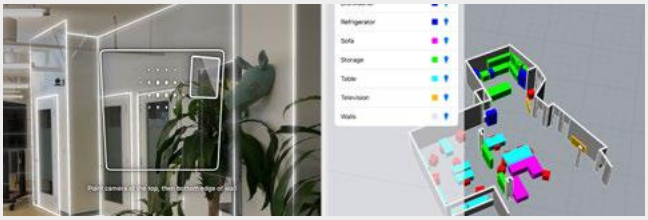
- Open/Import many formats including: Rhino 8, dwg, dxf, glb, gts, iges, lwo, usd, usdz, off, ply, points, raw, slc, stl, vrml, wamit and x.
- Save to Rhino 8 and Rhino 7 3dm file format.

Augmented Reality

View your models in the real world. AR enabled display modes allow you to see your model quickly in the camera feed. Choose from available anchor modes to fine-tune placement of your model.

Scan A Room

Quickly generate a Rhino model from an interior space. Using **RoomPlan** technology on LiDAR enabled devices, you can scan interior elements such as walls, windows, doors, cabinetry and furniture and get the resulting model in a 3DM format.



Features

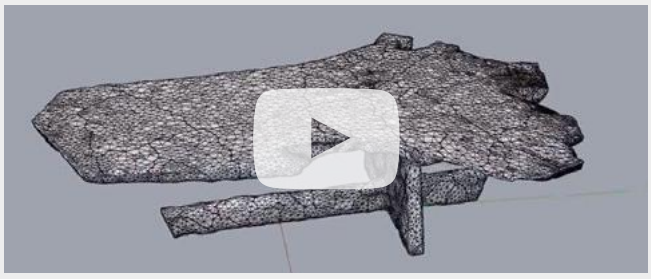
Augmented Reality Mode

Markups

Navigate your model and draw on any view without leaving the app.

Scan An Object

Scan a fully textured mesh of an object using this feature, powered by Apple's **Object Capture** technology.



And Many More ...

food4Rhino

Apps for Rhino and Grasshopper

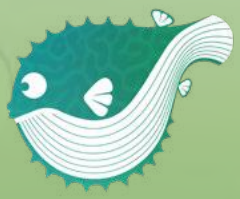
The food4Rhino web site has many apps for Rhino and Grasshopper. It's a mix of plugins for many, many applications.

Popular apps you can find here:

LunchBox

Ladybug Tools

Kangaroo



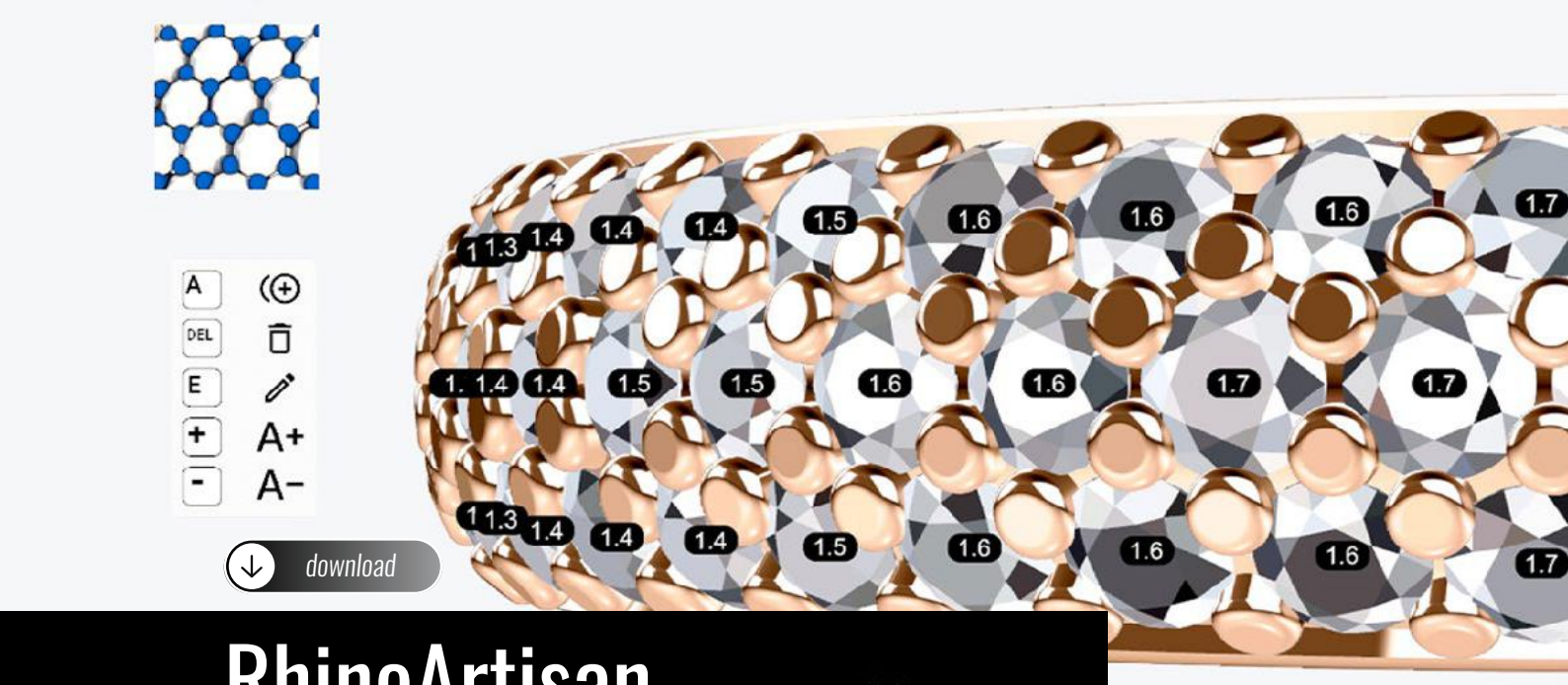
Pufferfish

PanelingTools

GhPython

Check it out!

