



Vitruv.ai: The Generative Synthesis Engine for Architectural Grammar

Architecture is a complex language governed by rigorous compositional rules, yet its knowledge remains fragmented across inaccessible treatises and technical manuals. **Vitruv.ai** solves this by decoding these grammars through a generative synthesis engine. The system extracts rules from primary sources, correlating theoretical vision with technical execution.

Our MVP focuses on the **Classical Core**, integrating **Vitruvius**, **Perrault**, and **Palladio** with the technical documentation of **Orlandos** and **Korres**. This "functional cell" validates the AI's ability to bridge archaic text and archaeological reality.

Vitruv.ai scales through chronological modules (Gothic to Contemporary) and geo-cultural "dialects," adapting universal grammar to regional traditions.

As a premier digital academic resource, **Vitruv.ai** provides scientific certainty for:

- **Restoration:** Ensuring historical rigor in conservation.
- **Contextual Design:** Guiding new interventions within ancient urban fabrics.
- **Creation:** Empowering architects to utilize historical grammars with technical authenticity.

Vitruv.ai—restoring the "genetic code" of the built environment through precision AI.

Vitruv.ai: A Generative Synthesis Engine for Architectural Grammar and Heritage Conservation

Problem: Architectural knowledge is currently fragmented. Theoretical treatises (Vitruvius, Palladio), technical manuals (Orlandos), and site studies are isolated in inaccessible formats, making scientific synthesis impossible for contemporary practitioners.

Solution: Vitruv.ai is a generative AI system designed to decode and correlate these complex "architectural grammars." By extracting rules from primary sources and correlating them with technical execution data, the platform provides a validated scientific bridge between theory and practice.

Implementation: Our MVP focuses on the "Classical Core" (Vitruvius, Perrault, Palladio), cross-referenced with the archaeological precision of Orlandos and Korres. The roadmap includes scaling through "Geo-Cultural Dialects" and chronological modules from Gothic to Modernism.

Impact: Vitruv.ai serves as a digital academic reference for high-precision restoration, guiding new interventions in historical urban fabrics by respecting the site's "genetic code."

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