Exhibit of Undergraduate Work

design
analyze
cooperate
cad
image
model
draft
draw
sketch
photograph

Steven Jerome Lehrburger













externalize

extend explore exact expose experiment explode exemplify extrude

exhibit

Reinterpreting the Glass House

task | Design a house for a working couple with no children for a vacant site in Palo Alto CA.

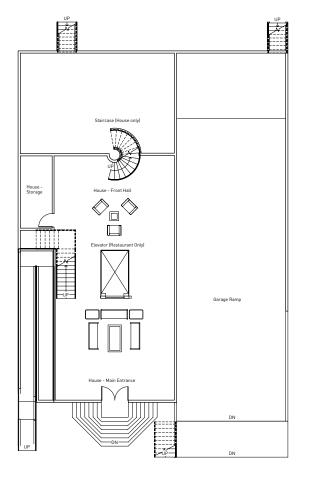
method I integrated a public restaurant into the private home to study the interactions and mutual subversions of convention that would occur between the domestic and commercial urban spaces. I studied glass house precedents and externalized aspects of domestic life that were once completely private. Mirrors and glass walls permitted constrained visibility between the house and restaurant.

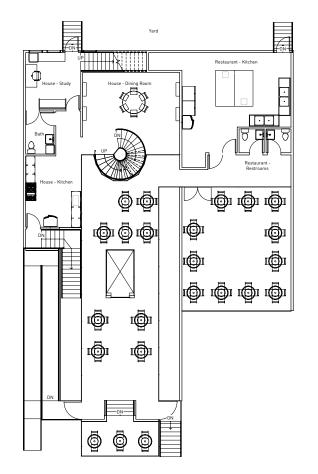
media Autodesk Revit, site photographs, Photoshop

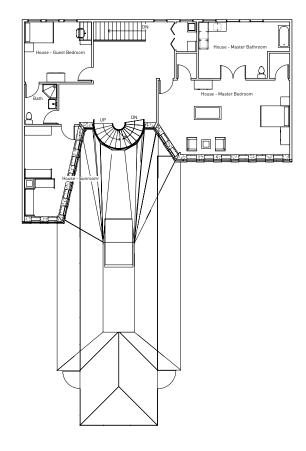
context Autumn 2005 - Stanford studio -The Architecture of the House - John Barton, Barton Architect Summer 2007 - personal work [rendering only]

design analyze cooperate cad image model

draft draw sketch photograph











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Reinterpreting the Glass House (continued)

task | Design a house for a working couple with no children for a vacant site in Palo Alto CA.

method | I also studied the intertwining of the private and public circulation patterns to eliminate conflict and confusion while maximizing visual (but not verbal and physical) interaction. I delineated between restaurant service and served spaces (orange), residential spaces that that I externalized (brown), and residential spaces that remained internalized (white).

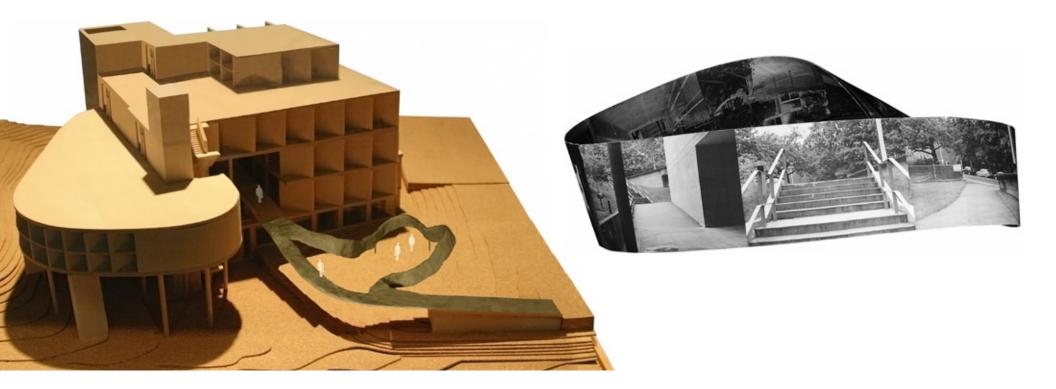
media Autodesk Revit, matte board, glue

context | Autumn 2005 - Stanford studio - The Architecture of the House - John Barton, Barton Architect

