Parametric Craftsmanship: Digital Workflows and Jewelry Fabrication at IXU Design

At IXU Design, computational design meets traditional jewelry craftsmanship. Using Rhino and Grasshopper, complex parametric geometries are translated into precise physical pieces through casting, advanced materials, and meticulous hand finishing.

ShaperBay: A Browser-Based Platform for Custom Surfboard Design and Fabrication

ShaperBay is a browser-based platform that empowers users to design and export custom surfboards using parametric tools powered by Rhino and Grasshopper. Its standout Hollow Wood Structure (HWS) feature supports the fabrication of sustainable, high-performance wooden boards through laser-cut templates and intuitive digital workflows.

New Dawn: A Lamp That Lives,

Breathes, and Decomposes

New Dawn by Aga Blonska is a 3D-printed lighting piece that transforms microbial biopolymers into an evocative sculptural form, entirely modeled and fabricated within the Rhino and Grasshopper environment. Showcased at Milan Design Week 2025, the project reimagines material decay as design potential, marking a milestone in sustainable large-scale additive manufacturing.

The Rooster Wears Code: Parametric Design in Recife’s Galo da Madrugada

For Recife’s 2025 Carnival, computational designer Pedro Vilarim developed a parametric system to map 10,000 recycled plastic bottles onto the chest of the 32-meter Galo da Madrugada sculpture. The design reimagines the vibrant cloak of the Caboclo de Lança using code, craftsmanship, and discarded materials.

The Aether Concept Car’s Revolution in Electric

Vehicle Design

Aether, a full-scale electric concept car designed by SCAD students, combines intricate parametric design with advanced additive manufacturing to craft its interior and exterior components. Using tools like Rhino 8, Grasshopper, and Multi-Jet Fusion technology, the team created flexible, resilient structures and intricate lattice patterns.

The Carapacks Pavilion: A Hexagonal Innovation

The Carapacks Pavilion features a versatile design suitable for wooden pavilions, roofs, and facades, showcasing architectural exploration and collaboration through innovative design and digital integration.