

Automated Generation of Assembly Animation for Korean Traditional Building

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Abstract— Korean traditional wooden building has a beautiful appearance and long history. Recently, they are inherited as a digital cultural heritage by government and researchers. The digital heritage is able to use in the education experience and the restoration of heritage. Virtual assembly and its animation are also useful to observe the components and preview the assembly procedure. Our method makes an interactive assembly animation from pre-built virtual building model. We analysis the geometrical relationship between parts and its neighbor parts to construct a part-connection hierarchical graph. We finally make a feasible interactive assembly animation and virtual assembly sequence with the graph from the part selected by a user.

Keyword—Assembly Sequence Planning, Structure Analysis, Assembly Simulation, Building Information Modeling, Hanok



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