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Intervention in Le Corbusier's Carpenter Center

task | Modify the exterior of this Harvard University academic building to create a large, a medium, and a small learning space. Be attentive and responsive to Le Corbusier's patterns and intentions.

method | I initially studied the twisted paths that a pedestrian must take through, under, and around the building, and the Möbius strip became a basic concept for my intervention. I cut, extended, and curved the forms of the existing concrete ramps to investigate new irregularities and their dialogs with the existing structure. I formed these warped walkways into minimal but sufficient enclosures.

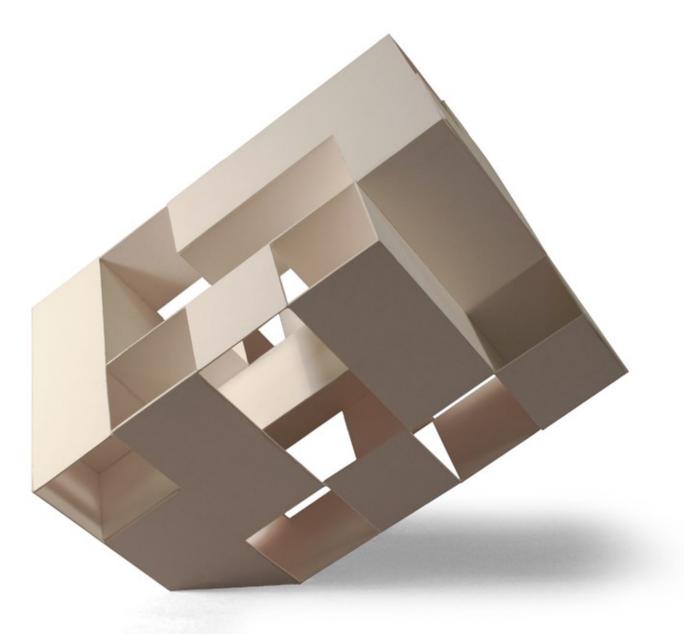
media chipboard, printed photographs, glue, wire, clay, existing display model, Photoshop

context | Summer 2006 - Harvard design school studio - Career Discovery - Neda Pourshakouri, GSD

design analyze cooperate

cad image model draft

draw sketch photograph



exhibit

Abstract Spatial Study

task Explore relationships of space through interlocking solids and voids of specified sizes. Obey a rigid 3" grid and use no more than three 45° triangles.

method I used the alloted triangles to rotate the grid that would order my volumes, and this rotation created a new spatial system for me to explore. I arranged the solids and the voids to accentuate this fundamental alteration by developing a line of symmetry that divided the axis of rotation. I filled the leftmost solids with additional museum board to balance the cantilever.

media | museum board, glue

context | Autumn 2005 - Stanford studio - The Architecture of the House - John Barton, Barton Architect

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photograph



externalize extend explore

exact
expose
experiment
explode
exemplify
extrude
exhibit

Case Study of Frank Harmon's Prairie Ridge Open Air Pavilion

task | Study the assigned existing building and present the analysis to the class.

method My partner and I researched the architect and the specific project to focus our analysis on the most formally and structurally relevant aspects of the design. We modeled the building at 1/4" in a partially-completed state to better explore the essential structural systems.

