

HAPPY BIRTHDAY

>>3DCreative is one year old, and we like cake!

SIGGRAPH 2006

>>A complete round-up from the CG event of the year

GRZESIEK JONKAJTYS

>>On Directing his new Film 'The Ark'

SWORDMASTER

>>Continuing complete character creation monthly tutorial for 3DSMax, Maya, Lightwave, C4D & XSI

BATMAN BEGINS

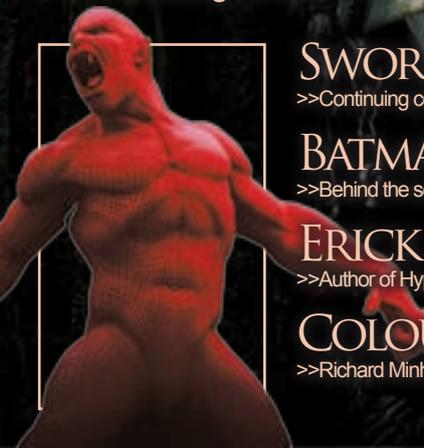
>>Behind the scenes of the Return of the dark Knight

ERICK MILLER

>>Author of Hyper Realistic Character Creation and industry Veteran

COLOUR TUTORIAL SERIES - PART 3

>>Richard Minh Le rounds off his colour theory tutorial.





3dcreative
www.3dcreativemag.com
www.zoopublishing.com

EDITOR
Ben Barnes

ASSISTANT EDITOR
Chris Perrins

MARKETING
Lynette Clee

CONTENT MANAGER
Warin Pismoke

DESIGNERS
Matt Lewis
Alex Price

ARTICLES
Richard Minh Le
Cine VFX
Pierfilippo Siena
Cavaliere Oscuro

INTERVIEWS
Grzesiek Jonkajtys
Erick Miller
Tara Kuzma

TUTORIALS
Richard Tilbury
Taylor Kingston
Luciano Iurino
Vojislav Milanovich
Giuseppe Guglielmucci
Niki Bartuoci
Siku

MAKING OF
David Munoz Velazquez
Y.Soner Yurtseven
Jonathan Simard

GALLERIES
Jeremy Roberts
James Busby
Neil Maccormack
Szabolcs Matefy
Sergey Skachkov
Adrian Baluta
Evgen
Gaston Nicolas Alanis
Piotr Fox Wysocki
Jeremiah Strong

on the cover

articles

interviews

tutorials

making of's

galleries

recruitment

HAPPY BIRTHDAY

We are one! Thanks for all your support!!

000 BATMAN BEGINS

Behind the CG for the Dark Knight's Return

SIGGRAPH 2006

Roundup of the CG event of the year

COLOUR TUTORIAL

Part 3 by Richard Minh Le

GRZESIEK JONKAJTYS

On Directing his latest movie 'The Ark'

ERICK MILLER

Author and Industry Veteran

BUCK STUDIO

LA and now NY based Production House

MASTERCLASS

Texturing Low Poly cartoon Characters part 1

SWORDMASTER

Part 5 - Modeling the Armour

MADE IN SATURNO

By David Munoz Velazquez

MAGIC FLUFF

By Y.Soner Yurtseven

WHITE TEETH

By Jonathan Simard

GALLERIES

10 of the Best

RECRUITMENT

Job Vacancies

ABOUT US

Zoo Publishing Information & Contacts



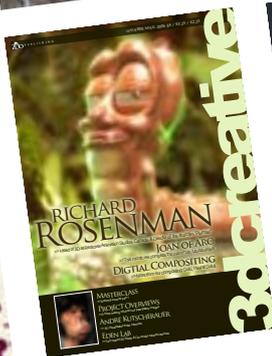
WELCOME

To the 13th Issue of 3DCreative. Which means, it is our first birthday issue and we are still not quite sure how we made it this far ;-) Hopefully (at least we would like to think) its because the mag is just so darn amazing! Or is it because you just cant get this much quality content for only \$4!! Who knows, but thanks again for purchasing this mag and helping towards yet another year of quality magazines. We have a lot planned for this year so keep coming back to check us out and pass the word around! Also, don't forget that buying back issues of the mag is now even easier. Go to www.3dcreativemag.com to view all of the details on each issue and purchase your download links.

ABOUT US

Zoo Publishing is a new company comprising of a small team here in the Midlands, UK. This magazine is our first project which we are hoping, with the support of the community,

will build into a great resource and a highly anticipated monthly release. The 'support of the community' is an interesting point, where a 'magazine for 3d artists' is not an original idea, the marketing and distribution of this magazine, as far as we know, is a first. It follows the principle of traditional magazines that are sold on news stands and in many outlets, but being a digital downloadable mag the many established web communities on the net are our outlets and newsstands. 3DCreative is supported by 3dexcellence, 3dkingdom, 3dlinks, 3dm, 3dmonkeys, 3dnuts, 3dpalace, 3dresources, 3dtotal, 3dvalley, 123d, ambiguous arts, cgchannel, cgdirectory, cgfocus, cgunderground, childplaystudios, daz3d, deathfall, digitaltutors, kurv studio, max-realms, mediaworks, rendezvous3D, spinquad, subdivision, the3dstudio, thebest3d, vocanson & vanishingpoint. We look forward to lasting and successful partnerships with these CG community sites.





Luciano Iurino

I started back in 1994 with 3DStudio on MS-Dos as modeler/texture artist. In 2001 I co-founded PM Studios & I still

work for it as Lead 3D Artist. Recently we have developed the videogame "ETROM – The Astral Essence". I also work as freelancer for different magazines, web-portals, gfx and videogame companies. Recently I left the 3dsmax environment to move on XSI.

iuri@pmstudios.it



Bogdan I. Suman Horduna

3D VFX artist Iasi, Romania. I started back in 1999 with 3D Studio Max but in 2000 trained in Maya.

I've been a modeller and texturer for few 3D animated movies & two games. Also a modeller, dynamics & particles, lights & render supervisor for many commercials, musical video clips and industrial presentations.

ionuts@catv.embit.ro

suiobo@yahoo.com



Vojislav Milanovic

3D modeler, animator, & vfx compositor, Anigraph studio, Self taught all-round 3D guy, started to doodle around in 3D about

8 years ago. In the last 5 years I have done a lot of various things from print and TV ads to gaming & movie graphics. Currently involved in multimedia study & character developing for an animated feature movie. One of my goals is to make my own animated movie

vojo@teol.net

<http://users.teol.net>



Giuseppe Guglielmucci

Freelance 3d modeler / Animator.

I began to use computers with the epoch of the vic20 & Cinema4d was my

1st 3d software. I started working in the field of CG in 1999 in commercial design. In 2003 I worked on ETROM - The Astral Essence, RPG video-game for PC, developed by PMstudios. Currently I'm hoping to work in the video-games industry and develop my own game.

piko@pikoandniki.com



www.pikoandniki.com



Niki Bartucci

Freelance 3d modeler, Italy. I started working in the field of Computer Graphics in 2000 as an illustrator & web designer. In

2003 I started using 3d software such as C4D & later 3dSMax. That year I worked on ETROM - The Astral Essence, RPG video-game for PC, developed by PMstudios. Currently I'm a freelancer & specialise in commercials. I especially like RPG & RTS video-games.

niki@pikoandniki.com

www.pikoandniki.com



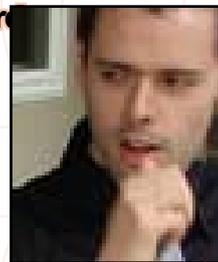
Jonathan Simar

3D Animator, Beenox Canada. I start studying CG 4 years ago at the NAD Center. I was hired

at Ubisoft, Montreal as an animator & I worked on projects such as Far Cry Instinct, Prince of Persia 3 & Assassins creed. I left Montreal for Quebec & now work at Beenox. Currently, I'm working with a friend to start a little studio to develop short movies.

capitaine_star@hotmail.com

www.athome-studio.com/pikmin.html





Contributing Artists This Months

Grzesiek Jonkajtys



I Graduated from The Department of Graphics at the Academy of Fine Art in Warsaw in 1997. I received an honorable mention from the dean of the Academy. I have devoted my professional career to the issues of visual communication with the aid of new media (the Internet, CD/DVD-ROM, short animated films).

jonkajtys@noir.org

www.3dluvr.com/jonkajtys/

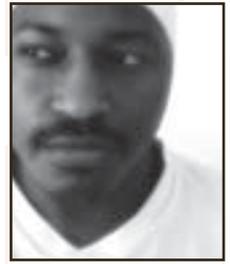


Siku

Concept artist / designer/comic book author> Fresh from Art College I worked as an advertising visualiser and designer. I then moved on to comics where my work was published for several years in 2000AD stripes under titles such as Judge Dredd, Slaine and a strip I co-created called Pan-African Judges.

mutantbox@aol.com

www.theartofsiku.com



Richard Minh Le



3d artist, Australia. Pencil and oil pastel were my only tools until I started my Architecture degree at RMIT, where I was

first introduced to 3dsMax and PS. My first professional work that involved texture painting and animation came to me in mid-2004 at SIAL lab. I am now working full-time as a 3D artist at RushWright Associates.

www.richardminhle.id.au

tradigital_le@yahoo.com.au



David Munoz Velazquez

3D/2D Freelance Artist, Barcelona, Spain. I started studying Graphic Design when I was 14, then left school to do some freelance Graphic Design work for a while. I then discovered 3D, which whilst I used it on my own work I was learning more deeply. I was hired into the game industry and up to now I'm doing every aspect of art that I can.

munozvelazquez@gmail.com

www.munozvelazquez.com

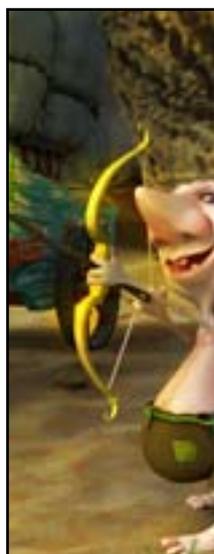
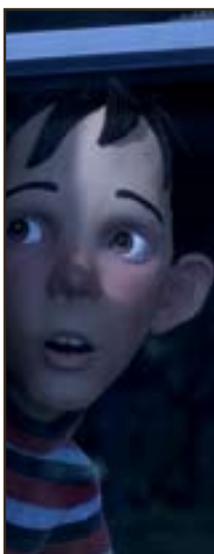


Erick Miller



Character Setup Supervisor at Sony Pictures Imageworks, has been a Maya® user since its inception at version

1.0. Currently, Erick is finishing the all-CG Sony Pictures® Animation feature, Surf's Up. Prior to Surf's Up, while at Imageworks, Erick did facial rigging for the all-CG feature, Monster House, and also built a muscle and skin system for the visual effects feature Ghost Rider®.