www.food4rhino.com

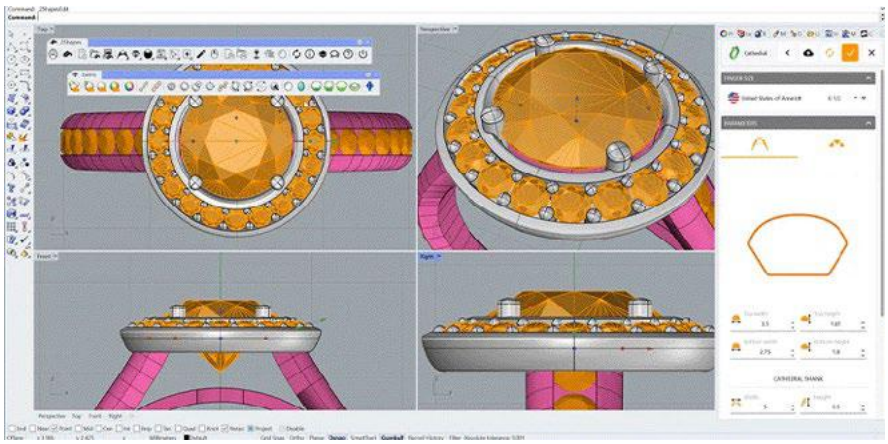


RhinoArtisan

(by 2Shapes Technologies)

Category: Jewelry design

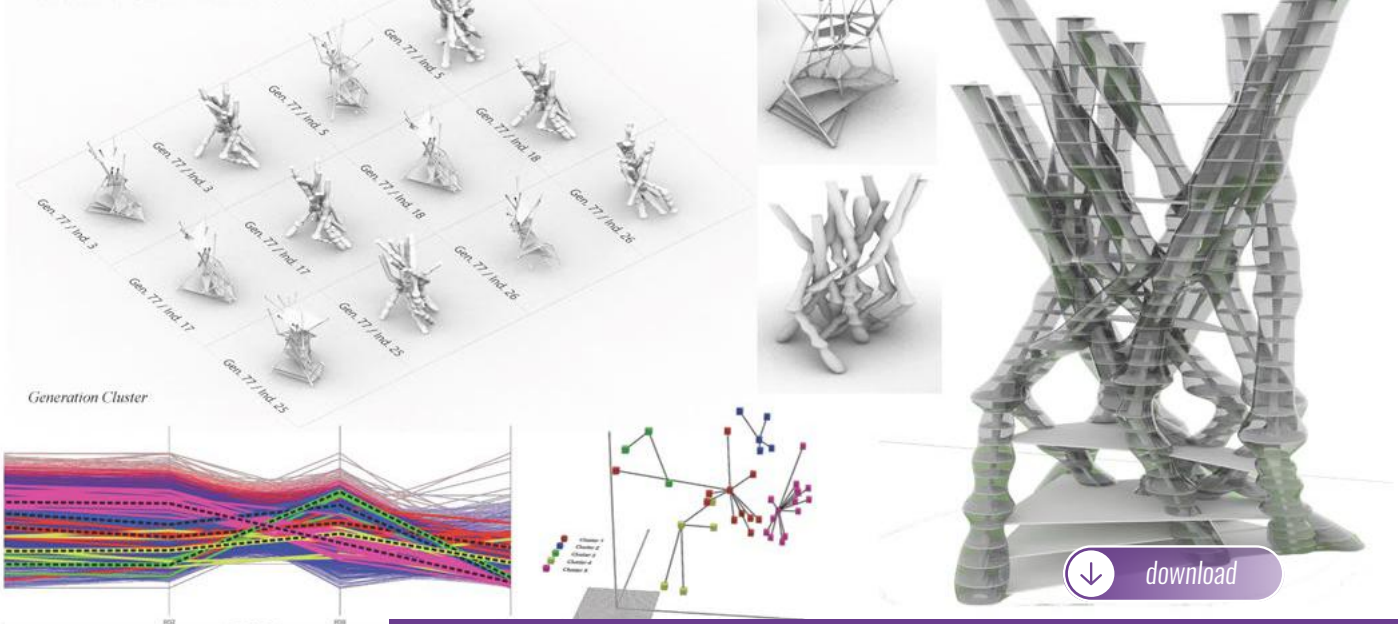
The most innovative Rhino plugin for jewelry designers and manufacturers, crafted by the creator of RhinoGold, Rafael del Molino, and the 2Shapes team.



With a distinguished 15-year legacy, RhinoArtisan is a beacon for global jewelers seeking unparalleled design solutions. Its intuitive parametric feature empowers designers to modify elements with simplicity amid intricacy. The user interface offers versatile options—side, top, light, or dark—integrating seamlessly with the standard Rhino interface for adaptability. Design effectiveness is heightened through fast builders and extensive editable libraries. The advanced rendering engine transforms 3D models into captivating photorealistic images and videos, enhancing customer comprehension. Backed by premium support, RhinoArtisan ensures immediate technical assistance, reinforcing its commitment to designers.

As a forefront of innovation, this versatile Rhino plugin seamlessly integrates cutting-edge features while preserving familiarity. Embark on a transformative jewelry design journey with RhinoArtisan, the pioneering, user-friendly plugin shaping the industry's future.

Watch this video and discover why RhinoArtisan is the must-have Rhino plug-in for designers and manufacturers.

