

# 3Disciple

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www.3Disciple.com | Issue: 02 | June 2020 | Featuring Archviz Artists and Studios. SiNi Project Tutorial

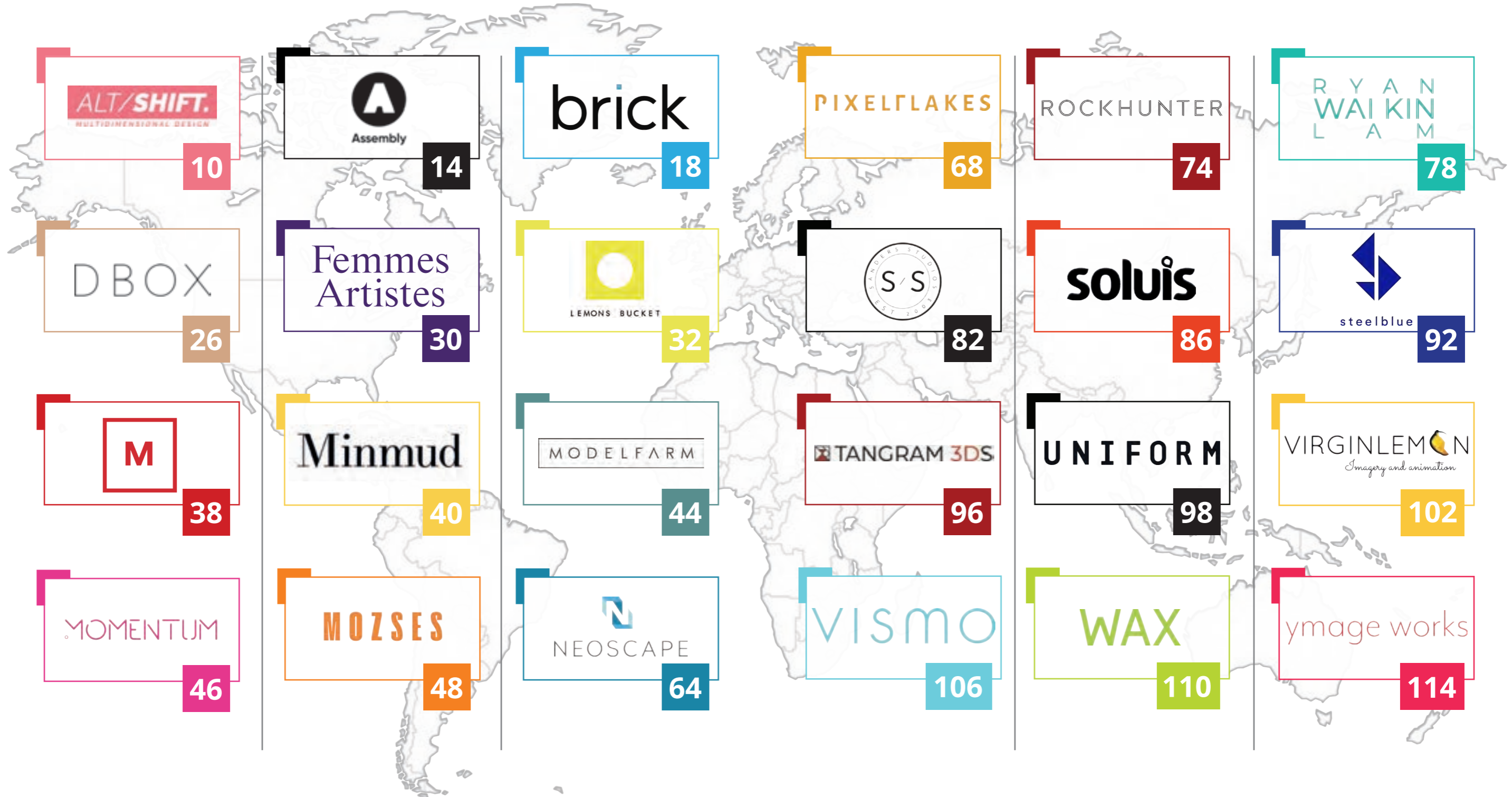
Get to know the artists and studios behind some of the most iconic Archviz imagery of 2020



Image copyright © 2020 ALT/SHIFT

# Content

# Artist Spotlight

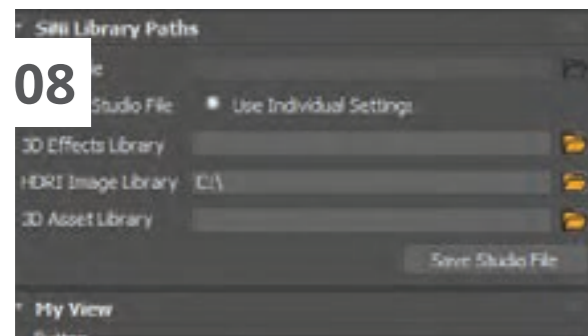


# ‘Making-Of’ Project

# Habitat Forestier

In this issue we have prepared a full making-of project, walking you through the steps from start to completion using the SiNi 3ds Max plugins.