media | basswood, chipboard, glue

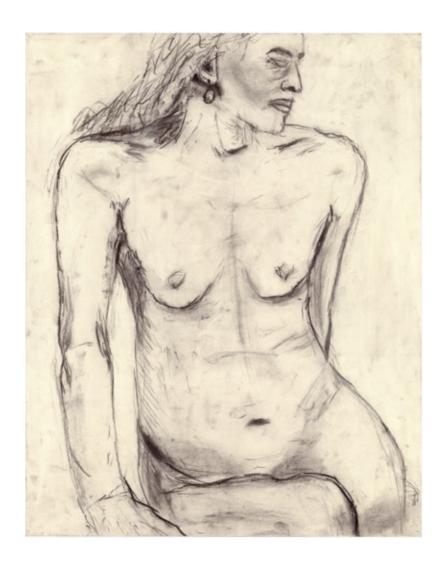
context | Winter 2007 - Stanford studio - Form and Structure - Eric Haesloop and Stefan Hastrup, Turnbull Griffin Haesloop Architects

design analyze cooperate

cad image model

draft draw sketch

photograph





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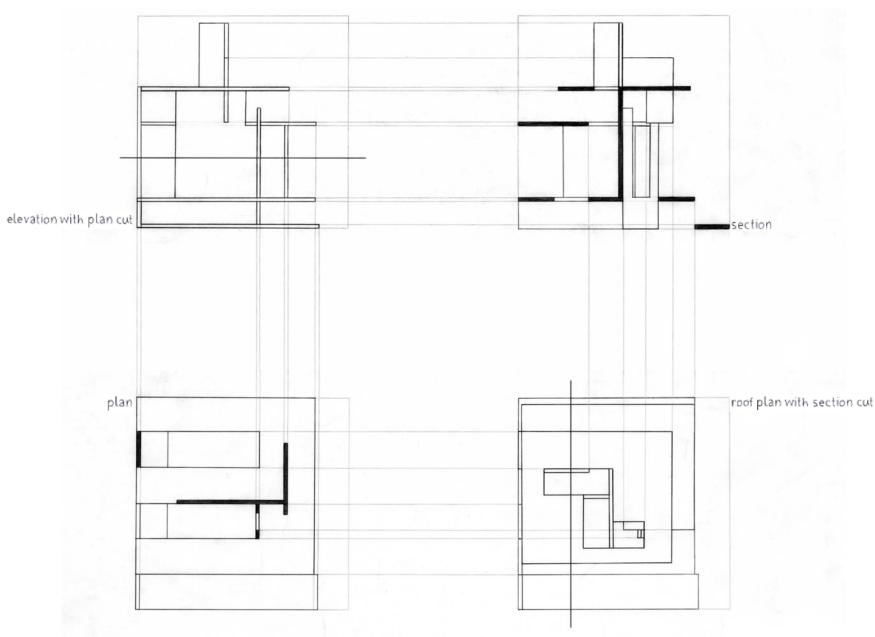
Charcoal Drawings

task | Draw artistic yet accurate compositions of nude models with limited pose durations.

method In the left drawing I explored the specificity of curved lines and subtle self-cast shadows. In the right drawing I explored the alternating patterns of light and dark as well as the varying degrees of changes in contrast. In both drawings I paid attention to the relationship between the figure of the model and the constrained rectangular ground of the page.

media vine charcoal, compressed charcoal, 24"x36" drawing paper

context | Winter 2007 - Stanford drawing studio - Drawing I - Kevin Bean, Professor



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expose
experiment
explode
exemplify
extrude
exhibit

Orthographic Drafting Exercises

task | Construct a visually interesting model out of foam core by dividing specified two dimensional shapes and recombining them into a form smaller than a 6" cube. Draw technically accurate orthographic plans, sections, and elevations at 1 to 1 scale.

method I carefully chose the locations of my plan and section cuts to read clearly and logically. I drew deliberately to meet the exacting standards required for the assignment.

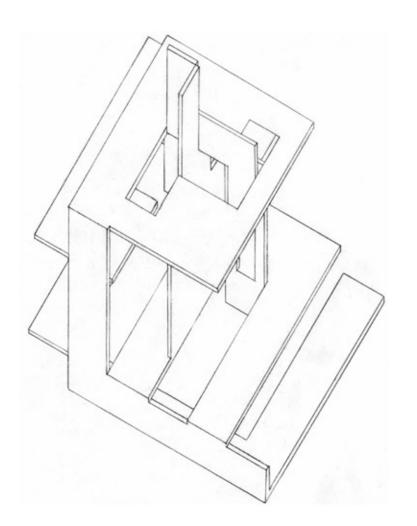
media | foam core, glue, graphite, trace, vellum

