JURY’S PRIZE

Cosmos Laundromat

Everything open source, created with free software – the quality of this work shows that amazingly good 3D animation is not in any way dependent on the price of the software used. This is the sixth open-source film project created by the Blender Institute, and it once again demonstrates the leap made in the past several years by Blender 3D software.

The Blender Institute was founded in Amsterdam after the tremendous success of the first Blender open movie project »Elephants Dream«. On the one hand, the institute was founded so that they could have a permanent office and studio where they could more efficiently organise and pursue the goals of the Blender Foundation. On the other hand, the goal was also to better coordinate and facilitate their work on open projects. The Blender Institute has a staff of 3 to 5 people consisting of producers, project coordinators, an administrator and Blender developers. Their studio is fully equipped for Blender projects, with space for up to 12 artists.

Open Movies

The term »open project« means that the final result as well as the creation process will be published under an open license and that the material can be reused, re-mixed and issued by anyone who cares to do so. The content is created exclusively with free and open-source software. As is »Cosmos Laundromat«, which also just happens to be the first animated feature film made by the Blender Institute.

First Cycle

The project was originally launched in 2014. The first cycle of »Cosmos Laundromat« created by the artists at the Blender Institute was released in mid-August and is roughly 12 minutes long. After the release of the first part, twelve different teams in several different countries, from Brazil to Indonesia and France, have continued the story of the film in their own visual animation style. At the end of this creative experiment, the final result will be a complete feature film consisting of all individual parts that have emerged entirely using open source tools.

A Suicidal Sheep

The initial starting point of »Cosmos Laundromat« is the situation in which Franck the sheep finds himself. In the middle of a beautiful CG meadow – where the life-like wind simulated by the Blender team blows through each blade of grass – the suicidal sheep known as Franck attempts to take his own life. He tries to hang himself but is hindered by some rotten wood; and just as he is getting ready to throw himself off the cliff, he is interrupted by a red-haired businessman named Victor. Franck is not exactly sure what the intention of Victor’s question is, but he nevertheless enters into the deal proposed to him. Will he regret this move? The pilot ends with a cliff-hanger, and we’re very much looking forward to seeing what the next team comes up with in terms of how the story continues.

Character Design

The modelling of the characters was handled by artist Angela Guenette from her studio in Montreal. Very important at this stage was the background information, such as 2D concept drawings, mood boards and live references as well as the creative decisions of the Blender Institute. The next step was to scale the figures to one another and to the environment. After that came the character blocking, and when that was finished, came the finalization of the modelling with details.

Victor

The most complicated character in the design was Victor, even though Franck has more fur. Human CG characters remain the largest challenge in animated films, because audiences notice right away if something’s not right with a digital double of the same species. The team changed Victor’s look many times drastically before completing the production process, until they were satisfied with the appearance of the opaque and mysterious

The surface of the grass was generated with procedural shaders for the modelled grass.

Credits

The Complete Team gooseberry.blender.org/the-team

Links

Cosmos Laundromat First Cycle youtube.be/Y-rmzh0qi3c

The Gooseberry Project gooseberry.blender.org/sponsor

Blender Institute blender.org/institute
man behind the »Cosmos Laundromat« project. When the animatic was shown, for example, it became clear that the original design of Victor did not translate well into 3D, and the character appeared overly thin. The team then thickened the silhouette for the 3D version and reduced the size of the hands by 10 percent.

Franck

Although Franck is packed in layers of wool, his body under the fur had to be modelled in a manner that was physically correct. The team created proxy wool geometry in order to help define the design with regard to the volume and silhouette; it was also used as a guide for the grooming stage. The artists designed Franck’s caterpillar face as a morph of his sheep face and that of a caterpillar: during the modelling process, they decided that Franck should be instantly recognisable after his transformation – not only by means of his eyes, but also via his specific facial features and proportions. In order to facilitate the recognition, Guenette used the eyeballs, the interior mouth geometry and the face of the final sheep model and adapted it to the shorter caterpillar face. In addition to the characters themselves, one of the most impressive effects in the film is the tornado of colours. For this, the team created a colourised and turbulent animated smoke simulation. The look was chosen so that the audience would get the impression that miracles could really happen in this cloud.

Challenges

From a production standpoint, the biggest challenges were the story and the visual development. The introduction of the character had to be believable and the viewer had to become curious as to what would happen in the sequel. Originally, the Blender Institute had wanted to

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The category »Jury’s Prize« is presented by Rise | Visual Effects Studios

Founded in 2007 by Sven Pannicke, Robert Pinnow, Markus Degen and Florian Gellinger, Rise initially consisted of a small room with four computers. Today, the company spans 4 facilities in 4 cities (Berlin, Stuttgart, Cologne and Vienna), 1,000 square meters, 20 full-time staff and as many as 80 freelancers travelling across the globe to work in its open-minded and creative environment. Rise has contributed visual effects to some of the world’s biggest movie franchises including »Captain America – The Winter Soldier«, »Harry Potter and the Deathly Hallows«, »Iron Man 3«, »Guardians of the Galaxy«, »Avengers – Age of Ultron«, »Hitman: Agent 47« and »The Man from U.N.C.L.E.«. The company does photoreal digital environments and rigid objects, fx animation and simulation work. VFX Supervisor Florian Gellinger was an animago jury member this year and will hand over the animago trophy to the winning project in this category.

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release six minutes more of the pilot material, in which also the first female character was introduced. This part was edited out, however, in order to make sure the first part of the film lived up to the qualitative demands of the team. In order to bring the film to completion, several creative compromises were necessary within the team, such as the shortening of the island sequence and the removal of motion blur for a shorter rendering time. And the open source tool didn’t always make it easy for the team: the enormous amount of simulation of hair, grass and volumetrics was not easy to handle in Blender. As a result, they made comprehensive software improvements so that they would be able to create spectacular 3D scenes. And yet, according to Blender co-creator Ton Roosendaal, in spite of the tool optimisations, the product was still not good enough to be taken up as an official Blender release. In order to make Blender’s physics simulation truly first-rate, the Blender development team is now rebuilding the system from scratch. The next major release of the open source is thus scheduled for release only in 2016.

Crowdfunding
Under the name »The Gooseberry Project«, the Blender team used a crowdfunding campaign to raise the money to make the film. On the project’s official website gooseberry.blender.org/sponsor, it’s still possible to support the film with donations and/or to register for a subscription to Blender Cloud for 10 US dollars per month, which gives users access to all Blender Institute open projects, training sessions and much more. If you register for a time period of 18 months, you’ll even get a film credit in the feature film.

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This is the laundromat where the magic happens – we are curious how the story will continue.