Urban vision Jean Ponce – WILLOW (City Lab)

The layout and history of a city are related to its visual appearance as recorded by photos, paintings, and architectural documents. I will discuss some ongoing work that explores this relationship in the archaeological context, with a project aimed at constructing a 3D photogrammetric survey of the Villa of Diomedes in Pompeii, and exploiting both XIXth Century architectural drawings and watercolors, and modern photographs to construct a detailed record of this building and its decorative elements, such as frescoes and mosaics, as they were when it was unearthed, and as they have evolved since then. I will also discuss automated methods aimed at automatically aligning photos and paintings of buildings in an ancient or modern city with their 3D models, as well as a technique for identifying characteristic visual elements for a city like Paris.

Joint work with Mathieu Aubry, Helene Dessales, Carl Doersch, Alyosha Efros, Abinav Gupta, Bryan Russell, Josef Sivic, and Yves Ubelmann.