Yaşar Soner Yurtseven

Freelance 3d modeler & concept artist. Started working and studying on 3d arts in 2002. Graduated from the fine arts faculty in Istanbul in 2004. Worked as a concept designer in the arthitecture industry for 1 year. Won 3rd place in The CGSociety challenge "The Journey Begins". Now working as a freelance 3d modeler and concept artist. Hoping to work in computer games and animation film industry.

www.simurgstudio.com info@simurgstudio.com



totalTextures

v4: r2

Humans & Creatures

The Original Total Texture collection was created in 2001, utilising the best methods and technology of the time. Since then, techniques and technology have both moved forward, and here at 3DTotal we felt that although the original collection is still widely used and highly regarded among artists and studios of all calibers, it was time for an update...

This enormously improved version of the original texture collection now contains 272 individual Materials, comprising of over 938 individual, hand crafted texture maps. Every Texture now has its own unique colour map, bump map. There is also over 50 new alpha and 100 new specular maps.

What's new?
This new collection consists of 272 materials, comprising of 938 individual maps!! (Colour, Bump, Specular and Alpha maps). We have also included 36 psd files for some of the textures, allowing you to customize some new textures of your own.

DVD Contents:
31 Creature Eyes
11 Creature Furs
2 Creature Miscellaneous
6 Creature Scales
14 Creature Skin (Body)
27 Creature Skin (Facial)
16 www.3d.sk images
16 Human Eyes
2 Human Hair
12 Human Misc (Body)
24 Human Misc (Facial)
47 Human Skin (Abnormal)
2 Human Skin (Old)
13 Human Skin (Tattoo)
34 Human Skin (Young)
15 Human Skin (Reference)



15 Collections of amazing Textures

for full information and pricing including discounts of up to 25% visit www.3dtotal.com

Existing v4 owners can get the new upgrade for only \$29 usd!



GRZESIEK JONKAITYS

In 2000 Grzesiek made a short animated film called "Mantis" on his own. It won numerous prizes at film festivals in Poland & abroad.

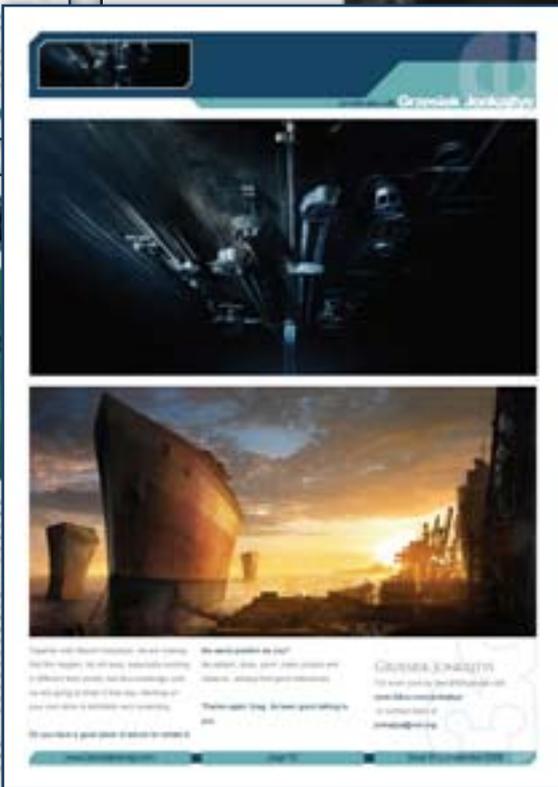
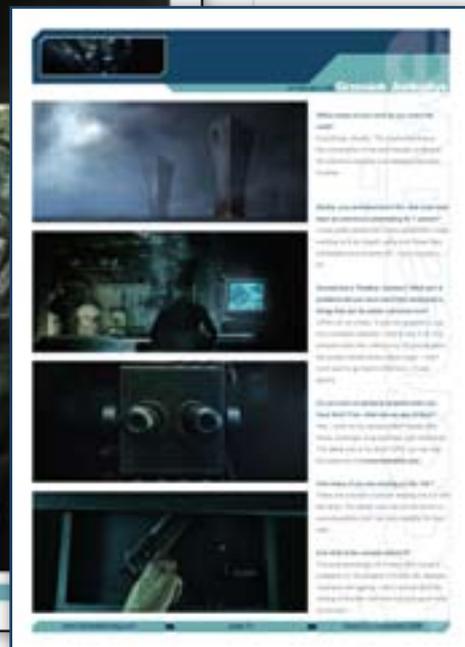
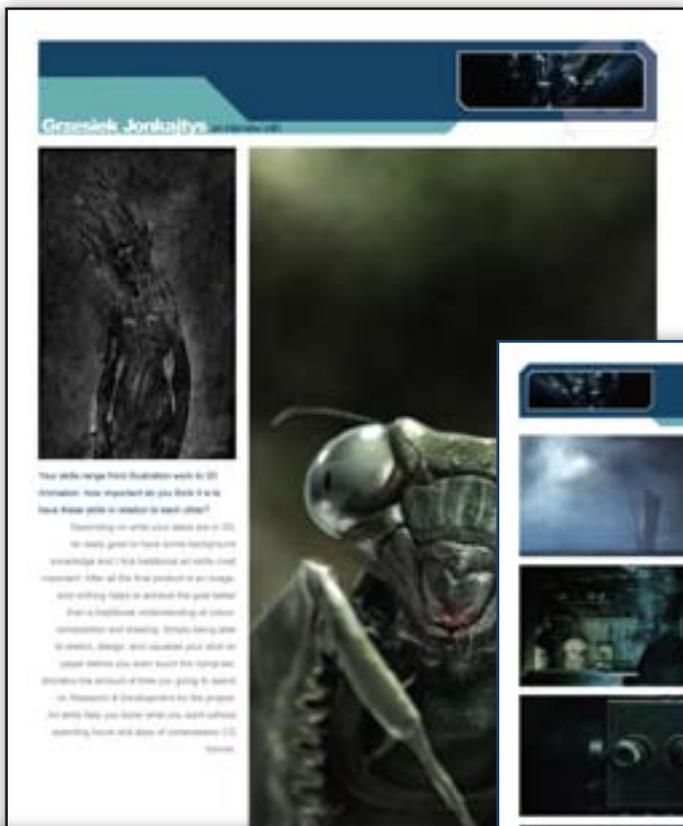
He has worked for Platige Image, & now for Cafe FX where he makes digital special effects for feature films. He has worked on the production of such films as "The League of Gentlemen", "Gothika", "Hellboy", "Sin City" & "Pan's Labyrinth". He has just finished directing his first film "The Ark", which will be shown in cinemas at the end of this year.



an interview with **Grzesiek Jonkajtys**

GRZESIEK JONKAJTYS

3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4



DEPENDING ON WHAT YOUR TASKS ARE IN 3D, ITS REALLY GOOD TO HAVE SOME BACKGROUND KNOWLEDGE AND I FIND TRADITIONAL ART SKILLS MOST IMPORTANT. AFTER ALL THE FINAL PRODUCT IS AN IMAGE, AND NOTHING HELPS TO ACHIEVE THE GOAL BETTER THAN A TRADITIONAL UNDERSTANDING OF COLOUR, COMPOSITION AND DRAWING.



digital-tutors™

"We are delighted with the Digital-Tutors RenderMan® for Maya® Training. Containing over 3 hours of lessons and examples, it is proven to be an invaluable resource for many artists using RenderMan for the first time. As the first educational product for RenderMan for Maya, Digital-Tutors has set an excellent standard and we look forward to future training initiatives together."

- Chris Ford
Business Director, Pixar RenderMan

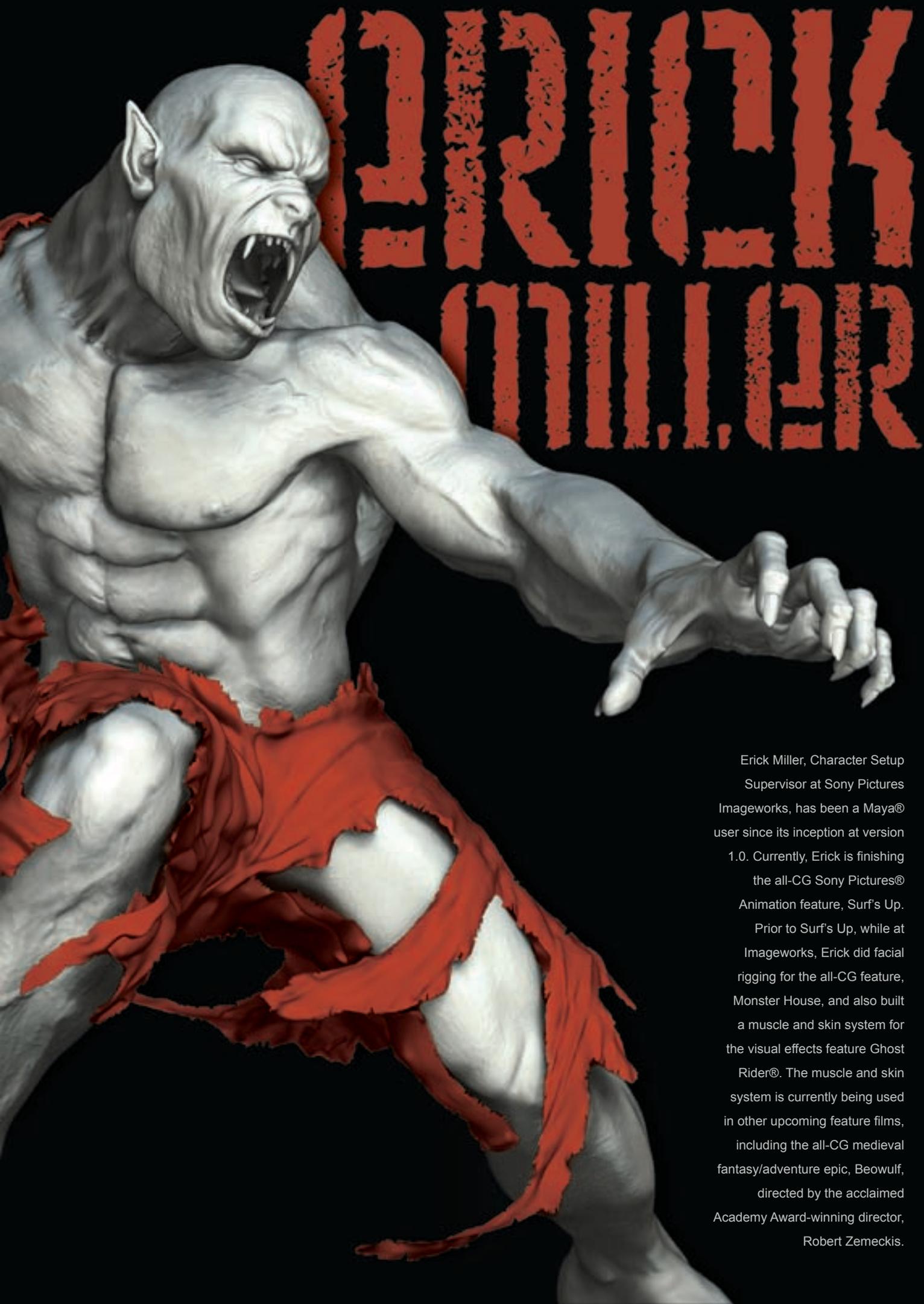


Introduction to RenderMan for Maya

A comprehensive guide to getting started with RenderMan for Maya

over 3 hours!

