Get to Work with Science and Technology

Creating Visual Effects for Movies as a CGI Artist

By Ruth Owen

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by Ruth Owen

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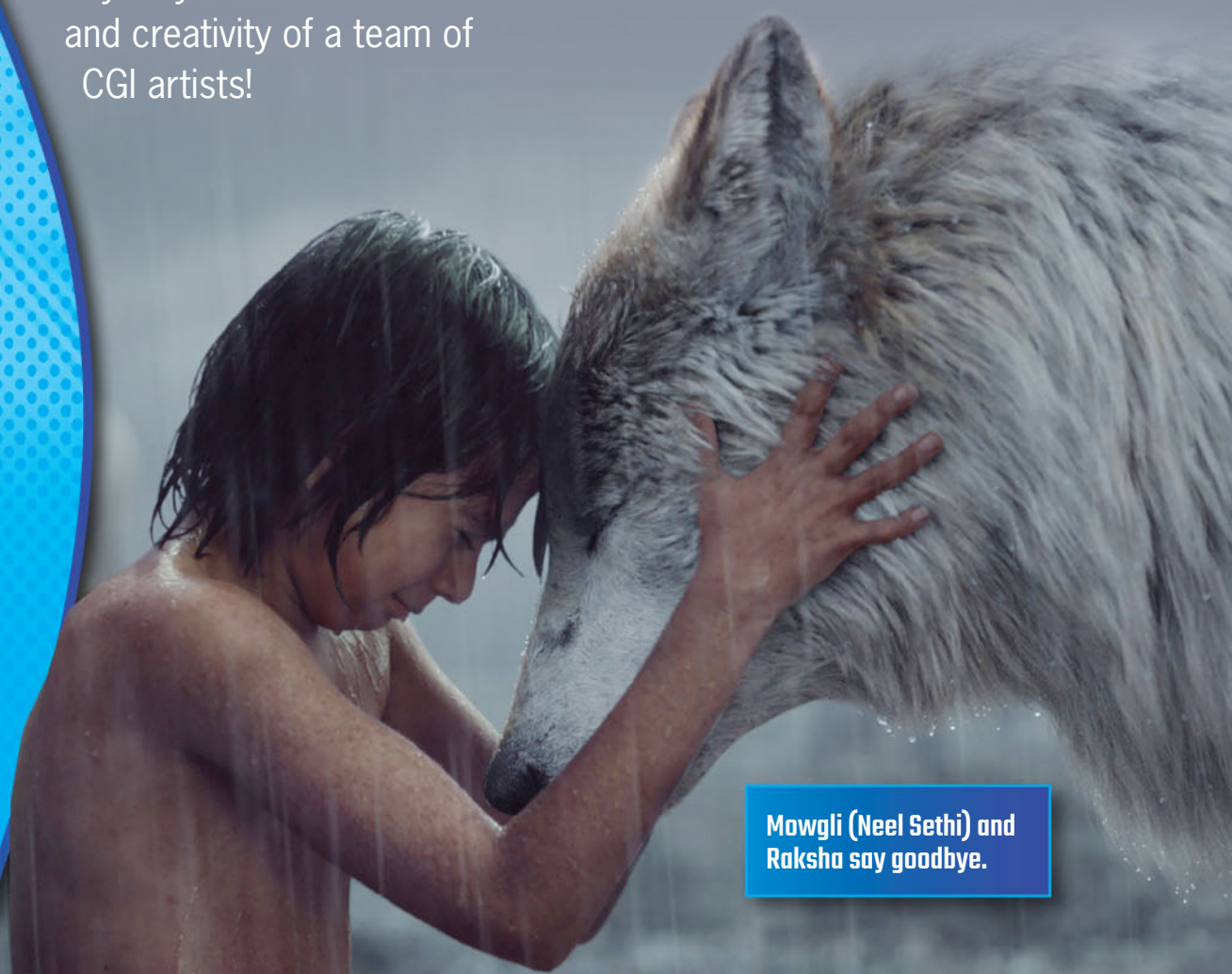
A New Kind of Jungle

In a dark movie theater, the audience falls silent and gets ready to enjoy *The Jungle Book*.

They hold back tears as Mowgli says goodbye to Raksha, his wolf mother. They laugh as the little boy and his bear buddy Baloo get into trouble. Some people cover their eyes in terror as Mowgli does battle with the vengeful tiger, Shere Khan. It's hard to believe that the only real thing on the screen is the young actor Neel Sethi.

The movie's jungle setting and the 70 different species of animals that appear are **CGI (computer-generated imagery)**. They only exist because of the skills and creativity of a team of CGI artists!



Mowgli (Neel Sethi) and Raksha say goodbye.

The millions of hairs on Baloo the bear's body all had to move and catch the light realistically.

The Jungle Book is a live-action/CGI film. This means it combines human actors with computer-generated characters and action.

Making Movie Magic

Today, computer-generated imagery can bring to life the ideas of even the most imaginative movie director. But how did **visual effects (VFX)** experts create dramatic effects in the past?

One way was to build miniature models and then bring them to life using a type of **animation** called stop-motion animation. In this technique, a model is photographed. Then it is moved a tiny amount and photographed again. When the series of photographs, or **frames**, are shown together at high speed, the model appears to be moving.

In the 1933 movie *King Kong*, the giant ape was actually a model just 18 inches (46 cm) high. The model ape's hair was made from rabbit fur.

The skeleton battle scene from *Jason and the Argonauts*.

Stop-motion **animator** Ray Harryhausen produced a famous battle between skeletons and human characters in the 1963 movie *Jason and the Argonauts*. He filmed models of skeletons in stop-motion. Then he combined the animated fight scene with film of human actors.

Ray Harryhausen's skeletons were just a few inches high. He worked on the stop-motion skeleton fight for more than four months. When completed, the battle scene lasted just four minutes.