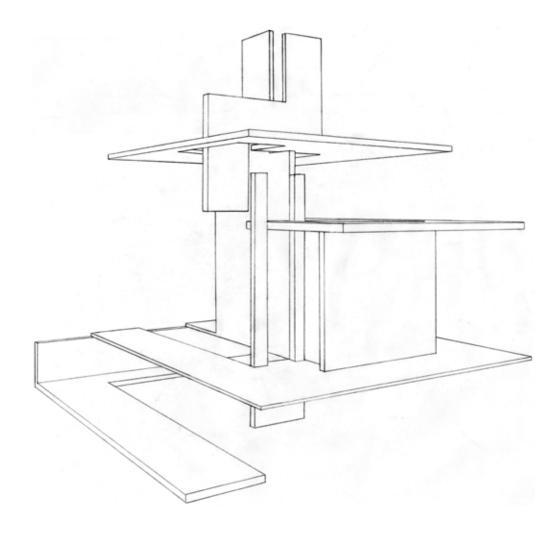
context | Summer 2006 - Harvard design school studio - Career Discovery - Dubravko Bacic, GSD

design

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Projection Drafting Exercises

task | Construct a visually interesting model out of foam core by dividing specified two dimensional shapes and recombining them into a form smaller than a 6" cube. Draw technically accurate axonometric and perspective drawings.

method | I experimented with different station points and horizon lines to exact the most dramatic and informative view from the model.

media | foam core, glue, graphite, trace, vellum

context Summer 2006 - Harvard design school studio - Career Discovery - Dubravko Bacic, GSD

design





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|Architectural Photography || Photographic Architecture

task | Create a uniquely-presented final portfolio consisting of my fifteen best prints.

method The negatives I had exposed over the quarter captured a variety of subjects, and I wanted to investigate relationships between them. I drew upon childhood memories of Charles and Ray Eames' House of Cards to create a buildable photographic experience. I specified themes for each of the five visible faces: graffiti, structure, macro, portraits, fog. Subtle annotations near each slot specified a single construction sequence. I considered the location of and compositional implications for each slice cut out of the pristine prints.

 $media \ \big| \ Leica \ single \ lens \ reflex \ camera, \ black \ and \ white \ 35mm \ films, \ photographic \ paper, \ museum \ board, \ drymount \ adhesive$

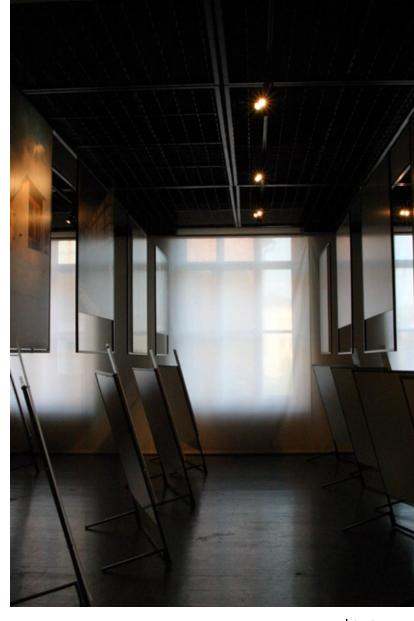
context | Autumn 2005 - Stanford seminar - Photography I - Lukas Felzmann, Professor

design









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experiment explode exemplify extrude exhibit

Independent Artistic Photography

task | Capture beautiful images while traveling in Europe.

method I carried my camera as often as possible and looked constantly for potential compositions. I exposed my sensor to the light of these moments in Ravensbrück, Germany; Helsinki, Finland; and Güzelyurt, Turkey. A 17"x22" print of the exposure of the children is currenty being exhibited with two others at the Stanford Coffee House, and of the four only it has been digitally edited (for color).

media | Canon digital single lens reflex camera, Photoshop

context | Spring 2006, Winter 2007 - personal work



defines void



double helix

mirrored/complementary/inverse processes for image creation



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experiment explode exemplify extrude exhibit

