

Interview with Dieter Morgenroth - *Mackevision* 30 March 2008



Could You please say a few words about Yourself. What is Your educational background, main interests. How did You become involved in 3D?

My name is Dieter Morgenroth. I am lead research engineer at Mackevision. I studied Media Engineering at the “Hochschule der Medien” in Stuttgart. I have a programming background and have been working as a 3D artist for 8 years at Mackevision.

Could You please tell us a little bit about the Company You work at. What kind of services does it provide? What is its target market?

Mackevision is an international premium service provider in the area of 3D visualization & Post-Production. Our core expertise lies in the creation of visualizations of the highest quality for all media – web, film and print. We are thus able to offer our clients all the advantages of full cross-media production and to successfully carry out the most complex instructions. Our team is made up of nearly 60 specialists working at three locations – Stuttgart, Munich and Detroit, USA.

What position and responsibilities at Company are delegated solely to You?

I am responsible for the technical aspects of 3D production work. With a team of 2 full-time programmers at Mackevision we are constantly refining the toolset and pipeline for the artists.

Please describe the people You work with. What type of skills in Your opinion will be needed more and more? How would You like to see the team developing?

Mackevision had an immense growth in the past. We changed the way we work from project teams to specialized departments. We divided the 3D team into several departments like modeling, scene setup department, shading & lighting department etc. This enables us to run dozens of projects in parallel. As a consequence we are looking more and more for specialists for specific tasks than for allrounders.



Do You know right from the start how the 3D visualization process will be organized and how will the tasks be distributed or is each project developed individually for itself?

Our core expertise lies in automotive visualization. The company has been working in this segment for ten years now and we have a learned process for projects that include vehicles. Every needed step from CAD data preparation to rendering is optimized as far as possible so we can concentrate on the creative part of the project.

Which is the starting point in a project around which everything else evolves?

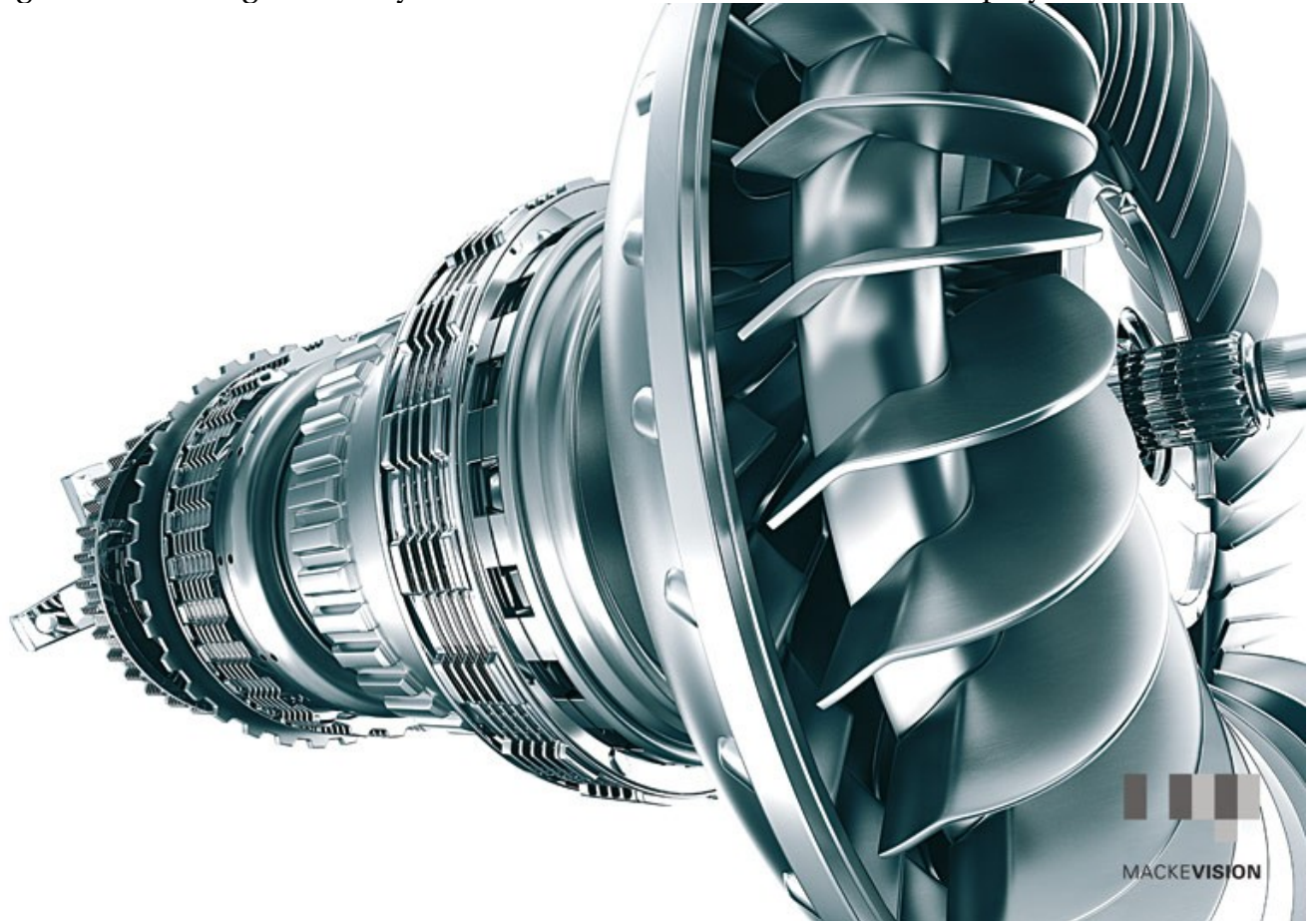
Every project starts with sketches on paper.