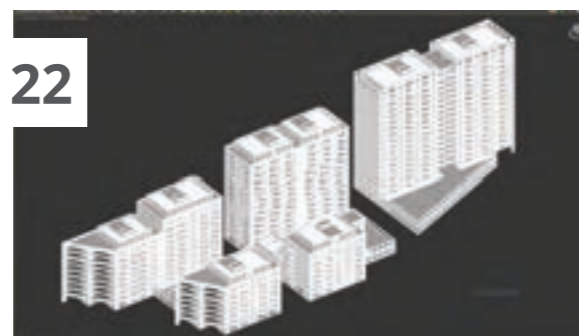
The source files used to create this project are included as an added bonus with the printed issue of 3Disciple Magazine.



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## Project Setup

You must install the project files and SiNi plugins before getting under way.



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## Part One

Learn how to prepare an imported BIM/CAD model for use in 3ds Max using the SiNi tools.



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## Part Four

We continue on from Part 3 by adding 3D entourage, such as cars and people.



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## Part Five

We are now ready to produce the final renders, adding atmospheric to enhance image depth.



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## Part Two

Using a pre-textured building model, we will set up two camera compositions and install HDRI lighting rigs to quickly add the final lighting.



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## Part Three

Part 3 focuses on the environment and context modelling, using the SiNi object plugins to parametrically lay out the design.



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## Part Six

If you wish to explore your project in real time to evaluate the model and V-Ray textures, Part 6 covers Project Lavina from Chaos Group.



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## Part Seven

Finally, we export the model to Unreal Engine with two options - Datasmith and V-Ray for Unreal.



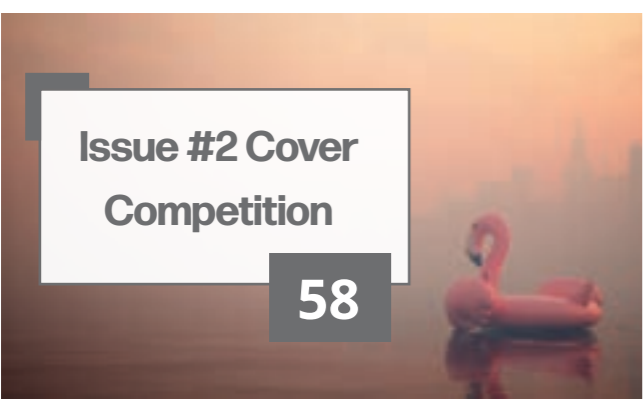
Copyright © 2020 Daria Maistat - AForm

# Exclusive

## CHAOSGROUP

We feature an exclusive 3Disciple interview with Lon Grohs from Chaos Group, where we discuss the past, present and future of V-Ray rendering and more.