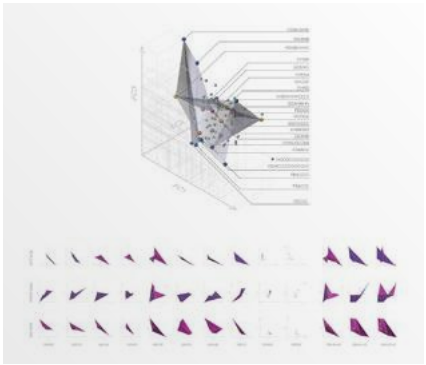


Wallacei

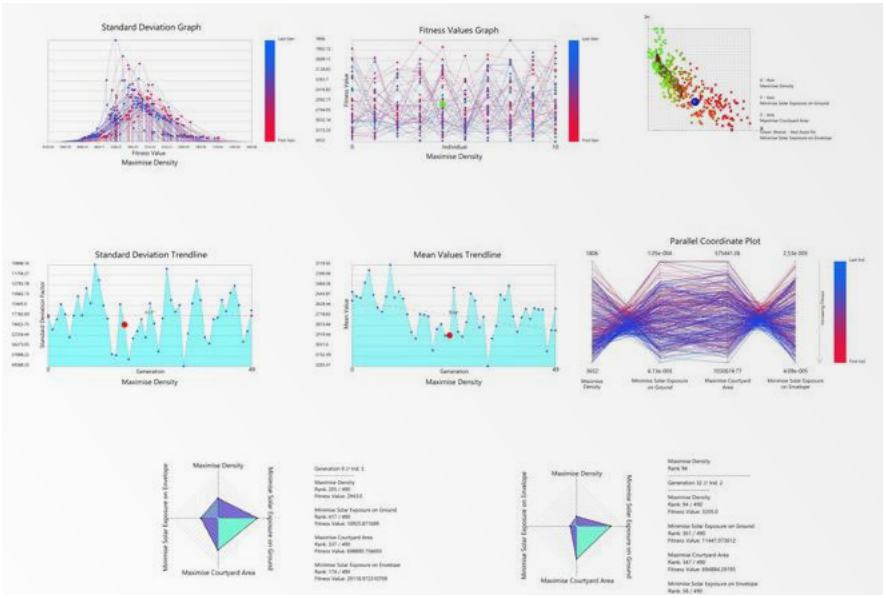
(by Wallacei)

Category: Analysis and simulation

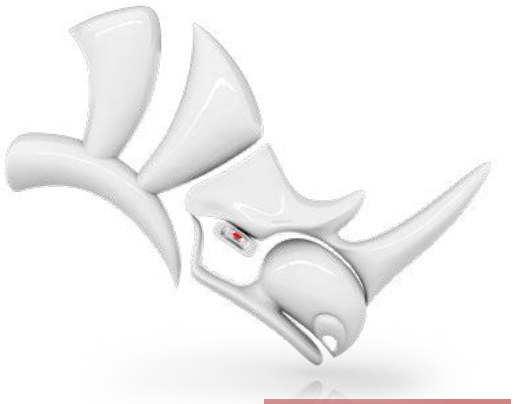
An Evolutionary Multi-Objective Optimization and Analytic Engine for Grasshopper 3D.



Wallacei stands as a groundbreaking plugin featuring Wallacei Analytics and Wallacei X, a testament to the collaborative efforts of Dr. Mohammed Makki, Dr. Milad Showkatbakhsh, and Yutao Song. This free tool empowers users to conduct detailed evolutionary simulations with advanced analytic tools and comprehensive selection methods. It also streamlines data access and analysis within a single user interface, making it accessible for all expertise levels. Streamlined for Rhino 6 and 7, Wallacei X employs the NSGA-2 algorithm, K-means clustering, and integrates JMetal, LiveCharts, and HelixToolkit libraries, ensuring a robust and versatile performance. Inspired by Alfred Russell Wallace, this evolutionary engine not only enables seamless problem setup, result analysis, and optimal solution selection - it also provides users with the unique ability to select, reconstruct, and output any phenotype from the population after completing their simulation.



Explore available video tutorials **HERE** and join the evolution of computational design with Wallacei.

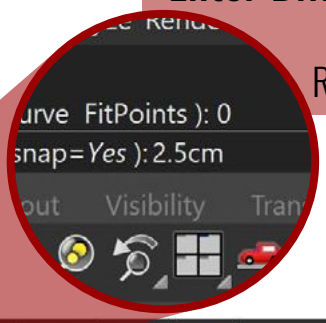


Tips & Tricks

Elevate Your Rhino Game: Think you know it all? Click now and unravel a collection of game-changing tips & tricks!

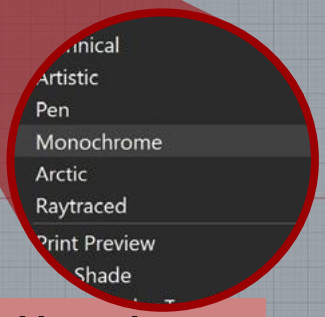
Turn on the Tooltips
Rhino 4+

Enter Different Units
Rhino 4+

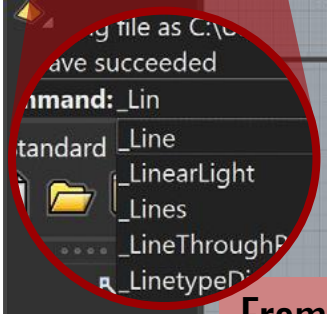


Package Manager
Rhino 7+

Monochrome Render Mode
Rhino 8



From Any Language to English
Rhino 4+



Vectorize Plugin
Rhino 7+

What's new in Rhino 8

Explore new features in Rhino 8, including ShrinkWrap, faster rendering, SubD Creases, enhanced drafting tools, customizable UI, and much more. Click on any of the following features to get more information.

ShrinkWrap: Turn Garbage To Gold

ShrinkWrap creates a watertight mesh around open or closed meshes, NURBS geometry, SubD, and point clouds: ideal for creating meshes for 3D printing.

Built for Mac

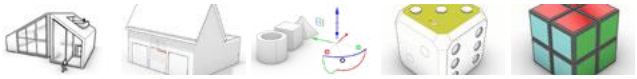
Rhino for Mac is faster than ever, running natively on both Apple Silicon and Intel Macs, and using the Apple Metal display technology. We've also brought the User-Interface on Mac closer to its Windows sibling...

SubD Creases

SubD Creases create a feature between a smooth and a sharp edge, without adding complexity to the SubD control net, great for making fillet-like features.

Modeling: Simplified

Rhino 8 unlocks new modeling workflows — like PushPull — and adds intuitive new features to the Gumball, Automatic CPlanes, and more...



Clipping and Sectioning

Rhino 8 introduces several clipping and sectioning enhancements to help support drafting and fabrication workflow.

Presentation

In Rhino 8, we've updated the Cycles Render engine, smoothed out the UV Workflow, improved our procedural textures, added a display mode, and more...

Grasshopper: Rhino Data Types

Rhino Data Types allow you to bake geometry with custom attributes, import more file formats, control blocks, use native materials in the display pipeline, create hatches and annotations, and many other expanded workflows...