order today at www.digital-tutors.com



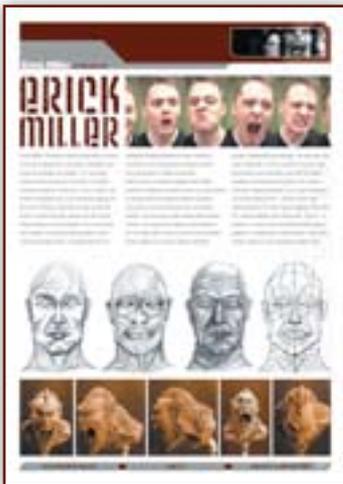
Erick Miller, Character Setup Supervisor at Sony Pictures Imageworks, has been a Maya® user since its inception at version 1.0. Currently, Erick is finishing the all-CG Sony Pictures® Animation feature, Surf's Up. Prior to Surf's Up, while at Imageworks, Erick did facial rigging for the all-CG feature, Monster House, and also built a muscle and skin system for the visual effects feature Ghost Rider®. The muscle and skin system is currently being used in other upcoming feature films, including the all-CG medieval fantasy/adventure epic, Beowulf, directed by the acclaimed Academy Award-winning director, Robert Zemeckis.



Erick Miller an interview with

3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4

ERICK MILLER



I STARTED OUT JUST BEING INCREDIBLY INTERESTED IN COMPUTER GRAPHICS! ACTUALLY MY VERY FIRST EXPOSURE TO CG WAS IN AN OPENGL COMPUTER SCIENCE COURSE, WHICH WAS THE ONLY PLACE I COULD FIND TO LEARN ABOUT IT.

THE FREEDOM TO CREATE,
MORE POWER TO RENDER.

INTRODUCING

APEXX⁸

SUPER
VFX WORKSTATION

SIXTEEN CORES.

WORK ON MASSIVE SCENES
AND COMPLEX EFFECTS WITH EASE.

RENDER FRAMES FASTER THAN EVER.

STORE WORK OF ANY SIZE
ON YOUR OWN WORKSTATION.

ROCK-SOLID PERFORMANCE
WITH VFX APPLICATIONS.

LEGENDARY BOXX SUPPORT
FOR DIGITAL ARTISTS.



BOXX

We Know VFX, and it Shows.



1.877.877.BOXX
www.boxxtech.com/apexx8
sales@boxxtech.com

BOXX and APEXX are registered trademarks of BOXX Technologies, Inc.
All other trademarks are property of their respective owners.

DI-O-MATIC CHARACTER PACK

Discover the technologies behind your favorite CG characters

Get 2500 \$ of
award-winning
plugins for
ONLY 149 \$*

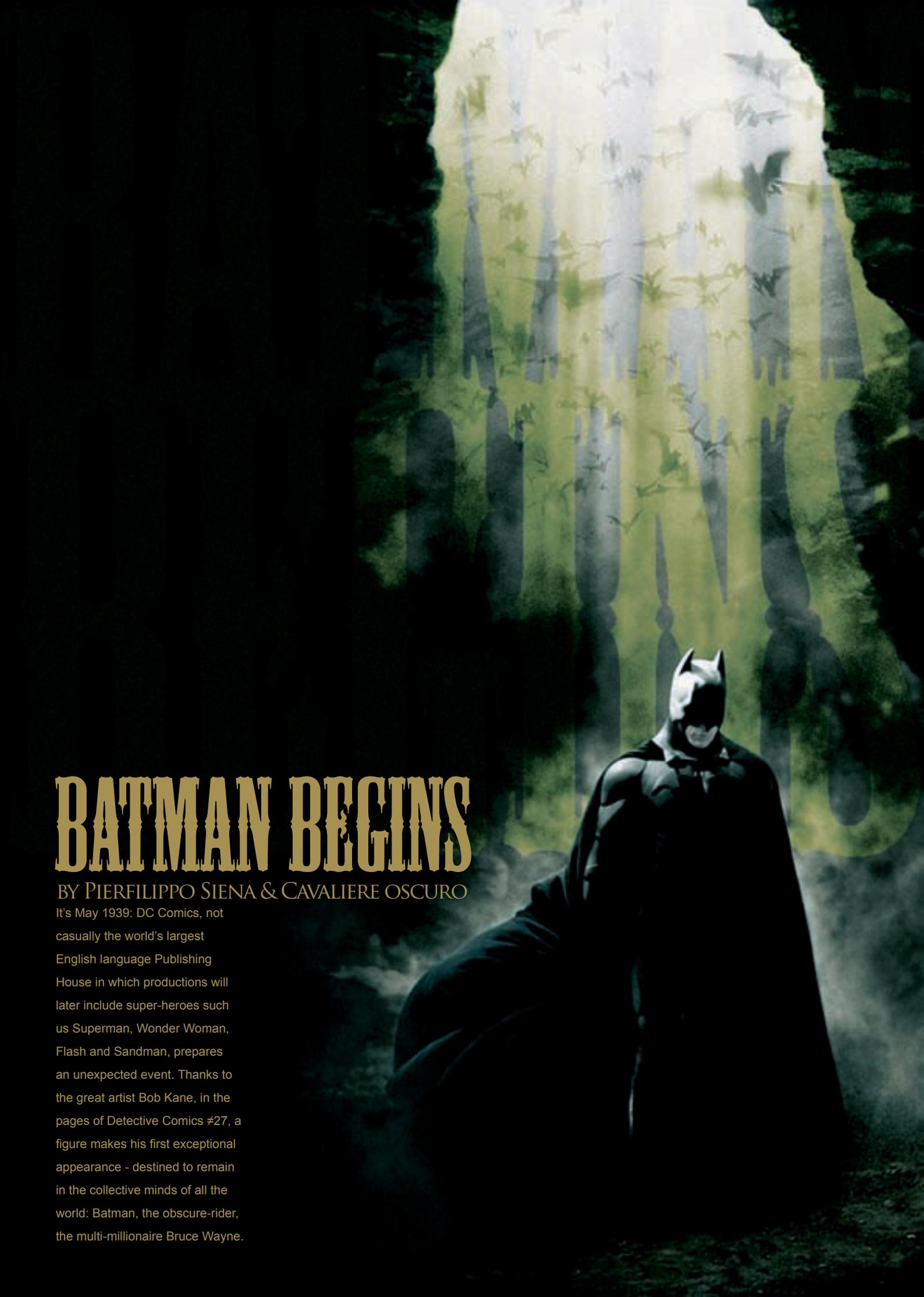


3DS MAX
PLUGINS



*this price is for one educational license only, academic proof will be required to get a license key

www.characterpack.com



BATMAN BEGINS

BY PIERFILIPPO SIENA & CAVALIERE OSCURO

It's May 1939: DC Comics, not casually the world's largest English language Publishing House in which productions will later include super-heroes such as Superman, Wonder Woman, Flash and Sandman, prepares an unexpected event. Thanks to the great artist Bob Kane, in the pages of Detective Comics #27, a figure makes his first exceptional appearance - destined to remain in the collective minds of all the world: Batman, the obscure-rider, the multi-millionaire Bruce Wayne.

Batman Begins The Dark Knight returns



The obscure-rider is a mysterious and tormented hero - "psychologically one of the most interesting figures in our cultural history", affirms Paul Levitz, president and editor of DC Comics - who utilises his anger towards his parents' murderers by declaring himself the defender of justice, of citizen order, by transferring his negative energy into "good" heroism, and able to feed off the "bad" that is present in himself. On the background of the skyline of Gotham City, his figure moves agile and fast... The 66 years of the character's history represent an unprecedented cultural phenomenon, including radio transmissions and television series, cartoons, interactive games, comic-strips, any kind of merchandising and, moreover, cinematographic films. After the two

appreciable gothic style films, filmed by "minstrel dark" of Hollywood, Tim Burton ('Batman' of 1989 and 'Batman Returns' of 1992 starring Michael Keaton), followed the unmemorable and psychedelic films offered by Joel Schumacher ('Batman Forever' of 1995 starring Val Kilmer and 'Batman & Robin' of 1997 starring George Clooney). What English director Christopher Nolan (by whom psychological thrillers 'Memento' and 'Insomnia' have demonstrated his talented attention to characters' psychology and have established his secure production style) proposed to do in 2005, was to successfully relate Batman's unique history, never seen by the impassionate, with the exception of short flashbacks in Burton's films about how Bruce Wayne became Batman.

