

I. Data-Driven Design in Architecture & Urban Planning:

- **A. General Concepts & Applications:**

- **Data Driven Design** [Data Driven Design](#)
- **Relevance:** Introduces the general concept of data-driven design in architecture.
- **Use:** General overview, introductory material.
- **Data-Driven Urban Design** [Data-Driven Urban Design](#)
- **Relevance:** Focuses on the application of data-driven design in urban planning.
- **Use:** Examples of urban-scale data-driven projects, discussion of urban data analysis.
- **Stanford Seminar - Mobile, Social, and Fashion: Three Stories from Data-Driven Design**
[Stanford Seminar - Mobile, Social, and Fashion: Three Stories from Data-Driven Design](#)
- **Relevance:** Explores data-driven design in various fields, providing a broader context.
- **Use:** Examples from other fields to illustrate the versatility of data-driven approaches.

- **Data Driven Design** [Data Driven Design](#)

- **Relevance:** Another general overview, likely with a focus on practical applications.
- **Use:** Supplement to the other introductory videos, potentially focusing on software tools.
- **Open UP Summit 2019 Sujin Lee - The Seven Myths of Data-Driven Design**
[Open UP Summit 2019 Sujin Lee - The Seven Myths of Data-Driven Design](#)
- **Relevance:** Addresses common misconceptions about data-driven design.
- **Use:** Critical perspective, addressing potential challenges and limitations in the "Q&A/Challenges" section.
- **Informed Data Driven Computational Design - Rick Titulaer - ARUP - CDFAM 24 Berlin**
[Informed Data Driven Computational Design - Rick Titulaer - ARUP - CDFAM 24 Berlin](#)
Relevance: A presentation by a professional from ARUP, a major engineering and design firm, likely showcasing real-world applications.

- **Use:** Practical examples, professional perspective, insights into industry trends.
- **Building sustainable solutions today, for a data-conscious tomorrow.**
 - **Relevance:** Building sustainable solutions today, for a data-conscious tomorrow.
 - **Use:** To be added as a general reference for sustainable solutions using data driven design.
- **B. Software & Tools:**
 - **Rhino User Webinar: Harnessing the power of generative design to shape better cities**
[Rhino User Webinar: Harnessing the power of generative design to shape better cities - YouTube](#)
 - **Relevance:** Demonstrates the use of Rhino (a 3D modelling software) and generative design techniques for urban planning.
 - **Use:** Examples of software tools, introduction to generative design concepts.
 - **Rhino User Webinar: The future generation of NET ZERO buildings from Zaha Hadid Architects**
[Rhino User Webinar: The future generation of NET ZERO buildings from Zaha Hadid Architects - YouTube](#)
 - **Relevance:** Showcases a prominent architectural firm's use of Rhino for designing net-zero buildings.
 - **Use:** Case study, demonstration of advanced workflows, connection to sustainability.
 - **Rhino User Webinar: Utilising Multimodal LLMs in Grasshopper's Parametric Design Workflows**
[Rhino User Webinar: Utilising Multimodal LLMs in Grasshopper's Parametric Design Workflows - YouTube](#)
 - **Relevance:** Explores the use of Large Language Models (LLMs) within Grasshopper, a visual programming environment for Rhino.
 - **Use:** Advanced techniques, integration of AI in design workflows.
 - **Rhino User Webinar: Unleash the Power of Computational Design**
[Rhino User Webinar: Unleash the Power of Computational Design](#)
 - **Relevance:** General overview of computational design using Rhino.
 - **Use:** Introduction to computational design principles and tools.
 - **Rhino User Webinar: Cloud-based Architectural Workflows with Rhino. Compute (English)**
[Rhino User Webinar: Cloud-based Architectural Workflows with Rhino.Compute \(English\)](#)

Relevance: Demonstrates cloud-based workflows using Rhino. Compute.

- **Use:** Examples of collaborative and cloud-based design processes.
- **food4Rhino webinar: Monoceros - A Discrete Assembly Toolkit for Architects and Designers (English)**
[food4Rhino webinar: Monoceros - A Discrete Assembly Toolkit for Architects and Designers \(English\)](#)
Relevance: Introduces Monoceros, a specialized toolkit for discrete assembly within Rhino.
- **Use:** Specialized tools for specific design tasks, potential for modular design.
- **food4Rhino webinar: Wasp - Combinatorial Design Toolkit**
[food4Rhino webinar: Wasp - Combinatorial Design Toolkit](#)
Relevance: Introduces Wasp, another toolkit for combinatorial design within Rhino.
- **Use:** Specialized tools, exploration of design variations and optimization.
- **Autodesk Forma** [Autodesk Forma - YouTube](#)
Relevance: Autodesk Forma (formerly SpaceMaker) is an AI-powered design platform for urban planning and early-stage design.
- **Use:** Examples of AI-driven design tools, urban-scale analysis, and optimization.
- **Adaptive Voronoi Landscape Design in Grasshopper**
[Adaptive Voronoi Landscape Design in Grasshopper - YouTube](#)
Relevance: Demonstrates the use of Voronoi patterns in landscape design using Grasshopper.
- **Use:** Examples of bio-inspired design, algorithmic design techniques.

- **C. Case Studies & Projects:**

- **Greenlight for Midtown Project**
[Greenlight for Midtown](#)
Relevance: This is the same project mentioned in the lecture slides.
- **Use:** Case study, real-world example of data-driven urban design.
- **World's Greenest Office Building Is Dutch: The Edge**
[World's Greenest Office Building Is Dutch: The Edge](#)
Relevance: Features The Edge building in Amsterdam, known for its innovative use of sensors and data for sustainability.
- **Use:** Case study, example of a data-driven building, focus on sustainability.

- **Songdo International Business District**
[Songdo International Business District in South Korea | A smart city](#)
Relevance: A new city built from scratch in South Korea, often cited as a "smart city" with extensive use of technology and data.
- **Use:** Case study, example of a large-scale data-driven urban development (though often criticized for its top-down approach).
- **Bloomberg's European Headquarters**
[Bloomberg's European Headquarters](#)
Relevance: Another example of a data-driven building with a focus on sustainability and employee well-being.
- **Use:** Case study, example of a corporate building designed with data-driven principles.