Rhino Refined

We've fixed hundreds of bugs, but we've also added new Linetypes, improved Mesh Booleans, enhanced our surface editing tools, and more...

Development Platform

Rhino 8 brings a new code editor, support for CPython and .NET 7, major improvements to our free SDKs, API refinements, and some major new features that broaden and deepen the foundations of the geometry development platform...

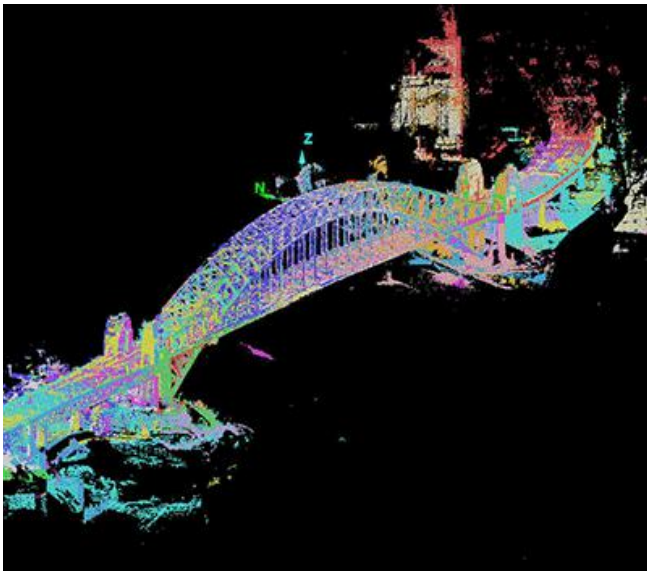
And More

Looking for a complete list of new commands? If you're not seeing what you're looking for above, please check out the documentation's New in Rhino 8 for a complete list...as well as new command options.

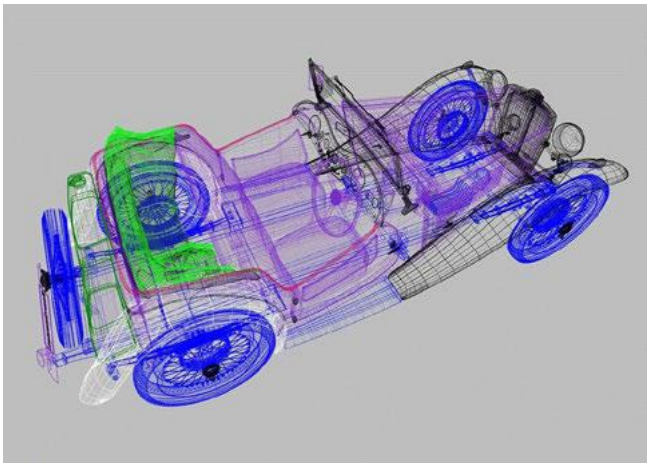
From Giant Scanners to Handheld Wonders, Mike Annear's 3D Scanning Odyssey

One name stands out in the ever-evolving landscape of 3D scanning and modeling technology: **Mike Annear**, the founder of **Scan2Model**. With a career spanning over two decades, Mike has been at the forefront of the 3D scanning revolution. His journey began in 2000 when he played a pivotal role in creating a 3D model from a point cloud for the Western Australian Police's crash and crime scene investigation.

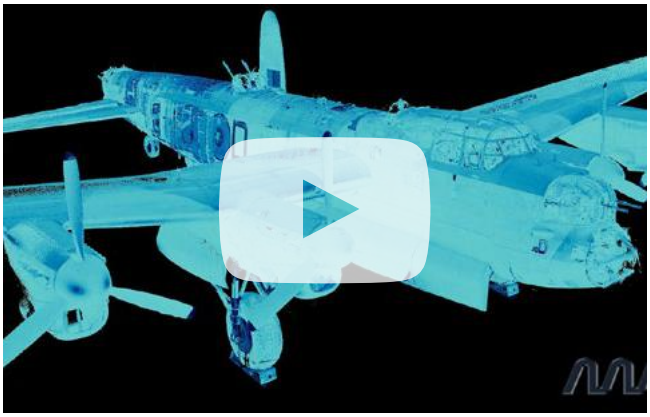
Remarkably, 3D scanning technology itself has only been available commercially since about 1995, and Mike's experience from its early days highlights the extraordinary advancements witnessed over the years. He shared in an interview, "In 2000, the 3D scanner was a huge, heavy tripod-mounted box run by very large car batteries and took over half an hour to do one scan. It cost over $250,000." This underscores the significant strides made in terms of affordability, portability, and efficiency in the realm of 3D scanning.



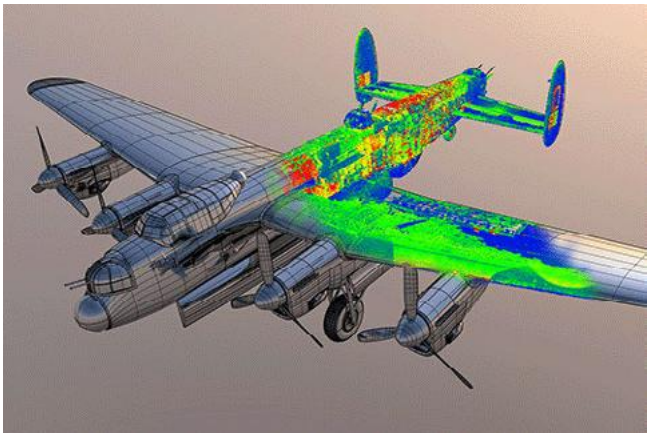
Scan2Model specializes in converting point cloud data into detailed and accurate 3D models, using Rhino 3D as a key software. Mike emphasized, "Rhino 3D is relatively cheap for full-blown modeling software that can handle large point clouds."

