



AUTO CITY: A SYSTEM FOR GENERATING 3D VIRTUAL CITIES FOR SIMULATION SYSTEMS ON GIS MAPS

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ABSTRACT—3D Virtual Reality (VR) platforms developed on computers can prevent users from possible risks of real physical environments. We are developing hardware and software based training system, in which training of driver candidates is possible. As a part of the system, virtual city generation is essential. We devised an algorithmic system which automatically generates virtual cities supporting several different map formats (i.e. DTED, HTF, SRTM, and DEM). Depending on the conditions submitted, the system generates different layouts for the cities even on the same geographical site. The current mechanism is based on Height Tile File (HTF) maps and initially The New York city model has been successfully implemented and real time 3D navigation in the city using a standard Intel P4 based PC is possible.

Key Words: Simulation Systems, Virtual City Generation, Virtual Reality