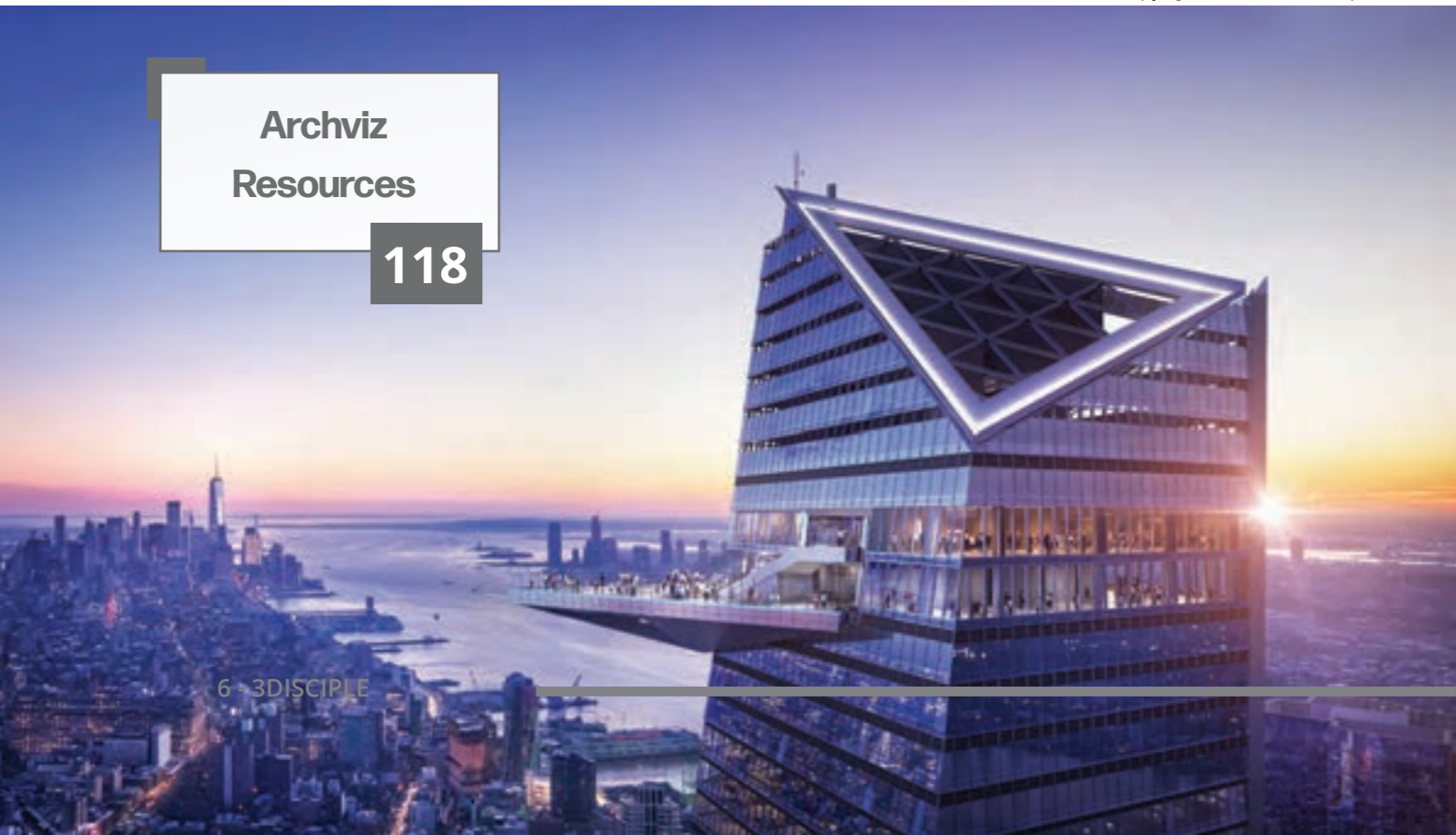
60



### Issue #2 Cover Competition

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### Archviz Resources

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## Editorial



### Editor In Chief

Nigel Hunt

# 'People say the sequel is always harder. In our case, Issue #2's talent speaks for itself'

- |                    |                       |
|--------------------|-----------------------|
| Shane Aherne       | Karim Moussa          |
| Yulia Arzhantseva  | Joshua Newman         |
| Kyla Astley        | Marvin Nooitgedacht   |
| Matthew Bannister  | Nils Norgren          |
| Luciana Bulad      | Morten Haugaard       |
| O'Brien Chalmers   | Olesen                |
| Carlotta Cominetti | Mia O'Neill           |
| Attila Cselovszk   | Karina Ponce          |
| Miguel Chuva Gomes | Martin Loureiro Prego |
| Simon Donaghy      | Paulina Pryzowicz     |
| Scott Grant        | Matthew Reid          |
| Lon Grohs          | Erika Ruiz            |
| Joshua Gruitt      | Kay Sames             |
| Judit Huszar       | Alan Sanders          |
| András Káldos      | David Tracy           |
| Ben Lamason        | Fiona Turnbull        |
| Ryan Wai Kin Lam   | Stefan Vittori        |
| Mark Lee           | Patrick Vogel         |
| Daria Maistat      | Tanja Nikolić-Vogel   |
| Teodora Merchiva   | Steve Ward            |
| Jennifer Mills     | Jon Wells             |

Who could have predicted this year and the disruption to our lives, both personal and professional. In March and April, I was touch-and-go on whether the invited studios would be interested in participating. Aside from the obvious restrictions, such as supplying team photos, everyone responded with unanimous enthusiasm, a reflection of the wider positive attitude that the global archviz community has, when facing uncertain times.

In issue 2 you will again discover a cross-section of archviz talent, from freelancers to some of the largest leading brand studios in the world. There is an interview with Chaos Group and a review of the cover competition amongst the contributors, which was blind-judged by the featured members from the Women in Archviz Facebook group.

Finally, 3Disciple is also about promoting SiNi Software, and I've changed the format to offer a step-by-step tutorial, along with source files, so readers can learn about the SiNi tools and explore how they integrate with products from other 3rd parties, such as Chaos Group.

Thank you to all the contributors and thank you to our readers in the archviz community for supporting 3Disciple Magazine.

*Nigel Hunt*

editorial@3Disciple.com

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Thank you to all our contributors who have helped make 3Disciple possible.



# Project Setup



# Habitat Forestier

Download all the 3ds Max project files!

## Project Setup

For issue #2 of 3Disciple, we decided to create a project to walk you through the archviz process, using 3ds Max, V-Ray and SiNi plugins as the main tools. You can substitute V-Ray for another renderer such as Corona Renderer or Arnold if you prefer.

The sole objective is to show you our suggested method of getting up and running with the SiNi plugins. We begin right after importing a CAD/BIM model and finish with rendering and exporting to Project Lavina and Unreal Engine.

The project has been split into bit-sized parts. Each part walks you through different stages of the pipeline, with the aim of providing an overview of how to use the SiNi tools.

It should take you around 2-3 hours to complete, depending on whether you use our supplied 3D scenes or create everything yourself, plus having to texture the building, source 3D entourage, etc.

Please do not expect this project to teach you texturing, modelling or rendering techniques, as there are many online tutorials on these subjects.

We also hope you modify and experiment with the project, creating your own work.

Please don't judge the end results of the project for their composition and render quality. There are loads of archviz experts, far more talented than us!



For a detailed step-by-step tutorial, this is included with purchases of the PRINTED magazine only. See below for details.

### 3Disciple Magazine - Print Bonus

All the 3ds Max source files used to create this project are available with the purchase of the printed 3Disciple Magazine. The project download link will be sent to your email address after purchase.