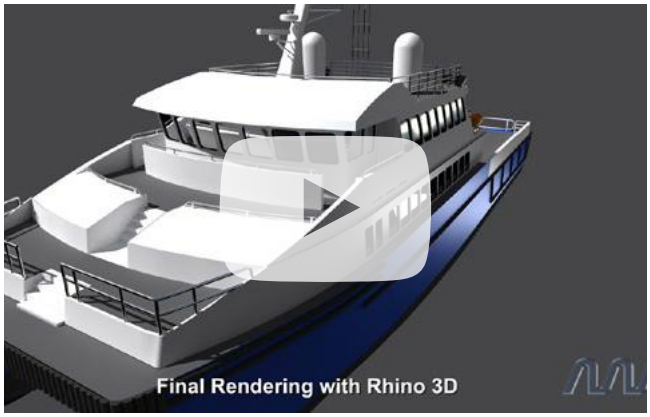


The workflow begins with importing point clouds into Rhino 3D. Mike employs a variety of tools, such as a mobile construction plane and clipping planes, to effectively maneuver through the data and generate sections for subsequent modeling. Mike described his approach: “My primary tools in Rhino involve the mobile construction plane, which is linked to two clipping planes. This functionality allows me to seamlessly navigate the point cloud, producing sections applicable in Lofting, curve networks, etc.” This detailed methodology guarantees that the resulting 3D models boast aesthetic appeal and precision.



Scan2Model caters to a diverse range of industries, including crash investigation, engineering, construction, architecture, and marine refits. Mike’s expertise extends beyond providing 3D modeling services; he also empowers clients by teaching them how to navigate the challenges of working with raw point cloud or mesh data.





Looking to the future, Mike acknowledges the ongoing advancements in 3D scanning technology, citing the reduction in physical size, increased speed, and accuracy of measured points. He humorously contemplates the potential impact of AI, acknowledging that automatic 3D models generated from images and videos might become commonplace.

Mike Annear and Scan2Model exemplify the transformative journey of 3D scanning technology. From the cumbersome devices of the early 2000s to the handheld, affordable scanners of today, coupled with the power of Rhino 3D, Scan2Model continues to revolutionize the creation of 3D models from point cloud data, leaving an indelible mark on the industry.

Upcoming Events

Hone Your Skills With Rhino

RHINO.INSIDE.REVIT ESSENTIALS
HOSTED BY SIMPLY RHINO - JAN 23, 2024

Professionals who find themselves using Rhino as well as Autodesk Revit® can get a lot out of this online course, which explores ways to enhance the interoperability between the two programs. Four course sessions total.

WHERE: Online **TIME**: 3-7 PM GMT
COST: £400 **LANGUAGE:** English

WOMEN IN 3D PRINTING
HOSTED BY PROJECT FARMHOUSE - FEB 7, 2024

Raise a glass and mingle with a wide breadth of design professionals at this mixer open to both women and men. Grow your community and connect, engage, and exchange ideas with both familiar and fresh faces.

WHERE: New York **TIME**: 7-10 PM EST
COST: Free **LANGUAGE:** English

INTRO TO RHINO AND 3D PRINTING
HOSTED BY GOLDSMITHS' - FEB 14, 2024

CAD and 3D printing have revolutionized the jewelry industry. Learn with experienced tutor Jasmin Karger how to use Rhino and the 3D printing process to open new and exciting horizons for your business.

WHERE: London **TIME**: 10 - 4 PM GMT
COST: £389 **LANGUAGE:** English

STUDENT SHOP MANAGERS CONFERENCE
HOSTED BY SSMC - JULY 9-11, 2024

The Student Shop Managers Consortium plans to bring together a community of school faculty, staff, and students in beautiful Hawaii, to connect and discuss challenges relevant to the consortium. Registration now open.

WHERE: Honolulu **TIME**: 8A - 5P HST daily
COST: $400 **LANGUAGE:** English

Book Discoveries

Rhino 7.0 for Jewelry Volume I & II by Dana Buscaglia

Volume I: 2D - Intro to Rhino

"Rhino 7.0 for Jewelry Volume 1" is a tutorial-driven guide for jewelry design using Rhinoceros 7.0 software. Focused on 2-D projects, Dana Buscaglia introduces fundamental Rhino commands through step-by-step tutorials, making it ideal for self-instruction or classroom learning. Covering topics from "The Rhino Workspace" to "Technical Drawing: Simple Pearl Ring," the book progressively builds skills for creating intricate 2-D designs, catering to both aspiring professionals and students.

Volume II: 3D - Intro to Rhino 3-D Space

In "Rhino 7.0 for Jewelry Volume 2," Dana Buscaglia extends the exploration into 3-D jewelry modeling. With a tutorial format, the book covers advanced topics such as navigation in 3D space, rendering, and creating complex designs like briolettes and revolved ring bands. From generating technical drawings to mastering layout commands for print or PDF, Volume 2 equips designers with practical skills for bringing innovative 3-D jewelry concepts to life.

get Vol. I now

get Vol. II now

Learning

Learn Grasshopper with Kris

About KRIS

"I am the founder of an educational platform dedicated to engineers and architects who seek to keep up with the latest technological developments and change the way the AEC industry works. Through my work, I'm committed to inspiring and empowering the next generation of designers to push the boundaries of what's possible with Grasshopper, Python, and C# in the AEC industry."

Kris provides high-quality online training for AEC specialists, drawing on extensive practical experience to impart accessible knowledge. The focus is on practical content and real examples to help with the career development of all subscribers.

Click and download these FREE guides that will help you start your journey with programming in AEC!

5 Steps to Learn Grasshopper

A Guide featuring the best books on parametric design, practical and fun exercises, explanatory tutorials, and cool videos. There's something for everyone, regardless of their level of expertise.

Python for all engineers in AEC

This guide, created for AEC specialists, provides Python and Grasshopper scripts, showing practical application of Python programming language in the engineering world.

Sign up **HERE** for free weekly Grasshopper mailing. Beginners get a step-by-step guide for easy and enjoyable learning. Advanced users receive Kris' Tips & Tricks, surprising even superusers. **Join a community of 10,000 architects and engineers to learn and improve Grasshopper skills in a fun way.**

Rhino 8

Rhino 8 brings new modeling tools like ShrinkWrap, a huge speed boost for Mac users, SubD Creases, PushPull workflows, better drafting tools, a more customizable User Interface, a faster Render engine, new Grasshopper data types, and much more.

