COMPUTATIONAL DESIGN THINKING!



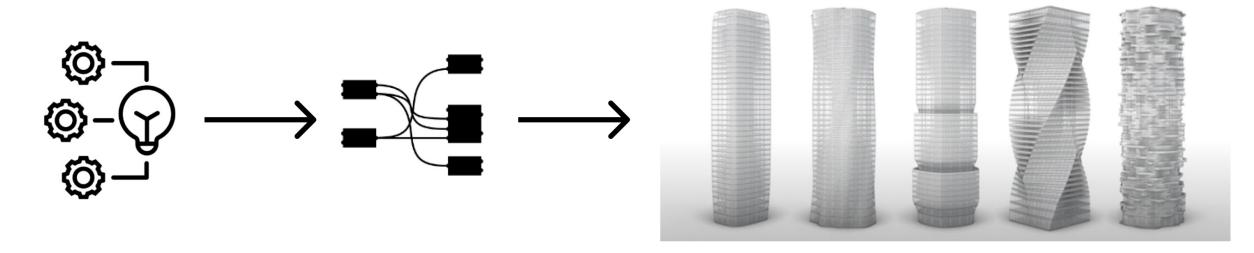




Computational Design - Approach

A method for combining Parameters and Algorithms to create opportunities

- I. Translate repeatable, valuable processes into code
- II. Create a new, collaborative and dynamic process
- III. Reduce limitations of time and resources
- IV. What about Generative Design?





Computational Design - Access

Bridging art, science, and technology.

- I. Hand Drafting + Physical Modeling
- II. 2D CAD Drafting + Digital Fabrication
- III. 3D Modeling + Advance Manufacturing
- IV. Building Information Modeling + Data Structures
- V. Computational Design + Data Simulation
- VI. Machine Learning + Artificial Intelligence









Computational Design - Thinking

Harmonize human-centered creativity and algorithmic precision...

- I. Empathize with user needs and break down complex problems
- II. Frame problems and ideate creative solutions
- III. Rapid prototype, test, and iterate
- IV. Learn, optimize, integrate, and innovate





Everyday

Computational design is all around us.

- I. Everyday products
- II. Specialty products
- III. Custom products















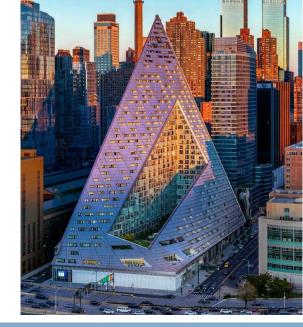
Architecture

Productize your processes.

- I. Structures
- II. Systems
- III. Components









Infrastructure

Memorialize tribal knowledge.

- I. Variables
- II. Logic
- III. Analysis
- IV. Collective Intelligence













Why use computational design?

A place to collaborate and innovate.

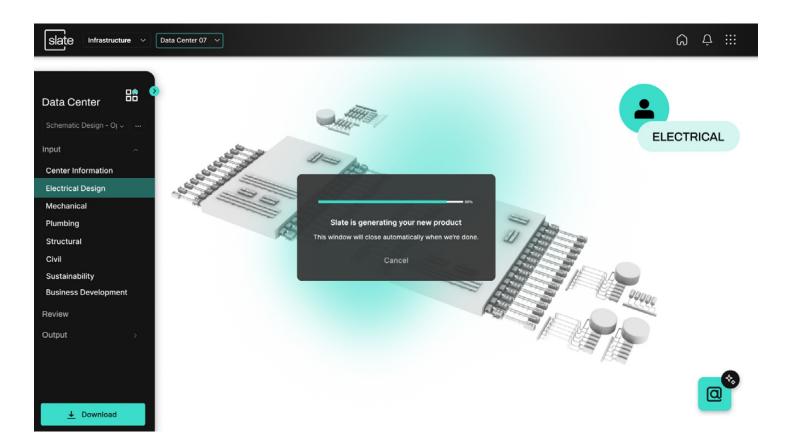
- I. Increase speed for deliverables
- II. Achieve consistent results
- III. Reduce risk
- IV. Increase resiliency
- V. Create confident estimates
- VI. Bid more business
- VII. Deliver better projects





Want to learn more?

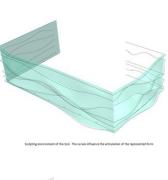
Head over to the link in the chat and sign up for our demonstration of Slate Generate on August 14th, 2024!

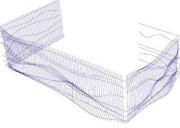




slate

Q & A

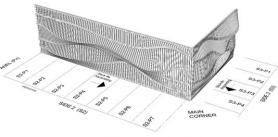








Full geometry model for verification in the finalization stage



All pieces are marked as follows: Sx-Px-Sx-Tx S = Side P = Panel S = Stick T = Twig (part of stick)

twig numbers go up vertically (1 is the bottom, 5 is the top)

Brise-Soleil Assembly Diagram with rules

S2-P1-S1-T5	- S	2-P1-S2-T5 -	S2-P1-S2-	T1	S2-P1-S1-T4	
S2-P1-S1-T1 e	- S2-P1	-S2-T4	-	S2-P1-S	2-T3	-
- \$2-P1-S1-T2 -	- \$2-P1-Si	2-T2	-	S2-P1-5	31-T3	-
400 5	32-P2-S3-T3		52-P2-S1	3-T4 S	\$2-P2-S6	-TS (a)
S2-P2-S9-T	14 6	\$2-P2-S3-T2	S2-P2-S7-	T2 /6/6	S2-P2-S8-T	4 6
5	52-P2+S4-T3		52-P2-S6-T1	10/	S2-P2-S12-1	11 /0
\$2-P2-S6-T4	5	2-P2-S4-T5 C	S2-P2-S1	TI -	S2-P2-S11-T	11 10
S2-P2-S13-T5	5 - 0 :	S2-P2-S13-T2	10	\$2-P2-S	1-T3	-
- S2-P2-S1-T4	S2	-P2-S3-T5 -	(0)	52-P2-S	5-T3	(
S2-P2-S7-T4	1 (0) [-75	52-P2-S3-T4L =	S2-P2-S	S-T5 -	S2-P2-S3	-TT-
99 S2-P2-S11-	TA COLO	S2-P2-S4-T2	-	S2-P2-S2	e-TG	L-
S2-P2-S7-T1	10/10/	S2-P2-S7-	тз		S2-P2-S6-T5	5 50
9 62-P2-55-T2	10/10/ 8	2-P2-S13-T3	10/10/	S2-P2-	S8-T3	(0)
s2-P2-S1	G-T4	62	-P2-S9-T3	10/0	S2-P2-S11-	T2 ST
\$2-P2-S2-TE	52-P2-	S4-T4	S2-P2-S7-T5		S2-P2-S13-T	1. 19
S2-P2-S12-T5	01-1-7	\$2-P2-\$12-T4	(0)(0)	52-P2	-S10-T3	(0)
S2-P2-S4-T1	S2-P2	-S9-T2 (%)	\$2-P2-\$8-T5	10	S2-P2-S9-T5	5 (-)
/ S2-P2-S9-T1	1 191 5	2-P2-S11-T5 ==	J/ 52-P2-S5	5-T1 S	S2-P2-S8-	T1 (9)

CAD output showing one batch for CNC processing. Each process is shown in a different color.