### Included with the Project

- Building models and textures
- A collection of trees from MaxTree <https://maxtree.org/>
- A collection of bushes from 3DSky <https://3dsky.org/>
- Prop library (limited)
- HDRI's from Noemotion <http://noemotionhdrs.net/>
- Textures <https://www.textures.com/category/decals/52338>

### Not included with the Project

- 3D Cars. We recommend <https://hum3d.com/3d-models/vehicles/>
- 3D People. We recommend [Renderpeople.com](https://renderpeople.com) and [AXYZ-Design.com](https://www.axyz-design.com)
- Professional Bitmaps - <https://stock.adobe.com/>
- AdobeStock\_225474758, AdobeStock\_225474720

### Copyright Notice and Usage Rights

The project files are supplied as-is for training use only. You can use these files royalty-free but we ask that any renders created and shared on social media include the hashtags #3disciplemagazine #sinissoftware so we can see and share your efforts.

Copyright to the supplied 3D models and textures remains with the authors.

The tutorial content, including text, images and videos, is the copyright of 3Disciple Magazine.

### Project Software

Autodesk 3ds Max, version 2020, <https://www.autodesk.com/products/3ds-max/>  
Chaos Group V-Ray Next or V-Ray 5, <https://www.chaosgroup.com/>  
SiNi Software, version 1.21.2, <https://www.sinissoftware.com/>  
V-Ray Material Converter 3.0, <https://maxtools.3dzver.ru/vmc>  
Chaos Group Lavina, <https://www.chaosgroup.com/>  
Chaos Group V-Ray for Unreal, <https://www.chaosgroup.com/>  
Unreal Engine, <https://www.unrealengine.com/>

**NOTE:** you can also download a 3ds Max 2017 format of the project files as an alternative.

### Installation and Setup

Before starting the project lessons, ensure you have installed SiNi software and activated the 30-day trials. Go to [www.sinissoftware.com](http://www.sinissoftware.com) to register and download the latest installer.

If you are not using all of the software listed, we recommend downloading and installing it first. Most products have 30-day trials.

Download the free 3D models from the recommended websites and, if you use Adobe CC, download the Adobe Stock photos listed.

In the Texture/Noemotion folder, please read the TXT file to install the HDRI files and configure the SiNi Illumi plugin to read your image library.

### System Requirements

The project was created on a workstation PC with the following specifications:

AMD Ryzen Threadripper 3960X 3.8GHz Base, 4.5GHz Turbo, 128MB Cache, 24 Cores/48 Threads.  
64GB (4 x 16GB) 3000MHz Quad Channel DDR4 Memory.  
NVIDIA GeForce RTX 2080 Ti.  
Win 10 Pro 64-bit.

# ALT/SHIFT.

‘WE CREATE DIGITAL BEAUTY.’

‘WE ARE MULTI-DIMENSIONAL DESIGNERS.’

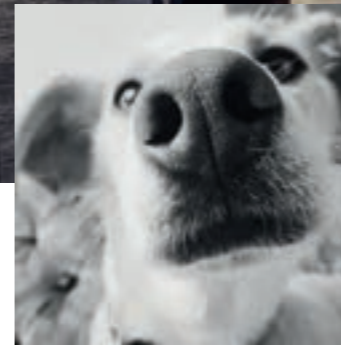
We are a super-versatile 3D studio based on two people and one dog.

We all have architectural backgrounds – Patrick was an architect, Tanja was an interior designer and Attila peed on house corners – but we decided not to limit ourselves to only one path. So we started ALT/SHIFT.

What we do is extremely difficult to summarise. We work in the fields of architectural stills and animations but we also do a lot of digital artworks for a wide range of different industries and clients around the world. We recognise that the main thing that matters is the relationship with the client.

We already do what we love, but that can only be fulfilling if you work with someone you like. So our key to success is the combination of quick, high-quality work that makes our clients laugh. We bind our clients with humour and it works.

We love what we do and we do what we love.



## Facts



### ALT/SHIFT

Studio Size: 2.5

Location: Hamburg, Germany.

Main Work: Stills, Animation, Art

Main Software: 3ds Max, F-Storm, Houdini, SiNi, iToo, Adobe CC

Contact Details: Patrick Vogel & Tanja

Nikolić-Vogel moin@altshift.de

Website: www.altshift.de

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**ALT/SHIFT.**





# Hot off the Assembly Line



**Assembly**

Assembly is an integrated creative agency, specialising in delivering interactive experiences for the built environment.

As the name suggests, collaboration and bringing teams together to deliver exceptional work are at the heart of who we are.

Our goal is to continually deliver amazement to our clients, while remaining passionately creative, building a positive team spirit and having fun along the way. As a team we are always encouraged to pursue growth and knowledge to ensure we keep ahead of the curve.

We're as proud of the team culture we have built as we are of the work we deliver.