'Batman Begins,' a super-production on a budget of 150 million dollars, goes back to the obscure rider's origins in the guise of the good force in Gotham City. An incredible adventure that compares the typical complex characteristics of the human condition, with the difficult talent and technical means which are required to reach the tormenting, but eradicable, presence in each of us - our own frightening alter-egos. A definitive history about the origins of Batman does not exist but, rolling on the years, and through various explanations of the personage, important events appear to make it what it is - a legend. Filling in certain gaps about the legendary figure, Nolan presents his opinion, in an original manner, about the dualistic man/hero, by combining fears and



The Dark Knight returns **Batman Begins**



senses to transform them into a psychological and physical strength. The real surprise came from the collective work for this ambitious project (if we remember, the director wanted to guarantee that his realistic approach was continued, in every aspect, from the concept design, to the stunt, to the visual effects). The magic that was missing from the last two movies, but is evident today, lies with the complete empathy that Nolan, with his collaborators, set up between the expression and the visual expertise given by the special effects and visual games with the complexities of the human soul of Bob Kane's creation. Filming started in the middle of March 2004 and by day 129 the realizers shot on location (Iceland, Chicago, London, the famous Shepperton Studios, an old hangar for airships at Cardington), in costume, with several CGI contributions. Production designer Nathan Crowley, admitted to prefer, where possible, the maximum contribution of the visual effects which produced hyper-realistic revivals, in the likes of the reconstructions of moving staircases. "The best way to do it is to realise the possibility in life", added co-supervisor of effects Dan Glass, with Janek Sirr). The first location: the glacier, Vatnajokull, to the South-East of Iceland, where the rocky terrain was the perfect result for the seasonal stages at Bhutan, where Bruce Wayne battled with Henri Ducard on the icy lake in the small village, and an enormous monastery entrance was reconstructed to scale and was subsequently extended using a miniature construction. It's essential now to thoroughly examine Gotham City's uncertainty, observing it through the eyes of the residents of the city – living in a city that is both familiar and dangerous at the same time, like a modern-day New York but more intense – a place where people are so troubled that they can't individually deal with the constraints of the city. In the real location set of Crowley, they were joined only in post-production with the digital effects of the miniature. Chicago, the "Windy-



Batman Begins The Dark Knight returns

City", was the reference for the set design and also helped furnish the outward parts so as to realise the scenes in the sunlight where the spectacular pursuit with the hero's car in the traffic, the Batmobile, takes place. The design of the Batmobile (in the producer's garage) was devised step-by-step, from the outlining stages written by Christopher Nolan personally, with David S. Goyer (author of the 'Blade' trilogy). In spite of the filmmaker's willingness to work in real ambient, 'Batman Begins' tallies 600 shots with digital effects and models, 300 of which were realized by 'Double Negative' in London, which were important in extending and completing Nolan's vision of the watched-over metropolis by the obscure-rider. Whereas the 'Moving Picture Company' (MPC) took in hand the swarms of bats in CGI that often accompany Batman's appearances, the French 'BUF' Company gave form to the nightmares casued by the Scarecrow's mask, or Doctor Jonathan Crane (Cillian Murphy), whilst the 'Rising Sun Pictures' and the 'Senate Visual Effects' completed the rest of the film effects. With regards to the disturbance in Gotham City, it was insisted by supervisor Paul J. Franklin of 'Double Negative', that a total and convincing photorealistic surrender of the digital city was created. So, Franklin, and four members of staff,





went on Spepperton's set to study in detail the type of lighting wanted by the director of photography Wally Pfister, for 'Batman Begins'. Differing greatly to actual films, he didn't want to be based on the support of digital medium, but he would instead create the film's atmosphere in the old way; restricting all the technicians and artists to collaborate to adapt the visual look as far as possible. By the beginning, excluding the hypothesis to realise a miniature of Gotham City for the repeat aerial action, the dimensions of which would have

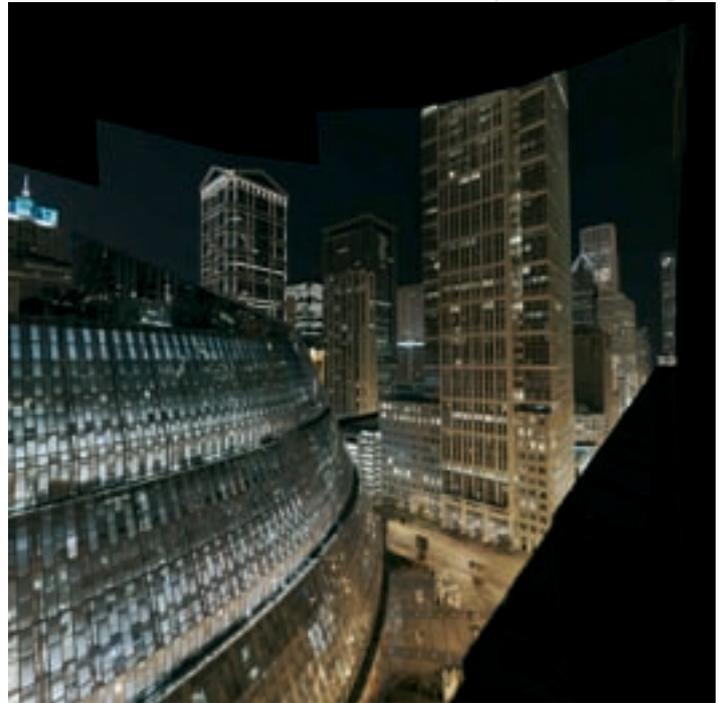
Batman Begins The Dark Knight returns

reached Soho, in London, Double Negative used digital cameras to take high resolution pictures. From these they were able to generate textured 3D models of the buildings, which were essential to increase the Chicago stage set and locations. To completely understand the work executed by the London studio, we can take for example the monorail sequence of Gotham City that, covering the suspended line thanks to pillars inspired by the design of Sydney's Opera House, rides through the river, in the middle of which there is Narrows Island, haunted by the lower class citizens of the big metropolis. The motor-vehicles and wagons reflect the constructive style of the American convoys 'Amtrak' of the 1950s but, particular details were paid more attention because Franklin stayed in Chicago for four weeks taking pictures of the trains' movements, to understand how direct sunlight was reflected by their metallic surfaces and to study railway mechanisms. Although a miniature was used for the spectacular uprooting of the convoy at the end of the film, for the rest of the shots dedicated to the train in motion a digital model 3D was applied. A miniature 1/2 scale model of Narrows Island was created, embellished with CGI layers to capture the light from the windows better, and Double Negative composed a new tool, to sufficiently act in the 3D space. Adding in the digital Gotham river, the support of the super elevation, the rails and the carriages became more precious by two passages of rendering dedicated by the illumination, one for the exterior and one for the interior. The rest of the elements used in the skyline of Gotham City's buildings were realized in CGI, based upon the material collected in Chicago and by utilising another tool set by Double Negative for the HDR images. With Windowbox, Double Negative was able to realise the interior of the buildings seen from beyond the windows, contrasting the "warm" lights of the city dwellings with the "cold" lights emitted from the tungsten-lit offices, thanks to this tool's ability to generate 3D





The Dark Knight returns **Batman Begins**





Batman Begins

The Dark Knight returns



geometries, starting from the homes and offices. In *Batman Begins*, there are also several effects present where miniature models were retaken on the "green-screen", for example in the monastery in Bhutan scene, or during the flight at full speed where the Batmobile is pursued by police cars on the streets, in the car-park and on the roofs of Gotham City. It was necessary to complete these scenes, or sequences, by

adding 3D digital atmospheres with buildings, skyscrapers, occupied streets and animated objects, like fallen and moved roof tiles from the passage of the heavy vehicle conducted by Batman. Data delivered by LIDAR was used for the set constructed in England and for a couple of locations in Chicago. 120 artists from the studio in London worked for around 19 months, assisted by Alias' Maya, Pixar's RenderMan,

Apple's Shake and 2d3's Boujou. The software was particularly useful for the camera-tracking of the markers positioned on location around the monastery entrance (scale 1/1), with the intention to insert a miniature composition of the monastery (built in scale 1/24 by Cutting Edge), and photographed in front of the green-screen and refined with the snowstorm elements in CGI. The producer, Christopher Nolan, declared





to be directly conflicting with the majority of the digital effects in the film, but he recognized the high level of realism reached by Double Negative in Chicago, of which, with the purpose to avoid making stunts more dangerous, they also succeeded in creating a virtual stuntman for Batman – the indistinguishable Christian Bale in costume. In fact, the British actor's body has been scanned and photographed with the least possible detail to model a double in CGI, the cloak of which, according to Nolan's wishes,

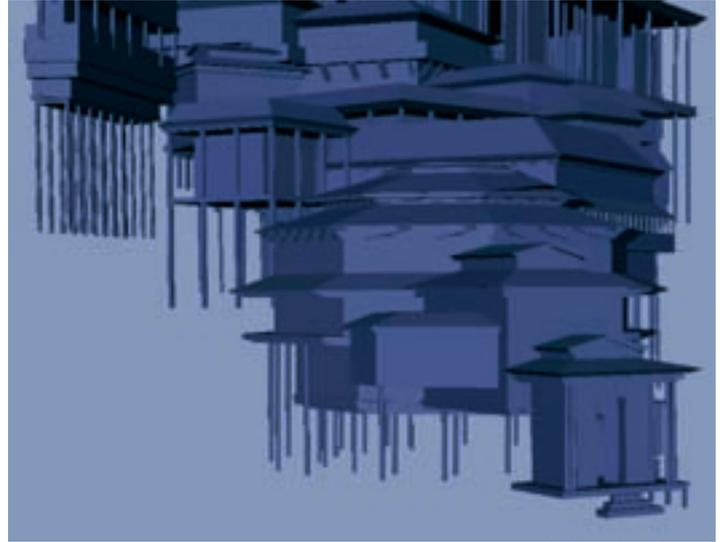
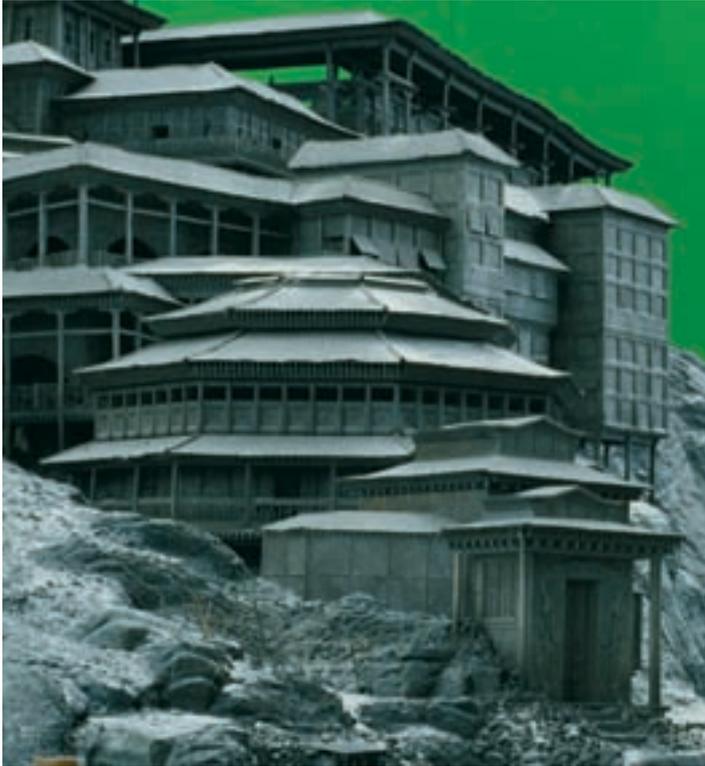
Batman Begins

The Dark Knight returns



should be transformed from a simple top-coat in to a large flying wing, able to glide the hero to the ground. The artists of the Double Negative received, in Neoprene, a complete pattern-book of templates used by the tailor's workshop for the real costume and, from that, they used the known simulator SyFlex to generate the cloak in bat form. The virtual Batman has been animated frame by frame, observing the real actions of the stuntmen. A specific shader, written in the language MEL of Maya, and called 'Bi-directional Reflectance Distribution Function', simulated the luminous reflections of the light on the cloak, hood and body-suit. To generate the digital bats around Batman's character, the Moving Picture Company, of London, used its own software for the simulation of the deranged ALICE, developed for the colossal epic 'Troy' and for 'Alien vs. Predator'. The artificial intelligence of ALICE, operating in Alias' Maya, simulates the brain of each bat "agent" with a network creation of nodal interconnections, in which every node is a sensor or a rule. The







