

Developing a Framework for a Process Digital Twin Using Unity 3D

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ABSTRACT

As part of Industry 4.0, Digital Twin solutions have become increasingly important. Some examples have focused on data-driven models, where data is shown primarily in tabular or graph format, and in others CAD modeling is used to show a virtual version of a piece or an array of equipment to show a whole process visually. The project will utilize Unity to allow multiple ways to see data for a process and allow interactivity. The final goal of the finished work will allow the digital twin work with a combination of both offline data sets, live cloud data, and user inputs.

Keywords: Industry 4.0, Digital Twin, Unity 3D, Cloud Data, Continuous Casting



Figure 1: Main Menu Screen of the Digital Twin Software