BIM on GIS Platform

Technology Overview

- The main purpose of this system is to integrate indoor and outdoor space simultaneously using BIM(Building Information Model) and 3D GIS. With this system, users can handle and mange the spatial information from the Earth to office desk scale.

Core Technologies

- Development of 'BIM on GIS Platform' based on World Wind Java
- Supporting various kinds of data types including BIM data (IFC format), terrain elevation data, orthoimages, photorealistic 3D building model, indoor texture, etc.
- Simultaneous spatial query and analysis of BIM and GIS data

Application Area and Advantages

- Monitoring platform for Advanced Facility Management (ex: BEMS, BAS, Safety Management, Smart GRID, LID/Underground structure O&M, etc)
- Smart City (U-City) Management System (as a Platform)
- Infra BIM (Standard Information Model. ex: Road, Bridge, Tunnel)
- Augmented Reality (Virtual Museum, Culture Heritage Restoration & Management, etc)

Accomplishments

- Development of effective facility management system for Antarctic King Sejong Station (Korea Polar Research Institute), 2014
- Patent registration : 10, Paper (SCI) : 3, Accomplishment of technology transfer : 1 (Gaia3D)