SANCTUM: Parametric Joinery and CNC-Carved Surfaces in a Room for One

Designed by Rafael Luna of Infra-Architecture Lab, SANCTUM is a plywood micro-architecture built around a parametric interlocking system and CNC-carved interior surfaces. Rhino and Grasshopper connect its sculptural form, fabrication logic, and exploration of acoustic behavior.

Scaling Nature: From Biomimetic Patterns to Furniture Design

What began as a biomimetic study of natural textures evolved into a parametric system capable of moving across scales, from surface patterns to digitally fabricated furniture. Developed in Rhino and Grasshopper, the project explores how a single Voronoi-based definition can be adapted, refined, and reinterpreted for different design applications.

The Peanut Bench: Free-Form

Coopering on a CNC Robot

The Peanut Bench reimagines the traditional coopering technique through computational design. Using Rhino, Grasshopper, and CNC machining, Stephen Thrasher crafted a free-form wooden bench that bridges craftsmanship and digital fabrication.

A Sculptural Table for ETT’s Sala Demo

Architect Valentina Serando designed a sculptural glass and resin table for ETT’s Sala Demo in Genoa, using Rhino SubD to translate fluid, organic forms into a precise, manufacturable object. The result is a centerpiece that fuses technology, craft, and design in a dynamic dialogue with space and light.

Gerard Furbershaw: From Industrial Design to Art Furniture

Gerard Furbershaw’s transition from industrial design to art furniture merges precision engineering with artistic expression. Using digital modeling and layered materials to craft unique sculptural pieces, his work redefines furniture

as “art you can sit on.”

Circular Economy in Action: The Wood Project

The Wood Project by MANUFACTURA and La Metropolitana uses Rhinoceros and Grasshopper to convert sawdust into 3D-printed architectural elements, demonstrating the potential of computational design in sustainable, circular economy practices.

The Melting Bookshelf

A simple bookshelf made using the parametric capabilities of Grasshopper.