Get a New Licence

STUDENT

One time purchase

Perpetual license
Support included
Service releases included
Use for commercial work

Buy Now

FREE EVALUATION

No credit card requiered

90 day trial license
Support included
All features included
Use for commercial work

Try It

COMMERCIAL

One time purchase

Perpetual license
Support included
Service releases included
Floating license

Buy Now

Or Upgrade

STUDENT

Upgrade from any version

Perpetual license
Support included
Service releases included
Use for commercial work
Prior version license key needed

Buy Now

FREE EVALUATION

No credit card requiered

90 day trial license
Support included
All features included
Use for commercial work

Try It

33% OFF COMMERCIAL

Upgrade from any version

Perpetual license
Support included
Service releases included
Floating license
Prior version license key needed

Buy Now

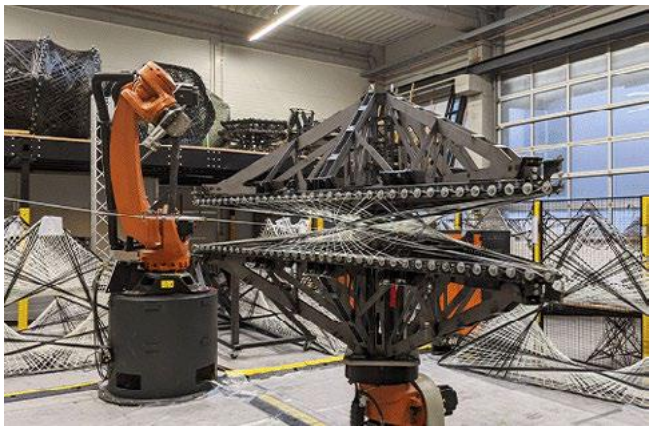
Limited Time offer

FibR's Robotic Elegance in Architectural Design Through the Texoversum Project

FibR GmbH, a pioneering construction company specializing in architectural fiber composite structures, continues to redefine the landscape of architectural design and construction. At the forefront of their innovative approach is the **Texoversum** project, a textile research and education facility for the University of Reutlingen. Let's delve into the intricacies of FibR's unique services, with a spotlight on the Texoversum project that exemplifies their commitment to resource efficiency and cutting-edge construction techniques.

FibR's Core Services and Expertise

FibR's core services revolve around robotic fabrication of fibrous lightweight structures for architectural applications. Their expertise spans load-bearing structures, facades, and interiors. What sets FibR apart is their integration of computational design methods and robotic fabrication. This integration helps unlock a novel design and construction repertoire that emphasizes resource efficiency.



Robotic Fabrication for Precision and Sustainability

FibR's robotic filament winding processes enable the precise placement of fibers in complex spatial arrangements. This approach not only ensures high-precision architectural components but also contributes to societal-relevant solutions for resource-efficient manufacturing. The process is waste-free, placing materials only where needed. It employs lightweight construction principles, aligning fibers to optimize strength and minimize environmental impact.

Customized Fiber Composite Materials

FibR takes pride in developing its own composite materials tailored to architectural requirements, ensuring weather resistance, robustness, structural performance, and visual appeal. From expressive glass fiber structures to high-performance carbon components and sustainable products made of natural fiber, FibR's materials offer a broad design repertoire.

Texoversum: A Milestone in Digital Lightweight Construction

The Texoversum project stands out as a testament to FibR's innovation. This textile research and education facility features a secondary fibrous skin that acts as a balustrade for balconies and provides shading for the fully glazed building. FibR played a crucial role in the early stages of the project, contributing to component geometry, fabrication strategy, and certification processes.

Unique Design and Sustainability

The Texoversum facade is a milestone in digital lightweight construction, showcasing bespoke structural design, shading capabilities, and considerations for weathering and fire protection. Each component optimally utilizes carbon fibers for load-bearing while carefully calibrating glass fiber arrangements for shading. This results in a structure that minimizes resource consumption and enhances sustainability.

Inspiration from Nature's Efficient Construction Principles

FibR's approach draws inspiration from nature's efficient construction principles, where load-adaptive organization and reinforced composite materials result in resource-efficient and highly performant structures. By employing computational design and robotic fabrication, FibR translates these principles into their technical structures, addressing urgent needs for resource-efficient architectural design and construction.

FibR's Texoversum project exemplifies its commitment to pushing the boundaries of architectural innovation. Through a combination of computational design, robotic fabrication, and a unique approach to fiber composite materials, FibR continues to lead the way in creating resource-efficient, sustainable, and aesthetically stunning architectural structures that redefine the possibilities of modern construction.

Archicad Grasshopper

FREE COURSE

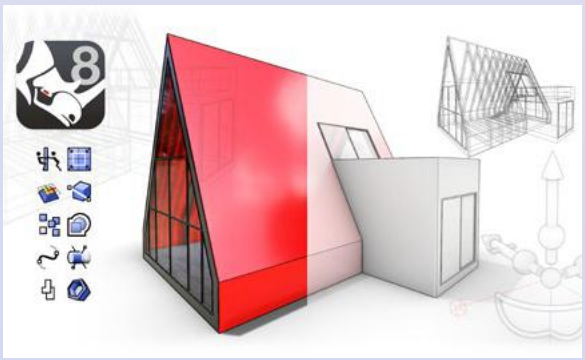
Embark on a journey into Building Information Modeling (BIM) and parametric workflows with our free online course. Led by expert instructors Nora Bukovits and Andres Velasco Muro from **PAZ Academy**, this course explores the seamless connection between Archicad and Grasshopper.

Discover the power of Archicad Grasshopper Grundlagen + PARAM-O, GDL, and Python, where we not only explore the connection but also dive deep into Param-O, the visual GDL editor in Archicad, GDL, and Python. This comprehensive course empowers both seasoned Archicad users and BIM beginners with videos, thorough documentation, and scripts to automate mundane tasks in Archicad.

Don't miss this opportunity to enhance your Archicad proficiency and join us on a journey of innovation!

take this class now

Intro to Rhino 8



Fee: $US 77.95

100% OFF
with Coupon Code: RHINOZINEDEC8

Unlock the power of Rhino 8 with our exclusive course!

