

3D物件掃描點群資料之實體建構研究

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摘要

電腦運算的快速化及雷射掃描器快速發展，電腦輔助軟體的功能亦隨之多功能化，上下游的結合面更順暢。因應掃描技術的發展，由實際物件掃描得的點群資料之實體重建的逆向工程技術及應用等成為研究的主題，亦是本文的目標。不同的掃描機及電腦軟體均有其各自的資料格式介面，本文中首先探討點群資料之格式與處理軟體間的相容性或轉換。其次是，點群資料之曲面模重建及縫隙的縫合處理。最後是曲面模的實體重建及尖銳特徵的處理與誤差分析。

關鍵詞：逆向工程；點雲；實體模；誤差分析

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