# Facts



**Assembly Studios**  
 Studio Size: 22  
 Location: London, UK. Abu Dhabi, UAE  
 Main Work: Stills, VR, Real-Time, Interactive  
 Main Software: 3ds Max, V-Ray, Corona, SiNi, iToo, Adobe CC, UE4  
 Contact:  
 Jon Wells. [info@assemblystudios.com](mailto:info@assemblystudios.com)  
 Website: [www.assemblystudios.com](http://www.assemblystudios.com)

All images copyright © 2020 Assembly Studios

## Archviz All Grown-Up

**You are currently reading a well-edited, lengthy, real magazine on Architectural Visualisation. This fact perfectly sums up how this industry has grown into a new phase, along with its creators. As we at Brick Visual like to describe this trend - the geek has become a business person, with a purpose.**

Archviz is not a small, niche business anymore, but an essential part of development, urban planning and of course architecture. What was born from a void in the process – the need to show buildings realistically in a relatively short time – has grown into a visual language, a community and, moreover, an independent industry.

Studios like us around the world that have been in business for more than half a decade have the same experience and growing curve as we do. We started out as a handful of young architects, some still in school, exploring a niche opportunity to create 3D visualisations for architecture studios. Everyone, including us, learnt the craft by doing it, using software and tools developed for entirely different purposes.

*'We, and especially younger generations, are children of technological singularity, where creativity and human values should be fostered, because those are the factors that are future-proof.'*

András Káldos, CEO of Brick Visual

# brick



We see ourselves as opportunity-makers. From the beginning, we have developed streamlined workflows and tools to enable us to meet and even exceed our clients' expectations. From just a scribbled white board with project names on it, we had to step forward, designing an effective capacity planning flow and tool that is essential in shipping dozens of images every month.

From 2017, we also established a research and development team to create tailor-made solutions for workflow and technical challenges. Our team has developed the Pulze software family (Post Manager, Render Manager and Scene Manager), the first tools dedicated to architectural visualisation. You can read about this in more detail and see how it can boost your workflow on page 24.



Images copyright © 2020 Brick Visual

## Facts



Brick Visual  
Studio Size: 70+  
Location: **Budapest and Cluj-Napoca**  
Main Work: **Stills, Movies, Interactive**  
Main Software: **Adobe Photoshop, V-Ray, Autodesk 3ds Max, Pulze, Sini**  
Contact: **info@brickvisual.com**  
Website: **brickvisual.com**

Archviz is, above all, a discipline of applied arts and it is much more than top-notch tech and clever business plans. We at Brick Visual truly believe that our visualisations would not work efficiently without artistic expression and the human touch. Technology is always changing and shifting and, as crucial as it is, the added artistic, creative and human factors are what makes all the difference.

Like all grown-ups, we feel the need to give back and share our knowledge, so we opened a school for those who want to learn about architectural visualisation from 3D artists - not just the 'How' but the 'Why'. Brick Academy organises courses for all skill levels, teaches our artistic approach and has just introduced live remote learning via interactive online courses.

What's next? Like everyone, we are facing challenges, but we keep on working, strengthening cooperation within the industry and creating opportunities for ourselves and everyone else. It's what grown-ups do.

# Habitat Forestier Part One

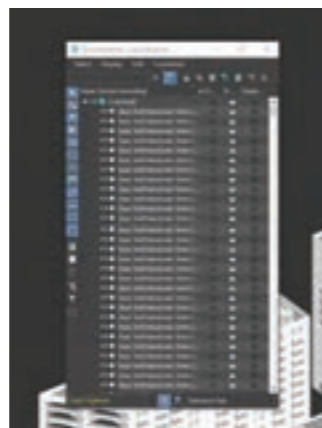
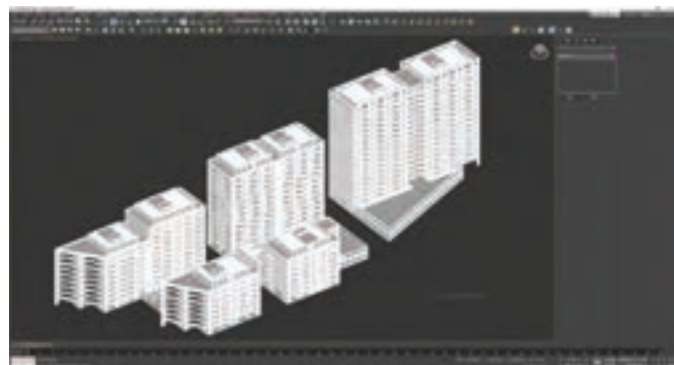
## Clean up the imported BIM model



### Part One

Software used: SiNi - Forensic, IgNite, Sculpt, 3ds Max, V-Ray.

**1.0** We will first check the model for 3ds Max workability with imported BIM/CAD files. We have never found a file that doesn't require tidying up. Your time is money so the faster you do this the more cost-effective you become.