What is the most difficult thing to do within the working process? Which are the most cumbersome or time-consuming tasks?

Most time consuming mostly is working around bugs of the used applications. For example when the shot of one artist wouldn't render on the renderslaves. That is usually the moment when things get nasty. Checking all the layers is also a task nobody is very fond of. Especially when each image has several channels that have to be checked also. But we are testing PDPlayer now that might help in the future.

Are there stages within the working process, which have to be remade or redone over and over again until the desired result is achieved? What does such additional remaking mean in terms of resource consumption (personnel, time, computing power)?

We established an approval procedure in the past that tries to reduce the “render to trashcan” times. We always try to get approval for the overall look and feel before production starts. For car projects we have a long list of questions that have to be answered in advance. That goes from the right model year of the car to the text on the radio display.



Please describe some of your latest and most interesting projects, which required the use of 3D modeling and/or 3D CG animation.

The Dodge Journey was our first animation project where we had to incorporate a CG car into shot footage. The plates were shot without a stand-in car. At time of production the car didn't even exist, so we never had seen the real car. Interaction between CG and live footage was another problem we had to master. For example people sitting in the car, exit the car, etc.) In the meantime we did several versions of the film with different cars and configurations. That's normally the point when the client gets the idea of cg...

For which of the projects did you use V-Ray? Could You please say a few words about each of them and the people behind the work?

Basically all of our work is rendered with V-Ray. One of our latest projects is the car configurator for Mercedes Benz. We have set up an automated pipeline that enables us to produce all possible configurations of a car line. And this goes into several millions of combinations! We set up a database based rendering pipeline. A database is remote controlling 3dsmax and sends the needed jobs to the farm. We made extensive use of Vrays

Render Elements and programmed several additions to be able to render different configurations with one pass. One of those additions, the multimatte render element was made public and was sent back to CHAOSGROUP and is part of the Vray package now.

Which is Your favorite project? Why?

My favourite project is always the next project to come. But from the technical side the configurator projects offer a lot potential for optimizing.

Please describe some of Your works or projects of the Company in which You have participated, which have received recognition or have been awarded in some way.

2004 • World-Media Festival Globe Gold, Kategorie Animation Globe Silver, Kategorie Animation • Animago Platz 1 Platz 2, Kategorie Professional/Animation Platz 3, Kategorie Professional/Animation 2005 • World-Media Festival Globe Grand, Kategorie Animation Globe Gold, Kategorie Animation • Animago Platz 3 x Platz 1, Kategorie Professional/Animation Platz 2, Kategorie Professional/Compositing Platz 3, Kategorie Professional/Animation • Integrated TV & Video Association Gold Award 2006 • HD Festival for Digital Film Golden Artist Award, Kategorie Automotive Film • World-Media Festival Globe Grand, Kategorie Animation Globe Gold Kategorie Animation Globe Silver, Kategorie Animation • Animago Platz 1, Kategorie Professional Still Platz 1, Kategorie Professional/Animation • US International Film and Video Festival Silver Screen, Kategorie Animation/Computer • Internationale Wirtschaftsfilmtag Wien Grand Prix Victoria Gold, Kategorie: Messfilme/Events 2007 • Autovision Festival OttoCar "Gold", Kategorie Product Presentation Films OttoCar „Silber“, Kategorie Informational Films • World-Media Festival Globe Gold, Kategorie Animation • US International Film and Video Festival Silver Screen, Kategorie Animation/Computer

As a V-Ray user, could You please tell us what made You select our renderer the first time? Any specific feature? How would You compare V-Ray's performance to that of other renderers?

Speed and reliability were the key arguments for using V-Ray. V-Ray was the first renderer that offered GI and glossy effects in adequate speed and quality for both stills and animations. The various render elements became core part of our pipeline. Being able to add custom functionality to V-Ray using the V-Ray SDK is another important feature for us.

How do You decide when to use V-Ray, for which projects? In what way does switching from another renderer to V-Ray affect the working process?

V-Ray is our core render engine. There was no need to switch to another rendering package in the past.

How easy is it to switch from the standard built-in renderers to V-Ray?

V-Ray is our standard renderer. We haven't used any built-in renderers of 3dsmax for the last 4 releases.

Would You like to high-light any points in this process or make any recommendations in this regard to the developers of the renderer?

Just keep on doing what you do!

How much pressure is exerted on Your creative team in terms of innovation and the setting of or keeping with the latest trends on the market?

Automotive Visualization is a highly dynamic segment with lots of innovations in the past. The trend goes to reality



What new features would You like to see in V-Ray? Is there a process/feature, which You think might help Your work if it is integrated within the renderer?

Render cache/render region. Tweaking of shading settings often is a time-consuming task on heavy scenes. It takes ages until the geometry is prepared for rendering even if you are only tweaking the light intensity. XSI has this nice interactive feeling when tweaking things. It starts rerendering as soon as you grab the slider. Mixing different AA Sampler. For example rendering everything with adaptive subdivision except for the glossy parts that are rendered with DMC. If that's possible at all. We are looking forward to the announced BRDF shader. We have been researching in this area and did our own BRDF measurements of different car paints. It will be interesting to be able to use that data for rendering.

How do You see the future in what you do? Is there an aspect of the working process, which in Your opinion can be really innovated or rationalized?

We are expecting an increasing demand for configurable car footage. We optimized our pipeline for that purpose.

Would You like to make any recommendations or give some advice to the visitors of our site? Is there anything else You would like to add?

The V-Ray forum is an excellent place that every V-Ray user should visit on a regular basis. The community there is great and you can always learn new ways of getting the best out of V-Ray.