Duplex for a Couple of Photographers

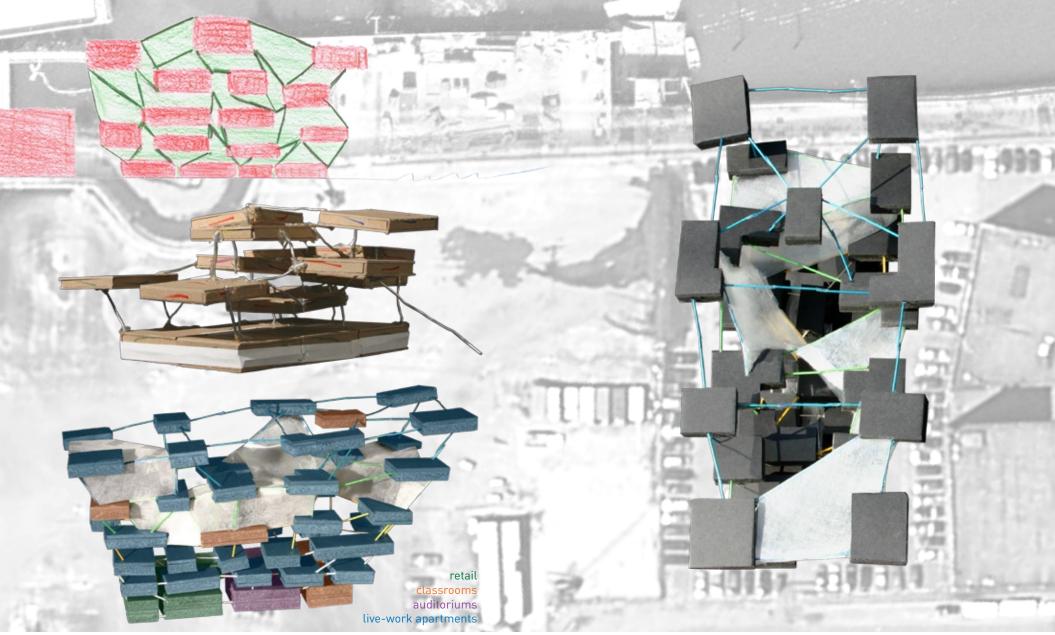
task | Imagine two distinct and interesting clients and design a duplex in which they both might live for a small Cambridge MA site.

method | I decided that one client would be a film photographer and the other a digital photographer. The film photographer sees a positive reality, a negative on film and a positive print, and thus his voids define his solids. The other works only with a positive image and thus his solids define his voids. I designed their residence to manifest, explore, and eventually resolve their inverse methods of image creation. I intertwined the staircases that ascended to their separate darkrooms to encourage artistic experimentation.

media ink, paper, museum board, plexiglass, glue

context | Summer 2006 - Harvard design school studio - Career Discovery - Neda Pourshakouri, GSD

design



extrude

exhibit

Artists' Cooperative

task | Design a 120 000 square foot artists' live/work/exhibition space for a constrained central waterfront site in Boston MA.

method | I explored axonometric and conceptual explosions of the surrounding brick warehouses to inspire my basic form. I concentrated primary circulation and exhibition spaces in the glazed voids between the solid live/work spaces. Steel structural supports (color coded by level) connect the exploded program blocks and act as secondary circulation paths. These rectilinear pieces are connected only at points which were adjacent in the unexploded form, thus holding the structure in a state of dynamic stasis and ordered chaos.

media colored pencil, paper, chipboard, wire, glue, foam core, toothpicks, sanded transparency sheets, Google Earth, Photoshop

context | Summer 2006 - Harvard design school studio - Career Discovery - Neda Pourshakouri, GSD