**1.2** Open the Layer Explorer. You can see that every object is on the Default layer.

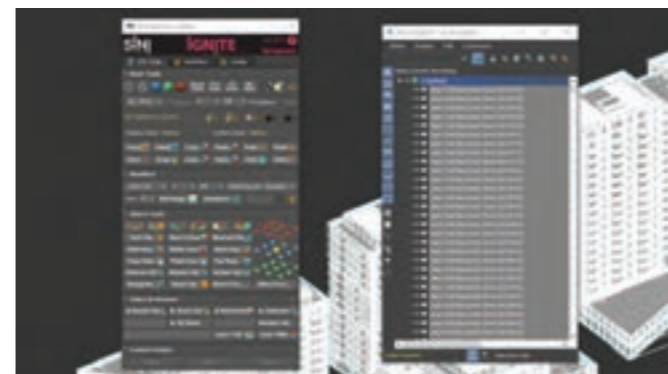
**TIP** - SiNi recommends undocking, as docking drastically slows down SiNi multi-threading because of viewport/menu refreshing.

**1.1** We recommend always running Forensic when you first import a model to scan and fix.

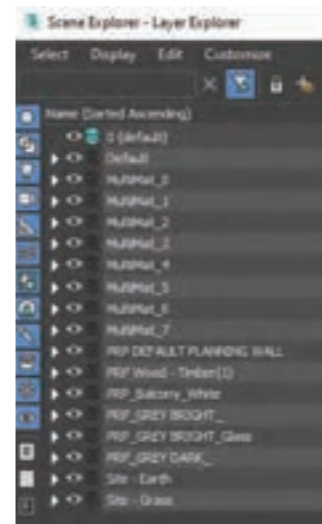
You'll discover this imported model uses Autodesk Materials. We'll convert to V-Ray later.



**1.3** Open the Material Editor to check how many materials have been imported with the model. In this case, there are only a few to work with.



**1.4** If you wish to work with layers, open the IgNite Springboard and you will see the layer tools located near the bottom of the rollout. Select all the building objects in the scene and click on the Layers by Materials button.



The IgNite tool creates new layers based on material names and moves each associated object onto the material layers.

For example, all objects with glass material will now be on the Glass layer.

**1.5** Optimise the scene further by combining the objects in the layers into one manageable object. Select ALL objects then open the Sculpt plugin. On the left, click Attach by Material.

This will combine all the objects that share the same material into one, making the 3ds Max scene lighter to move around. To reverse this later, use the Explode Objects tools.

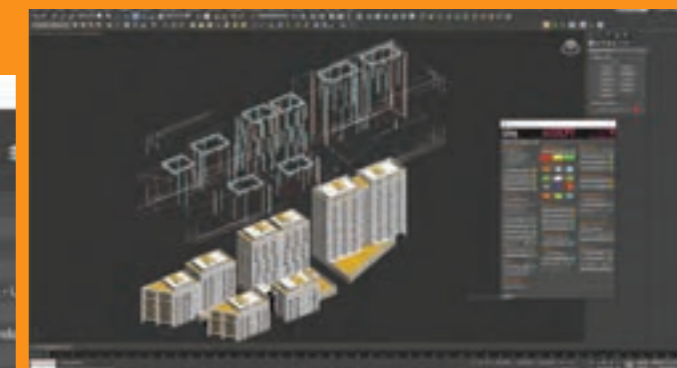


**TIP** - In Sculpt, try out the Diagnostic, Detach Double Faces and Repair Object tools to further clean up imported geometry.



**1.6** Convert Autodesk Materials. We use the V-Ray Material Converter (VMC) for this. Simply select the model, open the plugin and run. This will convert all materials in the scene to V-Ray.

**TIP** - Run Forensic afterwards to inspect the scene. You may wish to dive deeper into other SiNi IgNite tools such as removing double faces and instancing, but we covered these in 3Disciple #1.



**1.6** The building model is now ready to move on to Part 2 - adding textures and setting the scene camera composition and lighting.



## SiNi features in Pulze

**SiNi and Pulze have been working together to ensure a more streamlined workflow for artists.**

Pulze Render Manager is not just for managing render jobs, it is also an ideal tool for performing batch operations. SiNi has unique features that can be triggered by Pulze to be more effective.

**Batch asset maintenance**  
Open models from your Asset Library to clean, convert and relink missing textures.

**Batch render preview**  
Use SiNi's playblast preview tool and submit a Previz animation to your farm.

**Easy deployment**  
Install and update all your SiNi plugins.



# pulze

→ Visit [www.pulze.io](http://www.pulze.io)

## Convenient tools for Archviz

As an Architectural Visualisation professional, have you ever felt encumbered by your tools, rather than supported?

Brick Visual - a leader in the Archviz industry - has developed a family of dedicated plugins called Pulze. Pulze is designed specifically for Archviz professionals, enabling you to overhaul your arsenal of available tools and streamline your workflow.

These next-generation tools are easily accessible and provide an intuitive interface and design options for an efficient and more enjoyable workflow.

Pulze is the perfect replacement for complicated VFX-based solutions and offers consciously redesigned tools to fulfill the specific needs of a new generation of users, including architects, 3D artists and visual artists.

*'Pulze Render Manager is a fantastic product. It has been one of the most helpful tools we have added to our arsenal.'*

*Pedro Fernandes - Creative Director, Founder | Arqui9*



## pulze | scene manager

### The management tool for scene variations

Scene Manager is an intuitive time-saver for 3D artists and architects. Scene Manager collects all important settings that are scattered throughout 3ds Max and brings them together in a unified interface. It is a replacement of Max's Scene States and allows the user to prepare the project for batch rendering.



