PLOTTING A PLANET’S POTENTIAL

The Long View made the short list of the world’s top animation projects. The gesture-based interactive installation developed in the College of Design was selected for an international festival.

Developed by art and design students under the faculty guidance of Patrick FitzGerald, the Long View is one of 14 projects featured in a gallery at SIGGRAPH 2013, an annual conference to explore advances in computer-generated animation and visual effects, held in California in July.

The project allows viewers to rearrange animated elements on a screen projection of a planet. The artists hope the installation encourages participants to think about their impact on the environment. The Long View was created using Flash, a physics-based gaming engine, and Microsoft Kinect, a popular input device.

“The planet exhibits visual and behavioral changes over time and evolves as human technology and industrialization advance or increase,” FitzGerald says. “Viewers can play with these ecosystems to change them in some way. The piece itself loops, and metaphorically creates a conundrum for the viewer as to man’s long-term relationship to the earth.”

LANDSCAPE COMES TO LIFE

Each semester in Will Hooker’s small-scale landscape design studio, students build a sculpture made primarily of bamboo. The students gain hands-on experience with construction while learning how design ideas become reality.

This spring, the J.C. Raulston Arboretum commissioned Hooker’s horticultural science class, co-taught this semester with Anne Spafford, to build a sculpture to commemorate the opening of the new walk in its Asian Valley during this year’s Gala in the Garden.

Everyone in the class, including Hooker and Spafford, submitted sketches. The class chose the idea submitted by Justin Durango a Chinese dragon flowing in and out of the ground plane, and consisting of a 9-foot-tall head, three body loops, and an 8-foot-long tail with a rotating double spiral ending.

In total, the Asian dragon project took 15 days to build and install, with the class and 26 other volunteers putting in close to 1,200 hours of labor to complete the task. “All involved were totally exhausted but very pleased with the results,” Hooker says.

OBSERVING EARTH: MAPPING AND MORE

The view from the top floor of Jordan Hall extends toward downtown Raleigh, sweeping over a landscape of tall trees concealing homes, shops and streets under a canopy of green. It’s no surprise that the Center for Earth Observation set up shop here.

“We live in space,” says Hugh Devine, the center’s director. “Everything happens somewhere, so it’s all our domain.”

On a typical day in the center, you might see a data visualization program to find the optimal locations for food distribution centers in poor neighborhoods where access to affordable food is limited. Or you may observe a virtual reality program that could be used to help train firefighters.

In fact, the uses of geospatial technology are nearly limitless. “It’s tied into things as far flung as environmental engineering, natural resource management, archeology, city planning, landscape architecture, bioinformatics and law enforcement,” Devine says. “It touches anything that involves transportation, mapping, moving and locational data.”

To prove it, he points to collaborations the center has with more than 20 departments at NC State as well as with the Hunt Library and the Nature Research Center at the Museum of Natural Sciences.