extrude

exhibit

Abu Dhabi Cooperative

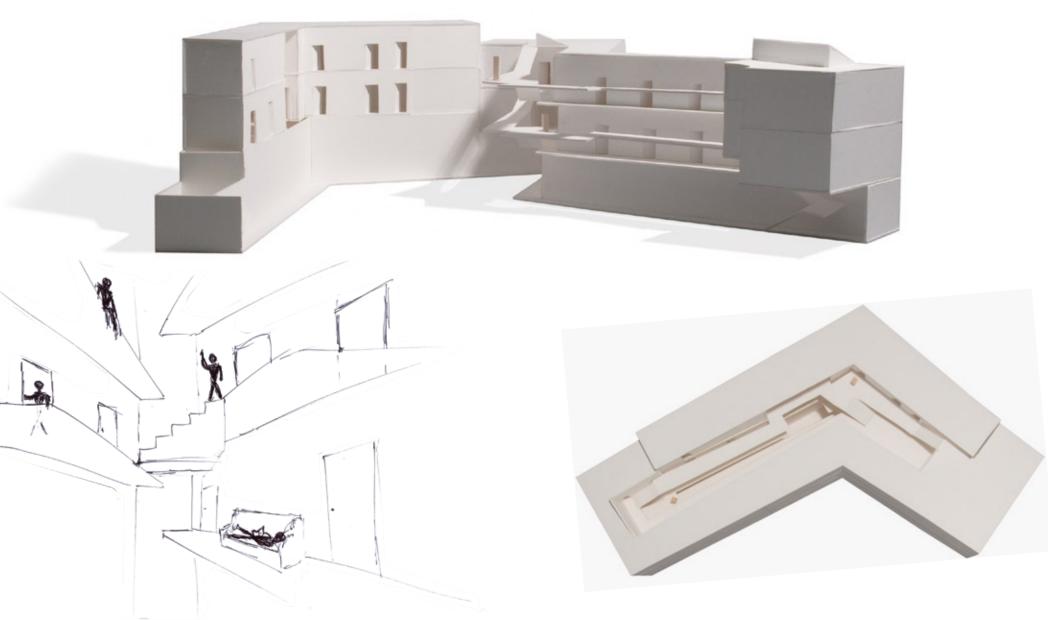
task Assist in the schematic design process for a 2,000,000 square foot retail/office/apartment/ballroom cooperative for presentation to potential developer client. Work with another intern to plan and construct a high-quality conceptual model.

meet an upcoming deadline. I then worked with professional photographer Jock Pottle in his studio to capture the above images.

method We used both digital and physical massing models to carefully design the pieces we would need to build the model before sending the files to to the laser cutter. We assembled the exploded pieces, adapted to unexpected difficulties in construction, and worked hard to

media laser cut acrylic sheets, scale figures, belt sander, Rhinocerous 3D, AutoCAD, Illustrator

context | Autumn 2007 - professional internship - Kevin Kennon Architect



exhibit

Stanford Green Dorm Project

task | Design the circulation and common spaces of the upper floors for a planned sustainable student dormitory. Model schemes on existing building plans developed previously by contributing students, faculty, and architects.

method | I pulled apart the existing halves of the building to create an open and public interior volume (lower left, lower right). A new split level system permitted continuous circulation (top), integrated common spaces and increased social interaction. Consequent opportunities for natural lighting and ventilation would allow the Green Dorm to exemplify an environmentally sustainable housing paradigm.

media ink, paper, museum board, wood, glue

context | Spring 2007 - Stanford studio - Green Architecture - Brad Jacobson, EHDD Architecture