## pulze | render manager

### The first render manager for Archviz

Pulze Render Manager is a simplified solution for managing render capacity and monitoring software and hardware resources. It was designed and developed with architectural visualisation in mind. By automating the process, it maximises the utilisation of the render farm. It provides a streamlined usage for the end user and full control over the resources for the IT specialist.



## pulze | post manager

### The automation of your Photoshop workflow

Post Manager takes care of the technical details of post-production, so you can focus on being creative. Create clean and well-organised Photoshop files and keep them updated throughout the life-cycle of your projects.



57 Ocean, Miami Beach, USA  
Client/Developer: Multiplan - REAM  
Architect: Arquitectonica  
Interior Designer: Sofia Joelsson Design



57 Ocean, Miami Beach, USA  
Client/Developer: Multiplan - REAM  
Architect: Arquitectonica  
Interior Designer: Sofia Joelsson Design



The XI, NYC, USA  
Client/Developer: HFZ Capital Group  
Architect: BIG  
Interior Designer: Gabellini Sheppard

The Tulip, London, UK  
Client: J Safra Real Estate  
Architect: Foster + Partners



# DBOX

The idea of 'dialog box' was formed in the vampire hours on the second floor of Rand Hall at Cornell University in the early 1990s. Three sleepless students beta-tested software developed by the godfather of computer graphics, Don Greenberg. No pun intended.

After those students reunited in NYC in 1996, dialog box was officially formed as a business producing computer imagery of unbuilt architecture. Our second client was Diller + Scofidio, for whom we rendered a human foot. We pushed a small TV on a trolley with cases of beer into large architecture offices as a guerilla-marketing tactic to show off our visual experiments.

If KPF hadn't called with a handful of images on a particular Friday afternoon in the winter of 1998, we wouldn't be around today. We came that close. Thank you, KPF.

Our hard work gained some recognition and soon we were known by a few architects in NYC in need of a visual story.

In 2001 we were commissioned to create all the imagery for Governor Pataki's global press release of the Freedom Tower. These images were on the cover of nearly every newspaper in the world. Now every architect and developer knew our name, which we had changed to DBOX. We were quickly vacuumed into the sector of real estate marketing and, hence, rapidly expanded into a full-service Branding and Creative Agency.

In 2006 cool things happened, like Matthew being named one of the world's top creatives under 40 by Wallpaper magazine. Keith was called a 'NY Influencer' in New York magazine alongside Santiago Calatrava and Andre Balazs. This was before everyone was an 'influencer'. Then we won a fucking EMMY(!) for our CG animation work for Discovery Channel's six-part documentary series called 'Rising: The Rebuilding of Ground Zero' – produced by Steven Spielberg.

We also won several World Luxury Awards and launched so many high-profile real estate brand marketing campaigns that some architects wondered if we still actually did renderings at all ...

Well, we always have. We just stopped pushing beer carts into architecture offices. We are immensely proud of our architectural illustrations, even though much of our work is never made public.

Rather than label ourselves as 'industry leaders', 'pioneers', 'visionaries', 'influencers' (yawn), we'd prefer that you just look at our work. Let the work do the talking, so to speak. After all, we are in the business of CG-as-visual-strategy.

- Matthew Bannister, Founder and CEO, DBOX

Penn 2, NYC, USA  
 Client/Developer: Vornado Realty Trust  
 Architect: MdeAS Architects (Renovation)  
 Charles Luckman Associates(Original building)



DBOX



## Facts



**DBOX**  
 Studio Size: 75  
 Location: **Budapest, Hong Kong, London, Los Angeles, Miami, New York**  
 Main Work: **Full-Service Branding and Creative Agency**  
 Main Software: **3ds Max, Corona, V-Ray, SiNi, Adobe CC, Fusion**  
 Contact: [info@dbox.com](mailto:info@dbox.com)  
 Website: [www.dbox.com](http://www.dbox.com)

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# New Role Models

# Femmes Artistes

The artists below have been curated from a long list of worthy candidates, all of whom are members of the Facebook group Women in Archviz. Its mission is to promote leadership, talent and female role models, encouraging more women to join and thrive in the global archviz industry.

To discover more about Women in Archviz (WIAV), please visit the Facebook group [www.facebook.com/groups/womeninarchviz/](https://www.facebook.com/groups/womeninarchviz/) #womenforarchviz



**Daria Maistat**

**Daria is the founder of studio AForm in Kharkiv, Ukraine.**

Daria worked as a freelance visualiser for some years before starting her own studio in 2019.

AForm's artists all have an architecture education, which makes it easy to understand client needs, to 'read' the project and to operate on the same wavelength throughout the partnership.

Daria believes that telling the story of a project that has big concepts behind it is a key value.

She strongly believes that a good image is key to promoting brilliant architectural ideas worldwide, especially in these times of social networks.

Contact Details  
work@aformstudio.com  
[https://www.instagram.com/a\\_form\\_studio/](https://www.instagram.com/a_form_studio/)



**Erika Ruiz**

**Erika is a freelance 3D artist working from Sicily, Italy.**

An Italian architect and construction engineer, Erika discovered archviz during a postgraduate course in Digital Architecture, which helped her to combine her passion for architecture with her love of photography.

