

Interdisciplinary Project



Design and implementation of dynamisation and interaction within a computer game environment

The institute of forest management at the TUM School of Life Sciences manages digital twins of forest patches in an online accessible geospatial database. The data is visualised with help of the Unreal Engine.

The goal of this interdisciplinary project is, to implement interactions within these digital worlds and to introduce dynamics (tree growth, climate change, etc.).

After phase one, users have the possibility to gather and display information of a single tree that was selected in the game. Possibilities of VR controllers should be considered. In a second phase, the tree dimensions are passed to a forest growth simulation system and the trees are rescaled based on the results of that system.

Software and Programming Environment

Unreal Engine 4.26, C++, Blueprint
PostgreSQL, PostGIS
Optional: ArcGIS Online, ArcGIS Pro, Python

Associated Classes (Selection)

Analyse räumlicher Daten (GIS)
Angewandte Geoinformatik
Grundlagen der Waldinventur

Contact

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