# **COMPUTER GRAPHICS WORLD**

## CONTENIDO

## VOLUME 33, No. 1 JANUARY 2010

## **DEPARTMENTS**

## **Editor's Note**

Animation: An Extraordinary Medium.

4 When we think of the world "animation," GCI comes to mind. While 2009 brought us a number of fantastic, films created in the medium, it also presented us with others crafted by the more traditional methods of 2D and stop motion, renewing our appreciation of animation in all forms.

## SPOTLIGHT

5 **Products** 

Dell's Precision M6500. Pixar Animation Studios' RenderMan 15.0 Nvidia's Quadro FX 380 LP, Quadro FX 3800M, and Quadro FX 2800M.

### Viewpoint

6 Procedural Randomness.

## Education

34 Digital content creators should continue sharpening their skills so they are ready to take the next step in their careers when opportunities become available.

#### **Back Products**

40 Recent software and hardware releases.

## **FEATURES**

## Cover story

## 8 Taking Flight.

Computer students at Cornell take up bird-watching helping ornithologists further their research with the use of cutting-edge CG technologies. *Barbara Robertson*.

## The Tradition Lives On

16 Walt Disney Animation presents *The Princess and Frog*, the studio's first hand-drawn animation since 2004, only this "hand-drawn" animation received a little bit of help from computer graphics. *Barbara Robertson.* 

#### **Playing the Open-Eyed Dream**

20 Movie director James Cameron and game developer Ubisoft team up to create an interactive title based on *Avatar*, as teams from both the film and the game collaborate on an unprecedented level. *Martin McEachern*.

## One Step at a Time.

28 The animators on the most recent stop-motion production show they are, well. Smart as fox, as they incorporate touches of DGI into the movie when necessary, giving *The Fantastic Mr. Mr. Fox* its handcrafted look while getting the most benefit in production. *Barbara Robertson.* 

## **Real Illusion.**

31 The late legendary crooner Frank Sinatra makes a special appearance in holographic form, thanks to a great deal of complex rotoscoping and compositing work by SquareZero. *Karen Moltenbrey*.

### **ON THE COVER**

This image depicts motion paths from flight tunnel data along with the skeletal model of an ivory-billed woodpecker, which is believed to be extinct. The information garnered from these and other CG techniques are being used to extend ornithology research. See pg. 8