This course uses our latest version for 3D design. You will begin by exploring the interface in Chapter 2, progress to drawing and editing 2D and 3D curves in Chapter 3, and master transforming techniques with Gumball in 2D in Chapter 4. Chapter 5 will delve into surfaces and lead you to Chapter 6, where you will learn how to create and edit solids using the new Push and Pull capabilities of Gumball, as well as the incredible ShrinkWrap command. In Chapter 7, you will be briefly introduced to SubD, which will be followed by 3D projects, presentations, and homework in Chapter 8.

Take this class now:
English** or **Spanish

*Ensure the coupon code is applied during payment. Failure to do so will result in the full course fee being charged, with no refund available.

After purchase, these courses will be available for two years!

Rhino3D Education

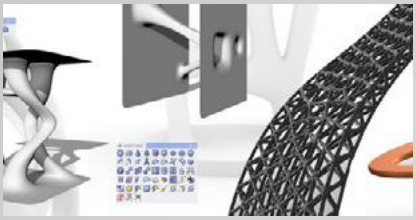
with more than 30,000 students...

Select courses below, from beginners to specialized ones or **browse all our courses.**

New to Rhino?

Rhino Intro & Intermediate

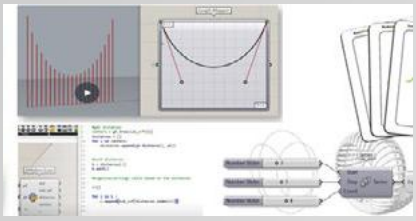
SubD in Rhino 7



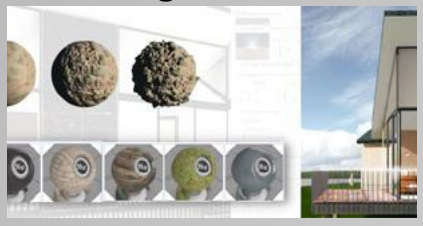
Rhino & Revit World

Architecture & 2D Drafting

Grasshopper & GH-Python



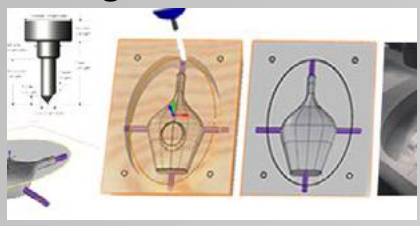
Rendering & 3DM Blocks



Jewelry

Footwear

Digital Fabrication



Marine Design

Podcasts & Webinars

Enjoy **20% OFF** with coupon code: **RHINO3DEDUCATION20** at checkout!

www.Rhino3D.Education

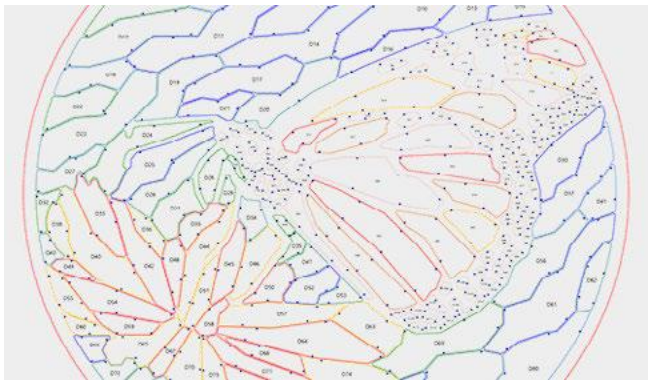
Nathan Neufeld's Transcendent Monarch Butterfly Installation, *"Migration"*

- Digital Fabricators Project

Nathan Neufeld presents a mesmerizing celebration through his 2019 project. This art installation adorns the Argosy Parkway bridge in Kansas City with a series of monarch butterfly portraits. They are intricately crafted from a CNC-milled lattice inlaid with many-colored laser-cut acrylic windows.

Neufeld's process began with hand-drawn sketches, transformed through Rhino's precision, and further refined using Grasshopper to code each piece's identity, organizing each curve by color. The result is a contemporary interpretation of stained glass, dynamically arrayed on either side of the bridge.

As sunlight transforms during dawn and dusk, and with the changing seasons, "Migration" breathes life into the bridge. The monarch portraits interact dynamically with the environment, reflecting the butterflies' migration to and from Mexico's oyamel fir trees. This visionary project becomes a symbolic journey, inviting viewers to connect with the enchanting world of monarch butterflies and witness the fusion of art and technology in a transcendent experience. In Neufeld's own words, "It is my hope that as you traverse the bridge, your thoughts also migrate to colorful and faraway lands."



Explore more of Nathan's inspiring work:

What is a RhinoFabStudio®?

A RhinoFabStudio® (fabrication studio) is a McNeel-certified digital workshop, which includes a suite of Rhino and Rhino-compatible programs, computer-controlled tools, and training. The tools cover the various cutting-edge industrial methods and materials for designing, analyzing, and manufacturing just about anything.

Advantages

As an Authorized RhinoFabStudio® you will:

- Be recognized as a leading-edge industrial-grade digital design, analysis, and fabrication expertise provider.
- Have all of your events and activities published to a worldwide audience.
- Have access to specialty digital design, analysis, and fabrication experts.
- Have direct access to many digital design, analysis, and fabrication product development teams.

Once approved:

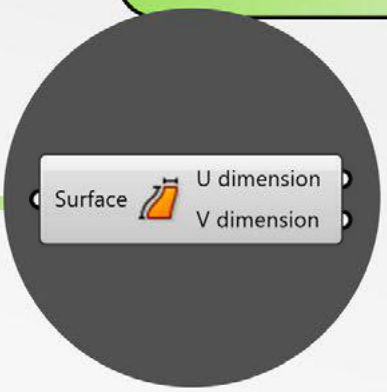
- You can log in and post your RhinoFabStudio events on the RhinoFabStudio event schedule.
- Your details and event schedule will be posted on the Rhino News Blog.
- Your event schedule will be announced in the RhinoFabStudio News e-mails monthly.

Want to become an authorized RhinoFabStudio®?