Batman Begins The Dark Knight returns

sensors allow each agent to move in formations about the area around them, amongst other agents and around obstacles along the routes taken. The sensors can be audiovisual but they understand any kind of function inserted in to the code, and when the desired ones are activated, it is possible to establish rules based upon their actions. If it is not requested that all the agents fly, they create a rule that enforces the displacement of the agents, until they are at a certain distance whereby the proximity lowers to a specific value. When all the general movements of the digital crowd are established, the next step is the management of the relative data so that every digital character possesses a complete array of abilities. This software's function, that generates the digital crowds, is named MLE (Motion Library Editor) or EMILY, and it works under a unique and innovate criterion, successfully inserted by MPC. The essential idea consists of taking an arbitrary volume of data based upon the movements that EMILY subdivides, then in brief, animated clips, with the maximum duration of 8 or 12 frames for each one, when thousands of them have been acquired, EMILY compares them with the position of the skeletal structure of the bats to animate them. EMILY then decides which of them can be employed to create a logical movement and belong to the anticipated event. Alice's system, I.A., defines the various agents' travel, for example, from point A to B until C are operated by the Motion Library Editor, EMILY, which decides what clips can work correctly so as to join them in sequence to create the animation of the "agents". If a digital bat has to turn to the right, the Motion Library Editor loads a clip able to satisfy this requirement. Clearly, when a vast archive of data is prepared, the realism of the simulation improves. Christopher Nolan, author with a capital 'A', firstly desired Batman to be based upon the character's psychology and not on an admiration for digital effects. Both dubious and sceptic about the flawless miscellany between live-





The Dark Knight returns **Batman Begins**



action, location, painted scenes (constructed as both theatre-set and by CGI contributions), Nolan feared potentially missing the realism of Batman's digital stuntman. He has since had to change his mind at the point when 'Batman Begins' became a universal success, raking in 372 million dollars, which is without even considering the DVD collections which have just been released, ending with an elaborated and credible digital effect, as desired by Nolan himself.

Copyright 2006 Article by
**PIERFILIPPO SIENA &
CAVALIERE OSCURO**

for Imago Edizioni, Italy

<http://www.imagonet.it>

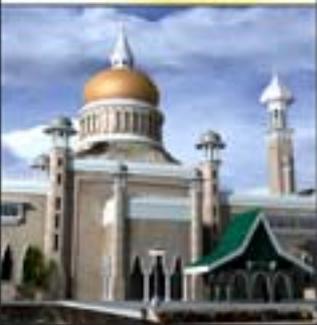
Published by agreement.

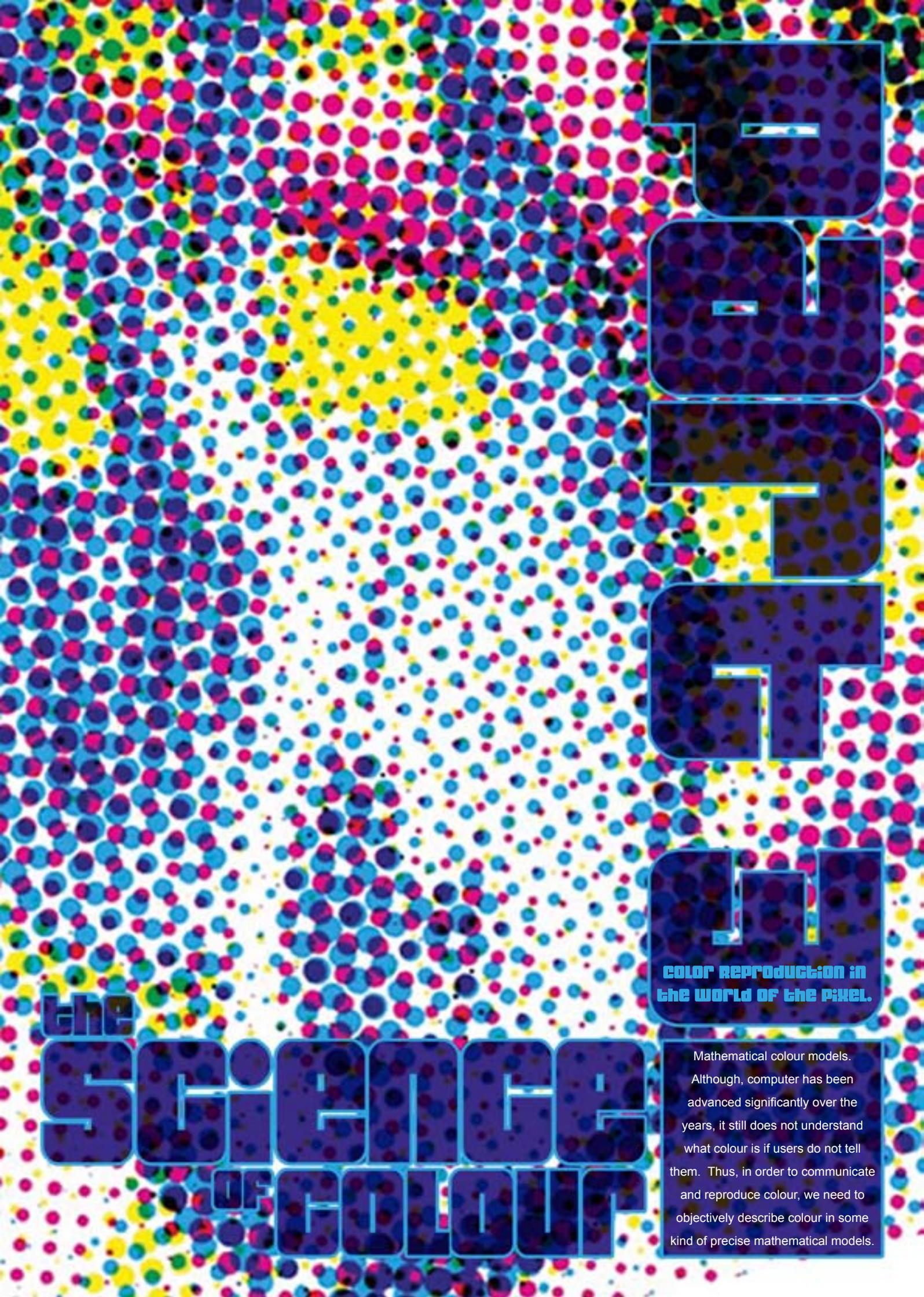




 **3d02.COM**
The Finest 3d Model Store

3d02.com. Commonly known as a high quality 3d model store, one of the premier stores of digital assets offering ready to use CG 3d models, and an open platform allowing artists to publish and sell their 3d models online





THE
SCIENCE
OF
COLOUR

the
SCIENCE
OF
COLOUR

**COLOR REPRODUCTION IN
THE WORLD OF THE PIXEL.**

Mathematical colour models.
Although, computer has been advanced significantly over the years, it still does not understand what colour is if users do not tell them. Thus, in order to communicate and reproduce colour, we need to objectively describe colour in some kind of precise mathematical models.



3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4

the SCIENCE OF COLOUR

THE HUMAN EYES HAVE BLUE, GREEN AND RED RECEPTORS FOR SHORT (S), MIDDLE (M) AND LONG (L) WAVELENGTHS. THEREFORE, TO BE ABLE TO REPRESENT THE SENSATION OF COLOUR, WE MUST HAVE 3 ASSOCIATED PARAMETERS...

Science of Colour

...because the spacing between the dots is not uniform, the eye has to vary their size to create the different tones. Today's technology produces equally sized dots and continuous tones by varying the density of the dots. In reality, colour quality shifts depending on the type of printer and paper and is not reproduced the same quality on the device. RGB and CMYK are often device-specific models because they reproduce using these two colour devices. This leads to problems when you get the colour consistency across and to produce the desired colours. It is essential that we have an absolute reference like CIE LAB so that we can process of precise colour reproduction. RGB and CMYK based images produce. Another important fact to keep in mind is that the gamut of RGB colour space is larger than the gamut of CMYK print, but it does not cover some areas of the CMYK gamut. This leads to mismatching and impossibility to produce all colours that both colour spaces contain. (Fig 10)

HSV/HSB AND HSL COLOUR MODEL

HSV and HSL are often diagrammed in the form of a circular hue chromatic and saturation wheel where users can choose saturation and value/brightness for the chosen hue. However, some graphic applications do it via linear sliders or buttons. (Fig 11)

Fig 10

Fig 11

www.3dcreativemag.com page 29 Issue 013, December 2006

with duber training, you will learn how to:

“ model organic meshes
with perfect topology! ”

“ map complex models
fast and effectively! ”

“ paint photorealistic
textures with ease! ”

Organic modeling DVD - \$27.80 USD
UV Mapping DVD - \$27.80 USD
Texture Painting DVD - \$27.80 USD

Postage & Handling included!
Shipping worldwide within 7 days!
10% off when purchasing all three!