design



exhibit

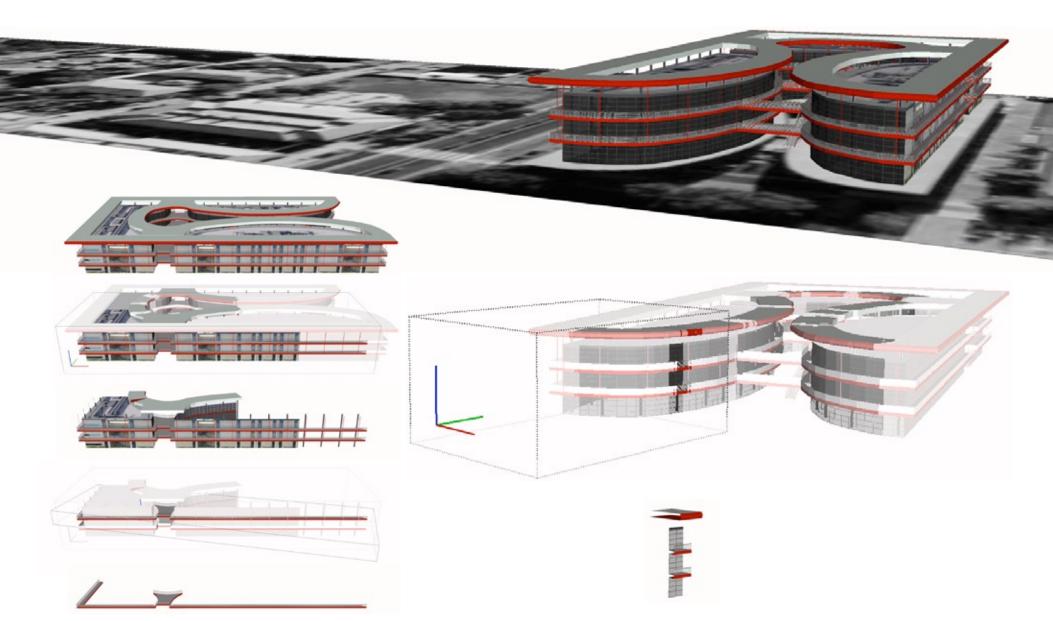
Stanford University Campus - Winning Google Competition Entry

task Build convincing 3D models of the structures on the Stanford University campus while minimizing file sizes to facilitate online accessibility via Google Earth. Research the purpose of each building before compiling and submitting these files to Google.

method I worked with another student to develop and obtain approval for a student initiated course that we would use to structure the project. We provided instruction and motivation to a team of eight students as they used photographs and building footprints to extrude the campus out of the map. I compiled these models and was responsible for communications with faculty, staff and Google employees.

media building photographs, Photoshop, Google Earth, SketchUp

context | Spring 2007 - Stanford student initiated course - Google's Build Your Campus in 3D Competition



exhibit

SketchUp Model of Foster + Partners' Clark Center

task Build convincing 3D models of the structures on the Stanford University campus while minimizing file sizes to facilitate online accessibility via Google Earth.

To begin this model I extruded simple forms to study possibilities for layered combinations of features in digital representations of buildings. Curved elements can dramatically increase the file size, so I strategically decomposed the building into a set of 17 repeated components consisting only of straight lines. This resulted in a reduction in file size of over 50% to under 1 megabyte.

media building photographs, Photoshop, Google Earth, SketchUp

context | Spring 2007 - Stanford student initiated course - Google's Build Your Campus in 3D Competition

externalize	1	Reinterpreting the Glass House	sheet 2 of 18
		Reinterpreting the Glass House (continued)	sheet 3 of 18
extend	The Parket	Intervention in Le Corbusier's Carpenter Center	sheet 4 of 18
SATO. L			311661 4 01 10
	4		
explore		Abstract Spatial Study	sheet 5 of 18
схрюгс		Case Study of Frank Harmon's Prairie Ridge Open Air Pavilion	sheet 6 of 18
		Charcoal Drawings	sheet 7 of 18
		Outh a graph in Duefting Typesiana	
exact		Orthographic Drafting Exercises Projection Drafting Exercises	sheet 8 of 18 sheet 9 of 18
		Trojection Branding Exercises	Sileet / Of 10
expose		Architectural Photography Photographic Architecture Independent Artistic Photography	sheet 10 of 18 sheet 11 of 18
		independent Artistic i notography	Sheet II of 18
experiment		Duplex for a Couple of Photographers	sheet 12 of 18
explode	A Distriction of the	Artists' Cooperative	sheet 13 of 18
		Abu Dhabi Cooperative	sheet 14 of 18
exemplify		Stanford Green Dorm Project	sheet 15 of 18
extrude	The same of the sa	Stanford University Campus - Winning Google Competition Entry	sheet 16 of 18
	The same of the sa	SketchUp Model of Foster + Partners' Clark Center	sheet 17 of 18