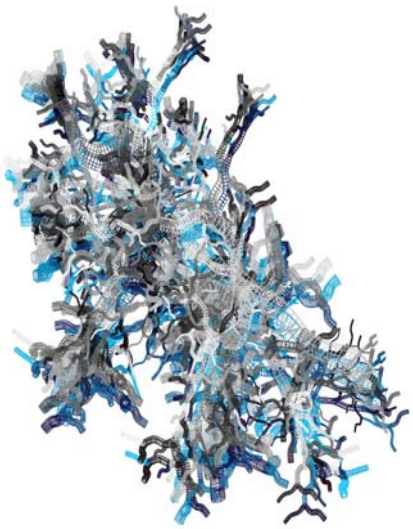

Above:
Untitled. seed( ) Plant, custom electronics, software drawing machine.

This image is generated by connecting a live plant to sensors which eavesdrop on its biosignals and transduce the live signal into drawing instructions for a custom plant art software system. The image is the result of a parametric drawing system using L-system rules to achieve a natural branching Structure

Below:
Untitled. Steve Mason. Digital image. Instanced geometry with local variation.

Voussoir Cloud. Buro Happold, Iwamoto+Scott Architects, ISAR, SCIARC students. Assembled thin wood veneer laminated fiber mesh fabric. Hybrid digital/analog parametric architectural design created by balancing a procedural approach with interpreted, human artistic direction.

MIT DUSP Urban Information Systems Group presents

PROCEDURAL DESIGN:
From simplicity to complexity

Natural metaphors and evolutionary strategies in contemporary design practice

TUESDAY October 21, 2008
5 - 7 PM
CRON Classroom (9-554)

In process-driven design research, intricate problems can be beautifully resolved by instantiating elegant and adaptive processes found in nature. This talk surveys and demonstrates biologically-inspired methods for creating parametric models with live, growing topologies. Rather than simply making form, procedural design helps us create artificial life ecosystems that give form with endless, smart variations. Generative components that are both sensitive and responsive to subtle differences in their environment are broken down into their essential parts. Works are cited in diverse practices: painting, sound art, computer graphics, architecture, landscape, industrial design and mass-customizable rapid fabrication. Come explore how contemporary artists are using nature's morphogenetic rules to create complexity out of simplicity.

Speaker: David Robert is a 12-year veteran of the film industry and is considered one of the world's foremost experts on procedural art. He lives in San Francisco and is currently consulting with PIXAR and other animation and architectural design studios worldwide on the use of procedural design systems. His artwork has been exhibited in North American, Japanese and European galleries and film festivals. He currently works for Toronto-based Side Effects Software, producers of Houdini; winner of multiple Academy Awards for bringing procedural design technology to the film industry.