10 of the Best images from around the world. This month Including:

Jeremy Roberts

James Busby

Neil Maccormack

Szabolcs Matefy

Sergey Skachkov

Adrian Baluta

Evgen

Gaston Nicolas Alanis

Piotr Fox Wysocki

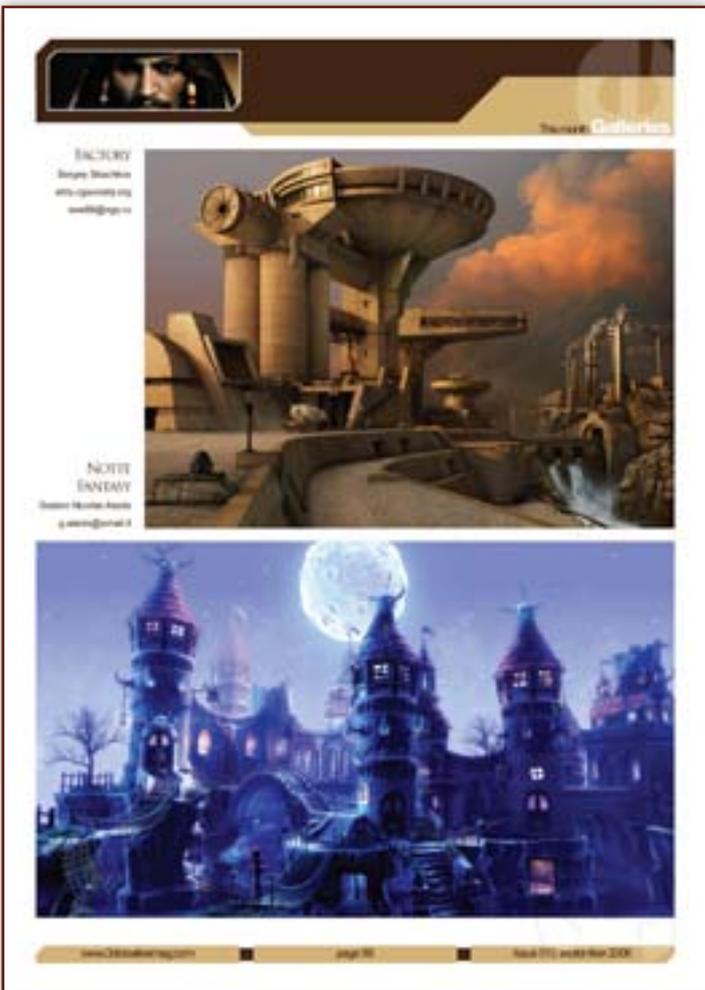
& Jeremiah Strong

the Sallevy





The Gallery



10 OF THE BEST IMAGES FROM AROUND THE WORLD.

THIS MONTH INCLUDING:

- JEREMY ROBERTS
- JAMES BUSBY
- NEIL MACCORMACK
- SZABOLCS MATEFY
- SERGEY SKACHKOV
- ADRIAN BALUTA
- EVGEN
- GASTON NICOLAS ALANIS
- PIOTR FOX WYSOCKI
- & JEREMIAH STRONG



Pixologic
makers of ZBRUSH



ZBrush.com ZBrushCentral.com

Disney Enterprises, Inc.
Bruckheimer, Inc. All rights reserved
Photo Credit: Industrial Light & Magic



"ZBrush has initiated a renaissance on sculpture. It's the first and only sculpting software that gives the artist freedom to work creatively without the constraints of conventional modeling packages also eliminates the need to work with physically based maquettes because it is, better than clay, more intuitive to use, and far more productive."
- Geoff Cambell, ILM Senior Model Supervisor



This month and next, artist Siku takes us through the process of texturing a stylised cartoon character. In this example, a Basketball Player created for a Game scenario.

TEXTURING MASTERCLASS

CARTOON & STYLISED CHARACTERS

PART ONE



3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4

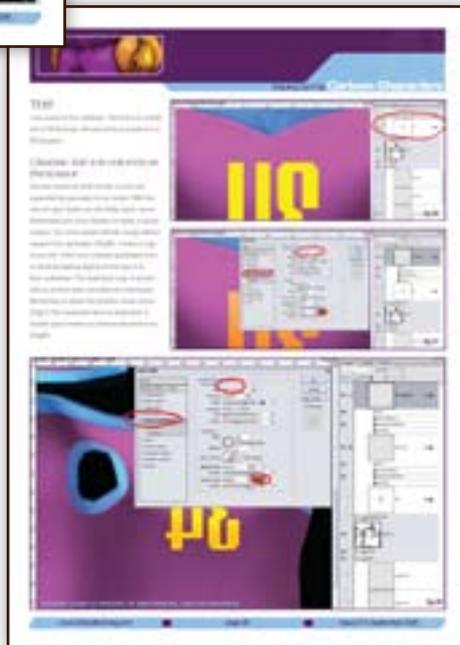
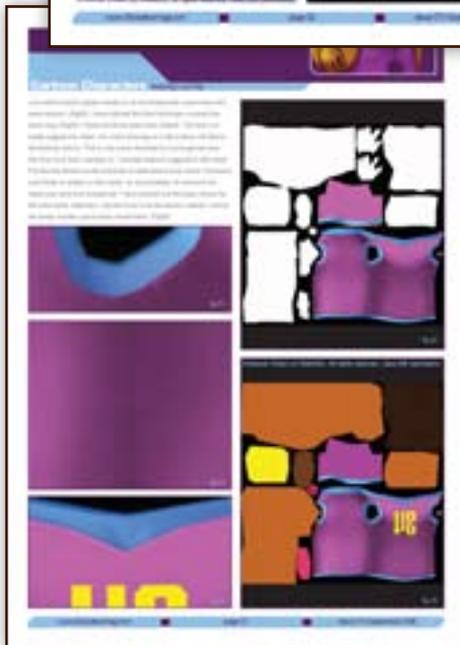
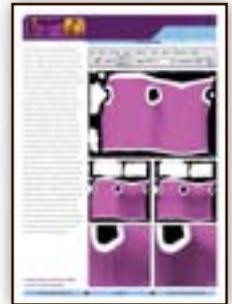
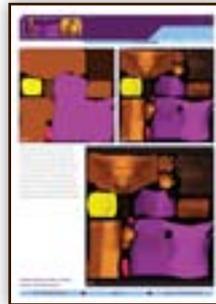
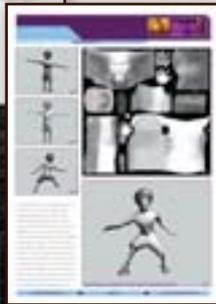
TEXTURING MASTERCLASS

CARTOON & STYLISED CHARACTERS

PART ONE



REAL-TIME ENVIRONMENTS WITHOUT DYNAMIC LIGHTING, REQUIRE REAL WORLD LIGHT SIMULATIONS. ONE TRICK USED IN THE INDUSTRY IS TO SET UP LIGHT OBJECTS IN YOUR SCENE AROUND YOUR CHARACTER. THIS TECHNIQUE IS CALLED TEXTURE BAKING,





**MAXON wishes a very
Happy Birthday to all at
3D Creative Magazine!**

In the past year 3D Creative has quickly become more than just a valuable resource for 3D Artists all around the world.

3D Creative has supplied the 3D community with fascinating articles, great features, in depth workshops and much more.

That's why we would like to present this very special, unusual and fruity birthdaycake to all at Zoo Publishing.

The magazine helps every reader improve his or her skills and find news ideas. New ideas that could be turned into a new project, a new assignment, a new vision.

And what else could you need for turning visions into reality than a 3D Software that has received dozens of awards, in the past 2 years alone, from leading magazines worldwide.

The international press has given CINEMA 4D a „good“ or „very good“ rating 36 times since August 2004. So why don't you give it a try, too?

**Visit us online and download
your free Windows* or
Macintosh* demo version at:
WWW.MAXON.NET**

*MAXON Software is available for Windows 32-bit und 64-bit and for Macintosh. Macintosh versions also available as Universal Binary for PowerPC and Intel processors.

MAXON

Welcome to our ongoing tutorial which will provide a step by step guide to building a low poly character based upon a model by Seong-Wha Jeong. Over the next eight months we will be covering how to build, map/unwrap and texture the character.

This month Part 5 - Modeling the Armour



3DSMax Version



Cinema4D Version



Lightwave Version



Maya Version



Softimage XSi Version



Vue 5

Solutions for Natural
3D Environments

Create, Animate
and Render
Natural
3D Environments



Scene created and rendered in Vue 5



3ds Max car rendered in a Vue environment with Vue 5 xStream



Frame from "Pirates of the Caribbean: Dead Man's Chest"



“ We validated Vue on the production of *Pirates of the Caribbean: Dead Man's Chest*. Vue is now part of our standard toolkit! You will be seeing a lot of it in future productions! ”

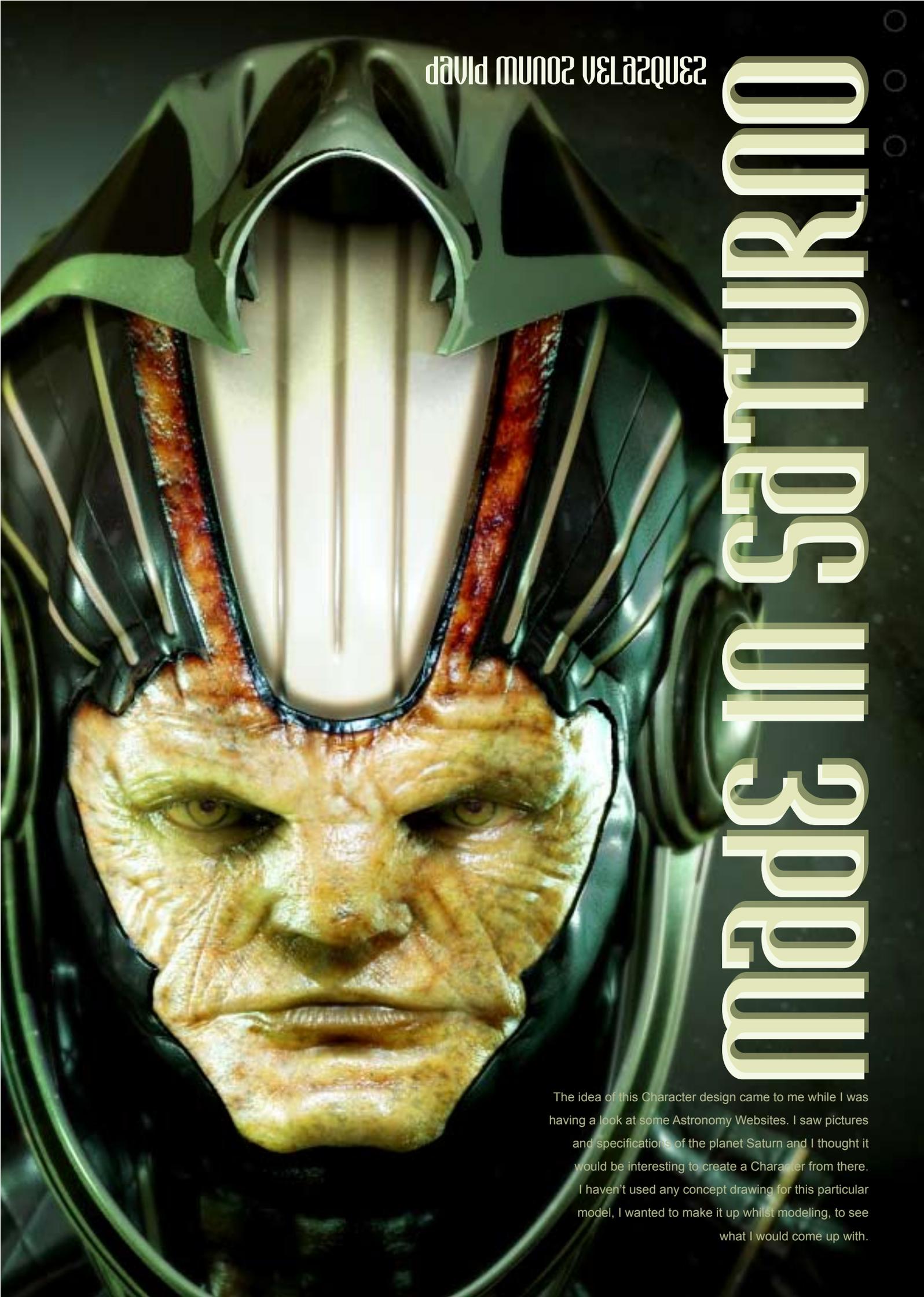
Cliff Plummer CTO, LucasFilm Ltd.

