

IV. Specific Technologies & Applications:

- **A. GIS & Mapping:**

- **Cesium GIS**

- [Cesium - YouTube](#)

- Relevance:** Cesium is a platform for creating 3D geospatial applications.

- **Use:** Examples of GIS applications, 3D mapping, and urban visualization.

- **ESRI GIS**

- [Esri - YouTube](#)

- Relevance:** ESRI is a leading provider of GIS software (ArcGIS).

- **Use:** Examples of GIS applications, spatial analysis, and mapping.

- **Web World Wind**

- [NASAWorldWind/WebWorldWind: The NASA WorldWind Javascript SDK \(WebWW\) includes the library and examples for creating geo-browser web applications and for embedding a 3D globe in HTML5 web pages.](#)

- Relevance:** An open-source virtual globe developed by NASA.

- **Use:** Tool for creating 3D geospatial visualizations, potential for integrating with other data sources.

- **B. AI & Machine Learning:**

- **largest AI & ML community**

- [Kaggle: Your Machine Learning and Data Science Community](#)

- **Relevance:** Kaggle is a platform for data science and machine learning, with a large community of users.

- **Use:** Resource for learning about AI and machine learning, finding datasets, and exploring applications in design.

- **Computational Design Across Scales and Disciplines: Mina Konaković Luković**

- [Computational Design Across Scales and Disciplines: Mina Konaković Luković](#)

- Relevance:** A presentation on computational design, likely touching upon AI and machine learning.

- **Use:** Exploration of advanced computational design techniques.

- **C. Photogrammetry & Reality Capture:**

- **Photogrammetry and Capturing Reality**

- [Capturing Reality - YouTube](#)

- Relevance:** Capturing Reality is a software company that develops RealityCapture, a photogrammetry software.

- **Use:** Examples of photogrammetry workflows, 3D model creation from photographs.
- **D. Other:**
 - **OnSiteXR with spatial computing on HoloLens 2 - construction sites visualized in Mixed Reality**
[OnSiteXR with spatial computing on HoloLens 2 - construction sites visualized in Mixed Reality](#)
Relevance: Demonstrates the use of augmented reality (HoloLens 2) for visualizing construction sites.
 - **Use:** Examples of AR applications in construction, potential for on-site visualization and data overlay.
 - **Make Art With The Wave Of A Hand Thanks To This Installation | Future Blink**
[Make Art With The Wave Of A Hand Thanks To This Installation | Future Blink](#)
Relevance: Showcases an interactive art installation that responds to hand movements.
 - **Use:** Inspiration for interactive design, potential for using sensors and data to create responsive environments.
 - **Circle of Life / Breathtaking Immersive Experience of Nature and Light**
[Circle of Life / Breathtaking Immersive Experience of Nature and Light](#)
Relevance: An immersive art installation that uses light and projection mapping.
 - **Use:** Inspiration for creating immersive experiences, potential for using projection mapping in architectural design.
 - **ENTROPY / A Mind-Blowingly Beautiful IMMERSIVE EXPERIENCE by Limelight**
[ENTROPY / A Mind-Blowingly Beautiful IMMERSIVE EXPERIENCE by Limelight](#)
Relevance: Another example of an immersive art installation by Limelight.
 - **Use:** Inspiration for creating immersive experiences.
 - **Light art installation by Claudia Bueno**
[Light art installation by Claudia Bueno - YouTube](#)
Relevance: Showcases a light art installation.
 - **Use:** Inspiration for using light and art in architectural design.
 - **Max Cooper - Order From Chaos (official video by Maxime Causeret)**
[Max Cooper - Order From Chaos \(official video by Maxime Causeret\)](#)

Relevance: A music video that features abstract visualizations, possibly generated from data.

- **Use:** Inspiration for data visualization and generative art.

- **Coding Adventure: Sound (and the Fourier Transform)**

[Coding Adventure: Sound \(and the Fourier Transform\)](#)

Relevance: An introduction to the Fourier Transform, a mathematical tool used in signal processing and data analysis.

- **Use:** Technical background on a relevant mathematical concept.

- **OPTIMIZATION AS A DESIGN'S TOOL IN ARCHITECTURE**

[OPTIMIZATION AS A DESIGN'S TOOL IN ARCHITECTURE](#)

Relevance: To be added as reference for optimization in design.

- **Use:** As an example of optimization in design.