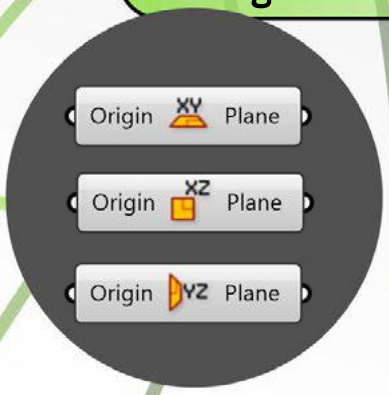
more info

Tips, Tricks & resources about Grasshopper

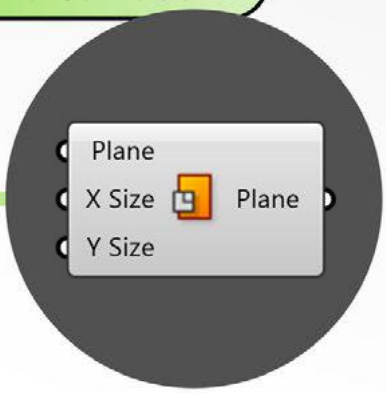
Dimensions



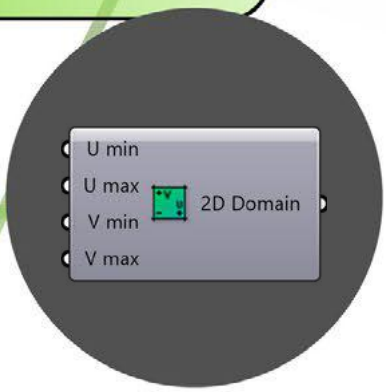
Origin Planes



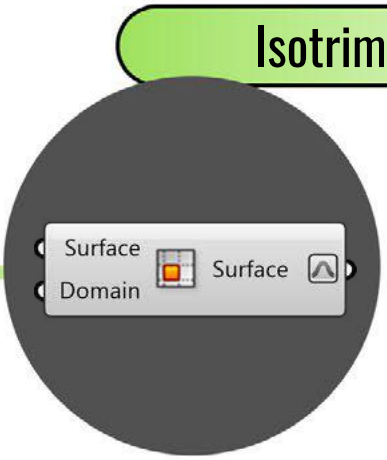
Plane Surface



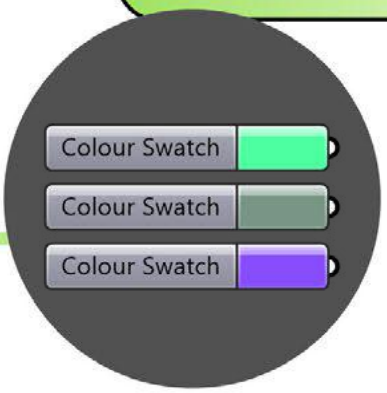
Construct Domain



Isotrim



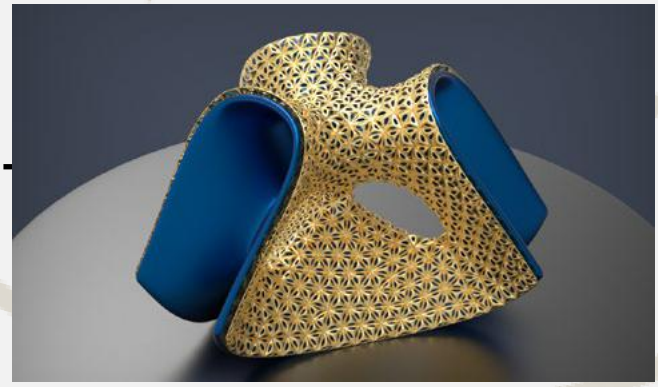
Colour Swatch



Elevate Your Grasshopper Game:
Click now and unravel a collection of game-changing tips & tricks!

‘Golden Renewal: 3D Fresh Starts’
- Compilation

(just...) Breathe
Posted by **nachetz**



Beauty of Math
Posted by **Cpiccioli**

Conch: A concept design made purely using grasshopper
Posted by **Adwait Dake**

Golden Curves
Posted by **Quan Li**

Jewelry design with Rhino
Posted by **vladislav**

Gallery

Explore a showcase of inspiring projects from the Rhinoceros Forums Gallery as captivating images bring to life the creativity, innovation, and artistry behind each posted masterpiece.

Click, like, and support the creators behind these fantastic posts!

Career Corner:

Job Opportunities with Rhino or Grasshopper

CAD DRAFTSMAN
TIFFANY AND CO

WHO: One of the most well-knownbrands in the world, with a historydating back to the early 1800's. Knownfor its luxury goods, particularly itssterling silver and diamond jewelry.

WHAT: Seeking a Rhino-experienced designer to support and facilitate all aspects related to New Product development projects.

more info

ARCHITECTURAL PROJECT DESIGNER
SPACEX

WHO: SpaceX designs, manufactures and launches advanced rockets and spacecraft. It seeks to expand humankind's exploration of the stars.

WHAT: Seeking a designer who will be responsible for driving the planning and design collaboration of modifications to existing SpaceX facilities in Cape Canaveral.

more info

PROGRAM MANAGER
EVERGLADES BOATS

WHO: An industry leader in premiumoffshore fishing boats. Founded in 1997, Everglades provides the ultimatechoice for discerning boat owners and knowledgeable big-water anglers.

WHAT: Seeking a Rhino designer to manage the product development efforts and share responsibility for program deliverables of all new products and model changes.

more info

DESIGN TECH SPECIALIST
WATG

WHO: The world's preeminent destination and hospitality design firm,specializing in hospitality, gaming +entertainment, urban + mixed-use, andhigh-end residential design.

WHAT: Seeking a licensed architect who possesses a high level of experience with production, documentation, BIM models (Revit), Rhino design software, and project information models.

more info

Stay in touch

Visit our Official Web site for purchases and support.

www.rhino3d.com

Expand your toolkit with new plugins.

www.food4rhino.com

Find valuable tutorials to enhance your skills.

Rhino3D.Education

Rhino Tutorials

@Rhinoceros3d

@Rhino3D.Education

@McNeelEurope

Stay updated and engaged by following us on our social media platforms.

@McNeelRhinoceros

@mcneel.europe

@rhino3d.education

@rhinofabstudio

Share your work, voice your opinions, ask questions, and contribute to a supportive community.

Rhinoceros Forums

GJD3D

www.Rhino3Dzine.com

support@mcneel.com