Buy Vue 5 now,
Get Vue 6 free!

For more information www.e-onsoftware.com/3dcv



Pictures created and rendered in Vue, the car scene was rendered in 3ds Max and Vue 5.0.0.0. Thanks to: Tom, Denis, Gary and Catherine at E-on for the picture e-on software and the e-on software logo are trademarks of e-on software, Inc. All other (brand names, product names, or trademarks) belong to their respective holders. "Pirates of the Caribbean: Dead Man's Chest" is a trademark of Disney Enterprises, Inc. and Jerry Bruckheimer Inc.



DAVID MUNOZ VELAZQUEZ

made in saturn

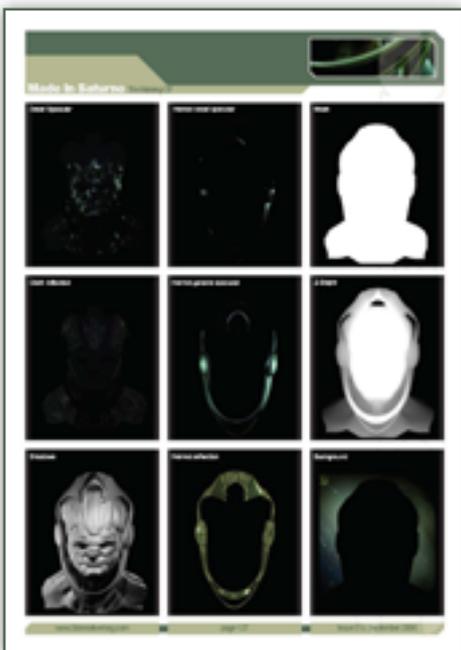
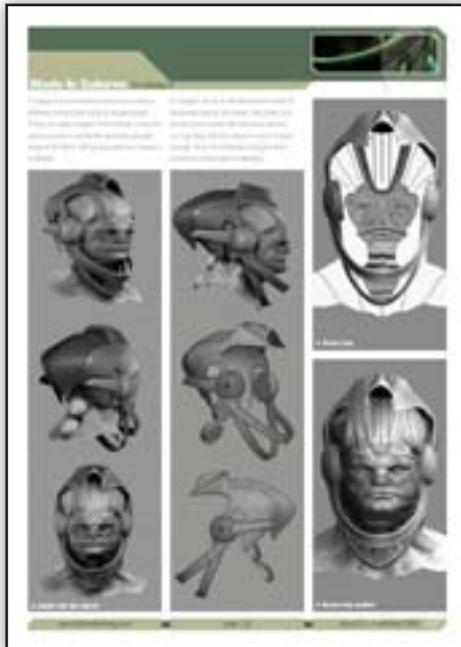
The idea of this Character design came to me while I was having a look at some Astronomy Websites. I saw pictures and specifications of the planet Saturn and I thought it would be interesting to create a Character from there.

I haven't used any concept drawing for this particular model, I wanted to make it up whilst modeling, to see what I would come up with.

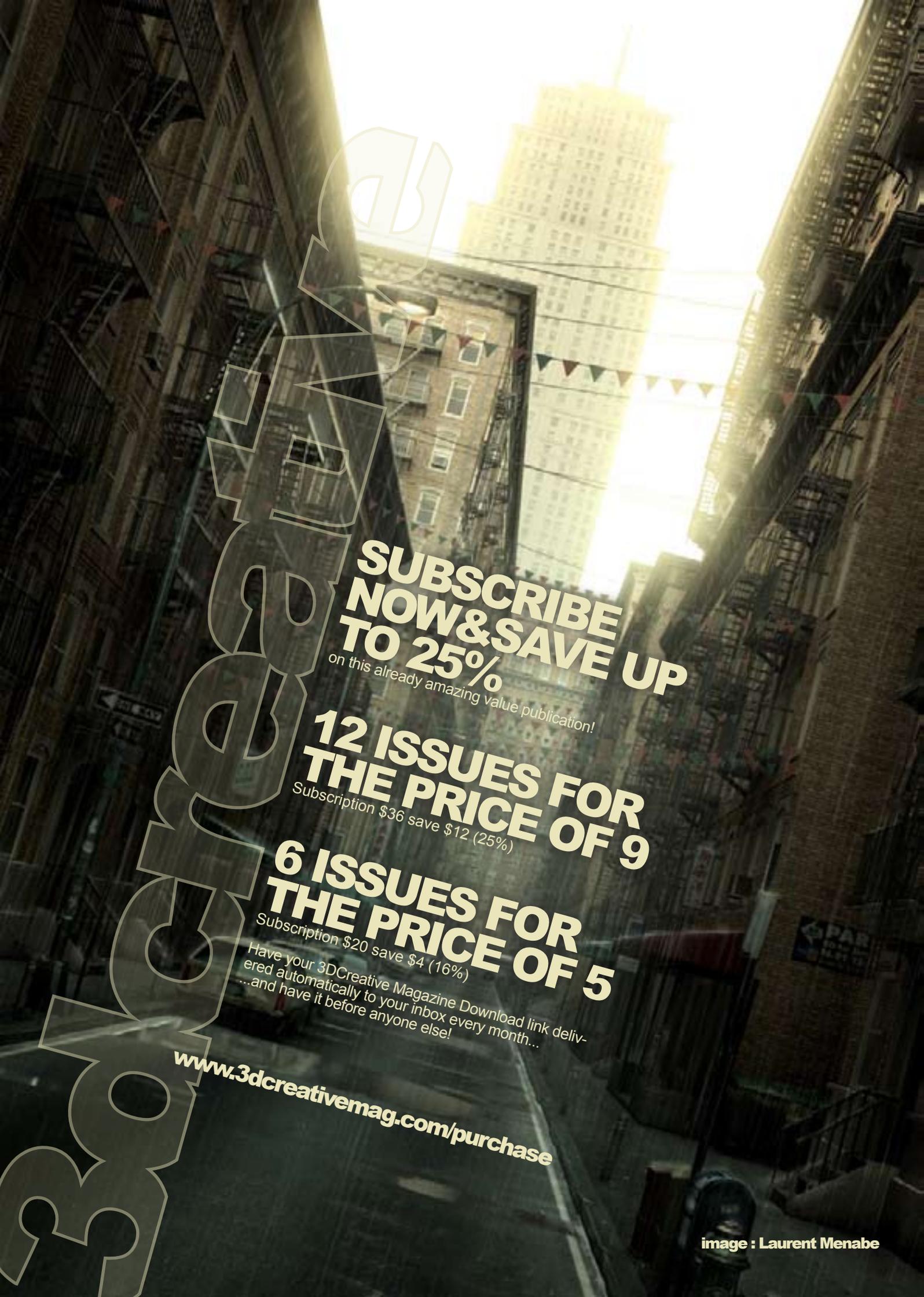


3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4

made in SATURNO



THE IDEA OF THIS CHARACTER DESIGN CAME TO ME WHILE I WAS HAVING A LOOK AT SOME ASTRONOMY WEBSITES. I SAW PICTURES AND SPECIFICATIONS OF THE PLANET SATURN AND I THOUGHT IT WOULD BE INTERESTING TO CREATE A CHARACTER FROM THERE. I HAVEN'T USED ANY CONCEPT DRAWING FOR THIS PARTICULAR MODEL, I WANTED TO MAKE IT UP WHILST MODELING, TO SEE WHAT I WOULD COME UP WITH.



3D
CREATIVE
MAGAZINE

**SUBSCRIBE
NOW & SAVE UP
TO 25%**

on this already amazing value publication!

**12 ISSUES FOR
THE PRICE OF 9**

Subscription \$36 save \$12 (25%)

**6 ISSUES FOR
THE PRICE OF 5**

Subscription \$20 save \$4 (16%)

Have your 3DCreative Magazine Download link delivered automatically to your inbox every month...
...and have it before anyone else!

www.3dcreativemag.com/purchase

image : Laurent Menabe



magic fluff

by Y.Soner Yurtseven



Magic Fluff The Making Of

3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4

magic fluff

'MAGIC FLUFF' WON 3RD PLACE IN THE CGSOCIETY CHALLENGE 'THE JOURNEY BEGINS', & I'M GOING TO ATTEMPT TO EXPLAIN THE MAKING OF THIS SCENE IN AS MUCH DETAIL AS POSSIBLE.

Lantern

The lantern is a simple, rustic object made of metal and wood. It has a glass globe in the center that glows with a warm yellow light. The metal frame is made of thin rods, and the handle is a simple wooden ring. The lantern is shown in a close-up shot, highlighting its texture and lighting.

Character on Creature

The character is a small, round, pink creature with large eyes and a small mouth. It is sitting on the back of a larger, grey, four-legged creature. The character is holding a small object in its hands, and the larger creature is looking towards the camera. The scene is set in a dark, forest-like environment.

Character Models

This page shows several character models, including a small, round, pink creature and a larger, grey, four-legged creature. The models are shown in various poses and settings, highlighting their design and animation.

Scene with Creature

The scene shows a character on the back of a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Character and Creature

This page shows a character and a creature in a dark, forest-like environment. The character is holding a small object, and the creature is looking towards the camera. The scene is lit with a warm, yellow light, creating a cozy atmosphere.

Zoo Publishing presents the new issue of *2dartist* magazine a downloadable monthly magazine for concept art, digital & matte painting for only \$4us

ZOO PUBLISHING

2d Artist

Concept Art, Digital & Matte Painting Magazine
Issue008 August 2006 \$4 / €3.25 / £2.25

A History of Matte Painting

Interviews

Olivier Derouetteau
Emrah Elmasli

Articles

From real Brush to Digital Stylus

Tutorials

King Kong - Part 3 of 3
Elements Digital Painting Series - Eyes

Making Of's

'Sirens' by Jimi Benedict
'Angel Attack!' by Daniele Bigi
'Mephistophelia' by Ivan Mijatov
'Captain of the Guard' by Eric Wilkerson

Galleries

10 of the best 2D digital artworks

visit www.2dartist.com

to download the free 'lite' issue, the full issue, subscription offers and to purchase back issues.



ZOO PUBLISHING



Hi, my name is Jonathan Simard. I'm a 3D animator working at Beenox, and as modeller at home. I have been working on the character for a while and in this making of I show you 'step by step' how to create my latest character called "white teeth". Thanks to Zoopublishing for using the image as the Cover of their August Issue of 3DCreative Magazine! Really! my first cover!

