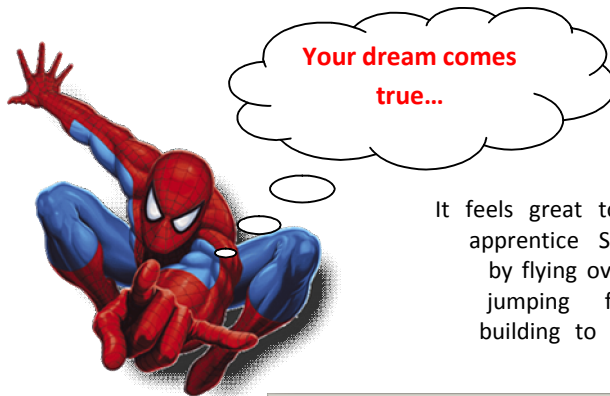


The trilogy of a success story... Part 3

Last but not least...here are the adventures of students who fell in love with Virtools... Live the romance...

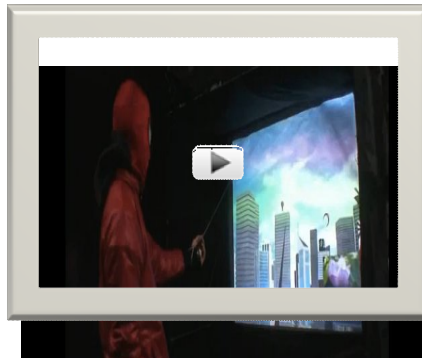
SPIDER HERO

Dassault Systèmes has worked wonders again!! With the use of 3DVIA [Virtools](#), Spider Hero completely engages the user's body in the experience of SpiderMan™.



It feels great to play the apprentice SpiderMan™ by flying over the city, jumping from one building to another or

staying still to contemplate the city from the sky! For those who have always dreamt of being a super hero, YES, IT IS POSSIBLE! Spider Hero has turned fantasy into reality for the forever-young who have always wanted to have the same powers as Marvel's SpiderMan™.



The concept is that Spider Hero enables visitors to ricochet from one building to another on a cobweb in a virtual city, just like SpiderMan™! It reproduces visuals and sound effects for more intense sensations and immersion.

This Virtual Reality application is based on a system using little unexpected and unusual tools: a vacuum cleaner, a rubber tube, a servomotor, a WiiMote, a thread and a WiiBoard.

The user stands on the WiiBoard, which is equipped with movement sensors. He wears a glove connected to a rubber tube with a thread. Using a system that exerts a pulling force, he targets buildings or moves in closer until he almost collides with them, feeling the wind blowing around him. Just like SpiderMan™...

The thread that the user holds stretches out to recreate the sensation of movement.

This project was presented during the Laval Virtual and finalized by students from the

The trilogy of a success story... Part 3

Japan Advanced Institute of Science and Technology ([JAIST](#))



L16 is a collective of designers around interactivity. They aim at creating, supporting and broadcasting artistic, design or multimedia projects; they also organize or participate in cultural events or artistic exhibitions and promote digital art, interactive design, and new technologies.

L'Ecole de Design Nantes Atlantique collaborated with collective L16 on **Stepping Garden**, a project made using **3D Virtools**.

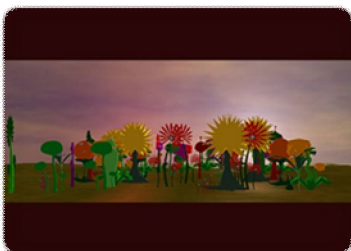
Stepping Garden: Plant the seeds of a forest of interactive sound and save the planet!



This 3D cartoon, **based on the Virtools application**, is completely in tune with current issues on threats to the environment. Aware of how ecological disasters are occurring with ever greater frequency and impact, we sometimes feel powerless to change things. However, Garden Stepping is full of optimism: a seed quickly becomes a tree which, in turn, will be transformed into a forest. The visitor is introduced to a sad and dark environment which then changes. Each tree produces a sound, and it all turns into a giant melody and mess sequencer.

The more vegetation there is, the more the world will regain its vitality and brightness!

This project is instructive and can appeal to people from 7 to 77 years old, as it is both interactive and meaningful.



The installation immerses visitors in a 3D cartoon, full of sound. Each plant is loaded dynamically and randomly on a virtual set, depending on each person's place in the room. The displacement is determined by a series of sensors, hidden under the screen. Data are transmitted to **Virtools** that runs the entire application. All the images are projected on a screen and they interact beautifully in pictures.

The trilogy of a success story... Part 3



ZOOM ON...

SCOPE PROJECT: Augmented reality toys

L'Ecole de Design Nantes Atlantique is home to many emerging talents, as we have already seen. Here is another example, discovered through the SCOPE project.

Frantz Lasorne developed the Scope project within the framework of the "Virtual Reality" major option at *L'Ecole de Design Nantes Atlantique*, using **Virtools** as well as ARtoolKIT technology. The aim is to link Virtual Reality to toys and erase the frontier between what is virtual and what is reality.

Scope is a game system in augmented reality working with tangible toys (Lego, figurines, and robots) and a 3D helmet equipped with a camera.

Each toy is arranged on a base provided with black and white markers. This enables the players to initiate virtual interactions.

The participants play
Thanks to
do not exist in
access to
and to virtual
usually find in
glasses that the



in a real space with accessories from their own toy boxes. augmented reality, they can create virtual elements that a tangible way. Through Scope, the player can have energy, life, magic powers, experience, and initiative accessories like weapons, tools and protections that we video games. These data are displayed on the 3D players wear.

This new application enables the player to find another use for his or her toys by mixing the virtual realm with reality. The original toy is no longer in its original state, but is enhanced with the creation of a new imaginative environment and new physical capabilities. It

gives another dimension to the game and creates more fun, for children and adults alike.

The purpose is not to remove the toy's authenticity but indeed to make its functions complementary to those of 3D, so as to improve existing games or create new ones.

The trilogy of a success story... Part 3

Thanks to this type of application, a child's room can be transformed in a real virtual

game

space!



With the Scopitoons, it's really cool to be square ...!

Whether you want to appear happy, grumpy, nasty, blond, frightening, or just be yourself... the SCOPITOONS, partly thanks to **Virtools**, take you into a three-dimensional world where you can create your own avatar with your chosen personal identity: colors, clothes, facial expressions. With a screen projection system, you will be able to follow your virtual alter ego in his or her daily life, even when he or she is sleeping.

