

The Evolution Collection by Naman Choudhary: Parametric Jewelry as a Reflection of Identity

In The Evolution Collection, Naman Choudhary harnesses parametric design to craft intricate jewelry pieces that symbolize personal growth and transformation. By blending digital precision with traditional craftsmanship, the collection showcases the potential of computational tools in contemporary jewelry design.

The Design of the 'Mountain' Slide: Reviving Play

The 'Mountain' slide reimagines playground design with dynamic parametric curves, inspired by nature and play. Modeled in Rhino and crafted in lightweight yet durable FRP, this award-winning structure captivates children with its endless loops of movement and imaginative forms.

Cnidaria Pavilion: A Novel

Approach to Load-Bearing Architectural Skins

The Cnidaria Pavilion, developed at the Université de Montréal's School of Architecture, showcases an innovative approach to large-span, doubly curved structures using lightweight aluminum sheets. Combining computational design with manual folding and snap-fit assembly, the pavilion demonstrates a new structural system that balances efficiency, aesthetics, and rapid fabrication.

“Exploring Climate-Driven Design”

Climate Driven Design I is an essential resource for architects, engineers, and sustainability professionals aiming to master net-zero building design. Authored by Christoph Reinhart, a leading expert in sustainable architecture and building science, the book provides a comprehensive framework for understanding atmospheric and thermal conditions in and around buildings.

Architecture

Students

Fabricate Sculptural Benches at the University of Houston

The Infill Bench project at the University of Houston brought together architecture students and cutting-edge 3D printing technology to create sculptural outdoor seating using additive manufacturing. By leveraging Rhino, Grasshopper, and industry partnerships, students explored complex geometries and innovative material applications, leaving a lasting impact on the campus design.

Behind the River Plate Facade: A Digital Approach

Dive into the innovative design and digital fabrication process behind the parametric facade of the River Plate Football Club parking structure. This story highlights the use of Rhino, Grasshopper, and various plugins to tackle complex challenges and achieve an efficient and visually dynamic result.

From Code to Clay: 3D Ceramic Printing at 3D Clay Summer

School

At the 3D Clay Summer School, designers and researchers push the boundaries of ceramic fabrication through robotic extrusion and computational design. Datura Sculpture showcases how parametric modeling and advanced toolpath scripting transform raw clay into intricate, organic forms.

Mangrove: A Record-Breaking Glass Sculpture by Nikolas Weinstein

Suspended in the grand atrium of Solaire Resort North, Nikolas Weinstein's record-breaking glass sculpture Mangrove redefines architectural art. Drawing inspiration from the intricate roots of native mangrove trees, the monumental 27-meter-tall installation combines 11 kilometers of borosilicate glass tubing with advanced digital tools like Grasshopper.

Ica & Kostika's Mycelium Sneakers: Pushing Boundaries in Design and Technology

Ica & Kostika's Mycelium Sneakers combine 3D printing with a unique design inspired by mycelium growth. Using Rhino3D for

precise modeling and adjustments, the sneakers are made from a recyclable elastomer, offering comfort and breathability. Initially launched as an NFT, the project overcame production challenges and expanded through strategic partnerships, showcasing the potential of technology in footwear design.

Thrill Island: Designing Adventure on the Icon of the Seas

Thrill Island aboard Royal Caribbean's Icon of the Seas combines storm-ravaged tropical aesthetics with cutting-edge computational design, utilizing Rhino and Grasshopper to craft immersive attractions like waterparks and adventure courses, while overcoming production challenges for a first-of-its-kind cruise ship experience.