White Teeth



The Making Of **White Teeth**

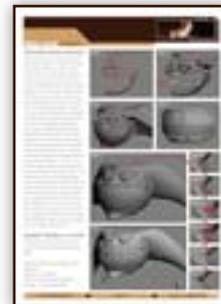
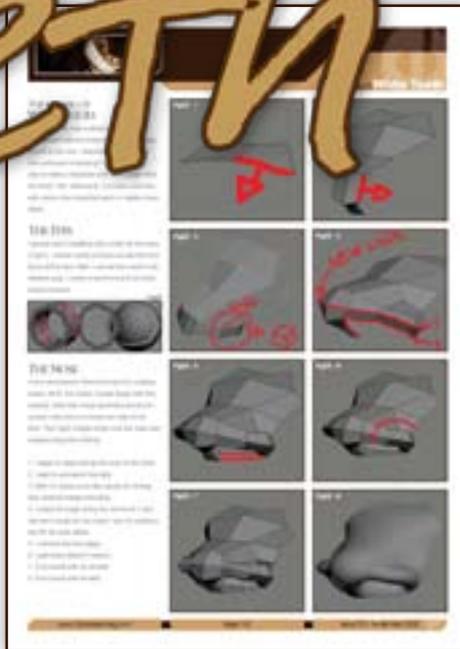
3DCREATIVE MAGAZINE
LITE VERSION
FULL VERSION ONLY \$4

White Teeth

THIS CHARACTER, WAS MOSTLY IMPROVISED. I DEVELOPED IT WITHOUT KNOWING HOW IT WAS GOING TO LOOK AT THE END.

I STARTED DRAWING THE FACE AND CONTINUED TO DEVELOP IT.

THE BASIC IDEA WAS TO MAKE A CHARACTER WITH TEETH BIGGER THAN THE HEAD. THIS 'MAKING OF', IS A BASIC OVERVIEW, WITH SOME MORE IMPORTANT PARTS IN SLIGHTLY MORE DETAIL.



NEXT MONTH

in **3dcreative**

MONSTER HOUSE

An interview with VFX

Supervisor Jay Redd

SIGGRAPH 2006

Full Review from the 3D

Expo of the Year

INTERVIEWS

Liam Kemp

Sebastien Schoellhammer

Marco Caminati

TUTORIALS

Swordmaster Part 6

Mapping & Unwrapping

Texturing Masterclass

Texturing a Cartoon &

Stylised character part 3 of 3

GALLERIES

another 10 of the best Images from
around the world.

PLUS

Articles, Industry news, Competitions & more!

IMAGE : SEBASTIEN SCHOELLHAMMER
VISIT WWW.3DCREATIVEMAG.COM FOR FULL INFORMATION
AND TO PURCHASE CURRENT AND PREVIOUS ISSUES FOR
ONLY \$4 US EACH!

Recruitment

“YOU’VE READ THE ARTICLES, YOU’VE LEARNT FROM THE TUTORIALS, NOW GET THE JOB YOU’VE ALWAYS WANTED!”

Employers! If you have a position that could be potentially filled by one of 3DCreative Magazine’s 20,000+ talented readers and would like to advertise here then please contact lynette@zoopublishing.com



aardvark swift

NEXT GENERATION RECRUITMENT SOLUTIONS

Established in 1989, Aardvark Swift is the UK's longest established and market leading interactive entertainment recruitment specialist, specialising in the games, mobile and interactive entertainment markets.

We have a huge range of vacancies available throughout the UK and overseas for Artists and Animators with 3D skills (Max, Maya etc.). No matter what your taste there is something for everyone in this exciting industry - whether its RPGs, RTSs, sports or action titles. You'll enjoy a relaxed and friendly working environment with excellent salaries, bonus schemes and benefits available.

Please forward your CV and demo work to colin@aswift.com and quote reference "3D Creative!"

Aardvark Swift Recruitment Ltd, Silicon House, Farfield Park, Walk-upon-Deane, Rotherham, South Yorkshire, S43 1DB

Check out our current vacancies or register online at:



www.aswift.com



Calling Part-Time Modellers, Texture Artists, UV Mappers, and Figure Riggers.



Want to join a dynamic team, make some money, and create innovative products?

Visit us to find out more:

<http://www.vanishingpoint.biz/developerbenefits.asp>



datascope RECRUITMENT

Top Games Jobs

We are managing all of Sony Computer Entertainment Europe's development recruitment. Their UK studios offer unrivalled development facilities and a creative environment. They currently have art roles available in London and Liverpool to work on the next generation of creatively advanced games.

They currently require:

- Lead Artists/Art Managers
- Animation Director
- Technical Artists (MEL Scripting)
- Senior Environment Artists
- Concept Environment Artist
- Visual FX Artist (Maya Particles/Dynamics)
- Video Processor/Editor (Final Cut Pro)

Contact Paul:
3dcreate@datascope.co.uk

our expertise: your development
datascope - recruitment specialists for interactive entertainment

London +44 (0) 20 7380 6018 info@datascope.co.uk
Chicago +1 312.587 3020 info@datascopeUSA.com

Winners 2005

3D JOBS

WWW.3DJOB.S.CA

Next-Gen Recruitment Solutions

OPM
response

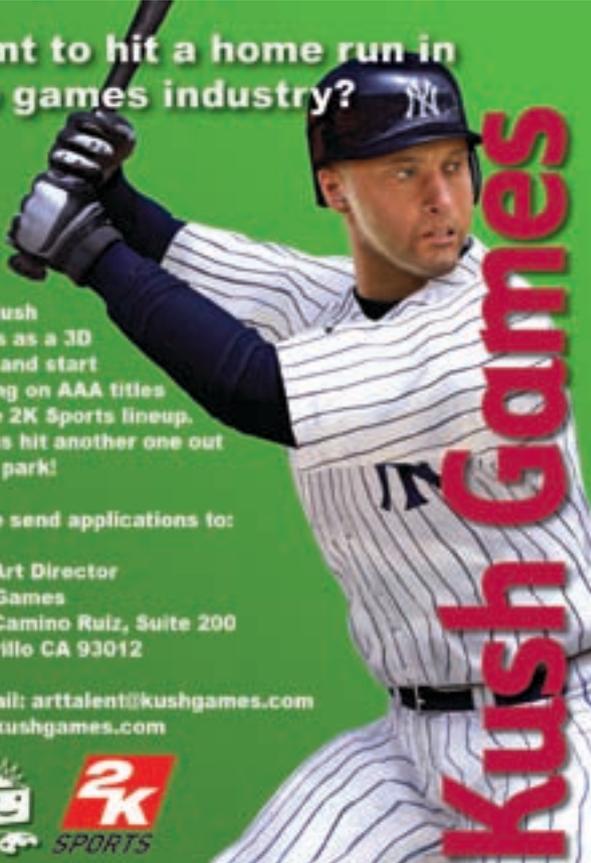
www.opmjobs.com

General Enquiries: OPM Response Ltd, 10 Peartree Business Centre, Stanley, Colchester CO3 6UN Tel: 01206 544044 Fax: 01206 547199



Recruitment CG Jobs

Want to hit a home run in the games industry?



Kush Games

Join Kush Games as a 3D Artist and start working on AAA titles for the 2K Sports lineup. Help us hit another one out of the park!

Please send applications to:

Attn: Art Director
Kush Games
5155 Camino Ruiz, Suite 200
Camarillo CA 93012

or email: arttalent@kushgames.com
www.kushgames.com



Now hiring... you?



NCsoft is seeking talented artists to join its seasoned team of industry professionals led by famed designer and programmer Richard Garriott. This is an exciting opportunity to work in a highly creative environment at NCsoft's headquarters in Austin, TX, concept art studio in Santa Monica, CA, or development studio in Aliso Viejo, CA.

CURRENT OPENINGS

- Senior 3D Character Artists (TX and CA)
- Senior 3D Environment Artists (TX)
- Senior Environment Concept Artists (CA & TX)
- Character/Creature Concept Artists (CA)
- Senior Animator (TX)
- Animators (CA)
- User Interface Artist (CA)

To apply, please send resume and reel/portfolio/link to on-line portfolio to:

Jobs-la@ncsoft.com
visit www.plaync.com/jobs/jobs.html
www.plaync.com

KROME STUDIOS

Krome Studios is Australia's largest game development studio, we have come a long way since our humble beginning in 1999. We now boast 4 project teams, over 200 talented people and an increasing presence in the worldwide game development industry.

To date, Krome Studios has created ten successful titles on multiple platforms and languages, including TY the Tasmanian Tiger™, Krome's own IP and Platinum selling global videogame franchise.

WHY WORK FOR KROME?

Work on high **profile titles** in conjunction with the top 5 publishers in the world.

Technology – industry leading tools and engine technology, cutting edge development on all next-generation consoles (yes! We have hardware) and most current gen consoles.

Benefits – flexible working hours, relaxed working environment, minimal crunch time, gym membership, massages, Beer O'Clock, and MORE!



POSITIONS VACANT

Cutscene Artist – A film or TV background, cinematic eye and a basic understanding of 3d animation preferred.

Level Scripters – An interest in game scripting and design, and experience using 3rd Party Level Design Editors (UnrealEd, Doom Edit etc) preferred.

Physics Programmer – games experience essential.

Senior Environment Artist – games experience essential.

Producer – games experience essential.

We are always looking for talented and experienced game developers to join our teams. If you share our passion for games and want to join Australia's largest games developer – We want to hear from you!

For more information on the above positions, or to apply – please email humanresources@kromestudios.com

TY the Tasmanian Tiger and the Krome Studios logo are trademarks of Krome Studios Pty, Ltd. © 2006 Universal Interactive, Inc. Spyro and related characters are™ and © Universal Interactive, Inc. All other trademarks are the property of their respective owners. All Rights Reserved.

www.kromestudios.com



About Us Zoo Publishing



Partners

If you have a CG Community website, and would be interested in reselling 3DCreative or 2DArtist magazine please contact lynette@zoopublishing.com

Zoo Publishing

Is a new Company, publishing downloadable online magazines. It is based in the West Midlands in the UK. Zoo currently produces two online downloadable magazines, 3dcreative and 2dartist. Zoo's intention is to make each issue as full of great articles, images, reviews, interviews, images and tutorials as possible. If you would like more information on Zoo Publishing or It's magazines, or you have a question for our staff, please use the links below.

www.zoopublishing.com

www.3dcreativemag.com

www.2dartistmag.com

Editor > Ben Barnes

ben@zoopublishing.com

Assistant Editor > Chris Perrins

chris@zoopublishing.com

Marketing > Lynette Clee

lynette@zoopublishing.com

Content Manager > Warin Pismoke

warin@zoopublishing.com

