

Parametric Adaptive Shell for an Autonomous Stock Handling Robot

Designed for a real-world logistics automation platform, this project explores how Rhino and Grasshopper can be used to develop adaptive industrial components that balance structural performance, mechanical constraints, ventilation, and manufacturability within a fully parametric workflow.

From Form-Finding to Fabrication: Pabellón Generativo Michoacán

A generative pavilion built in Morelia, Mexico, explores how form-finding, Voronoi-based segmentation, and digitally fabricated nodes can translate computational logic into a lightweight physical structure assembled from recycled CPVC components.

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.

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.

Vintersol: Redefining the Relationship Between Architecture and Nature

Originally designed for the Hello Wood Argentina festival, this installation reimagines architecture's interaction with its environment, blending computational design with a responsive, fluid aesthetic.

Imagining Sustainable Design: The Longsheng Yoga Pavilion

The Longsheng Yoga Pavilion by Helena Riesenberger, a digital project conceived within the serene landscapes of the Longsheng Rice Terraces in China, exemplifies a forward-

thinking approach to sustainable design.

Exploring New Frontiers in Lamp Design

The Crescent Lamp is a parametric design and digital fabrication product that showcases the seamless blend of minimal surfaces and advanced craftsmanship. It was developed as part of Controlmad's Master course and highlighted the transformative potential of algorithm-aided design.

An Innovative Exhibition Stand at CES by Simon Vorhammer & Atelier Grande

An example of innovative thinking and temporary architecture, combining aesthetic appeal with functional brilliance to create an engaging and educational experience for visitors.

Predictive Precision in 3D Printing Through AI

Neelam Chellani's research focused on enhancing shrinkage and deformation prediction in 3D printing through cGANs, delving into machine learning's ability to forecast deformation in 3D-printed objects.