She is fascinated by the use of light in street photography and tries to apply the same approach when working on CG images.

She is an active member of the WIAV group and believes it is a strong and valuable platform for sharing experiences, ideas and inspiration.

Contact Details  
erikaruiz@virgilio.it  
<https://akir3.artstation.com/>



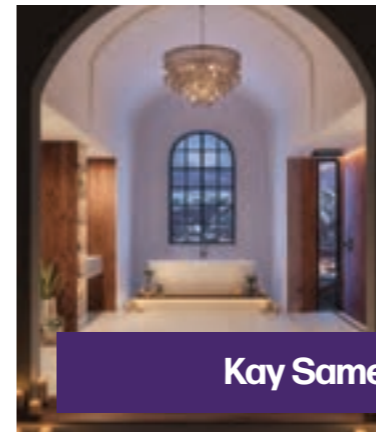
**Fiona Turnbull**

**Fiona is creative director & founder of Meche, Australia.**

With a background in animation, Fiona learned the art of visualisation while working at industry-leading studios in Melbourne, Australia.

She founded Meche to offer clients her particular approach to her passion for interior styling. Her images incorporate a distinctive exploration of light, tone, shadow and texture.

Contact Details  
fiona@meche.com.au  
[www.meche.com.au](http://www.meche.com.au)



**Kay Sames**

**Kay is a senior 3D artist working in London, UK.**

Kay loves the collaborative nature of the archviz industry and working with a varied team of specialities and talents, with everyone sharing knowledge to achieve a perfect outcome.

Projecting forward in her career, she is eager to continue learning and ultimately to pass the knowledge gained on to others new to the industry.

Contact Details  
kay.sames@outlook.com  
<https://kaysames.artstation.com/>



**Luciana Bulad**

**Luciana is an interior designer-turned-3D artist from Goiânia, Brazil.**

Luciana discovered the 3D universe while studying Interior Design.

She has been working freelance since 2018.

All of her images are created in 3ds Max, Corona and Adobe Photoshop. She loves working on 'moods', developing visual storytelling techniques using shades, contrasts and subtle lights.

She draws inspiration from websites such as Yatzer, Dezeen and Wallpaper.

Contact Details  
bulad3d@gmail.com  
[www.lucianabulad.com](http://www.lucianabulad.com)



**Paulina Pryzowicz**

**Paulina is the founder of Graphorm, Copenhagen.**

Paulina, AKA Graphorm, is an architect and 3D visualisation artist.

Her passion for architecture and design combines, alongside the ideas from her imagination, with her ability to translate these ideas into visual images using computer graphics.

This allows others to share her EXPERIENCE, DISCOVER the spaces, DESCRIBE the same stories and FEEL the same emotions as she does.

THE ONLY LIMIT IS IMAGINATION. The opportunity to create designs and environments that do not exist has been her driving motivation.

Contact Details  
info@graphorm.net  
<https://www.graphorm.net/>



## LEMONS BUCKET

Lemons Bucket is Karina Ponce, Daniel Herreras and Pablo López. We share a common vision for our studio and a mission to craft high-quality images.

This successful recipe has often meant that we are too busy to take on commissions and on occasion have turned down quite interesting projects. Our dedication to excellence ensures that our client reputation for quality is maintained and expectations are exceeded every time.

Our well-being is extremely important to us, so remote working and flexitime are part of our culture. We believe deeply in a work/family life balance, and this allows us to adapt schedules as necessary to accommodate everything life offers, including precious time with the kids!

As a small studio, we maintain close work relationships with other studios. This enables us to take on larger projects, working in collaboration with like-minded artists.

We believe that movements like 'The Credit Revolution' – to give the architectural visualisation industry the credit it deserves – and 'Women in Arch Viz' - a growing Facebook group promoting women in the industry, are doing great and necessary work, as are associations like AVA - the Architectural Visualisation Association.

We feel that we all have a lot to gain by joining forces and working together to make our community stronger.



## Facts



LEMONS BUCKET

### Lemons Bucket

Studio Size: 3

Location: Madrid, Spain

Main Work: Stills

Main Software: 3ds Max, Corona, SiNi,

iToo, Adobe CC

Contact: [Info@lemonsbucket.com](mailto:Info@lemonsbucket.com)

Website: [www.lemonsbucket.com](http://www.lemonsbucket.com)

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Lemons Bucket



# Habitat Forestier Part Two

## Prepare the Building Model and Set The Scene



### Part Two

Software Used: SiNi - IgNite, Illumi, 3ds Max, V-Ray, V-Ray Material Converter 3.0

#### 2.0 Overview

You can continue with the model from Part 1 or open the supplied 3ds Max scene file. Please note that we have skipped over the texturing process as this is entirely up to you. You will find we have pre-textured the buildings for you using V-Ray. We will now set our composition with cameras and lighting.



**2.1** Adding cameras. For this project, we will create an eye-level day view and a dramatic dusk view, complete with atmospheric V-Ray fog. We have set the cameras for you but feel free to add your own, cloning our cameras.



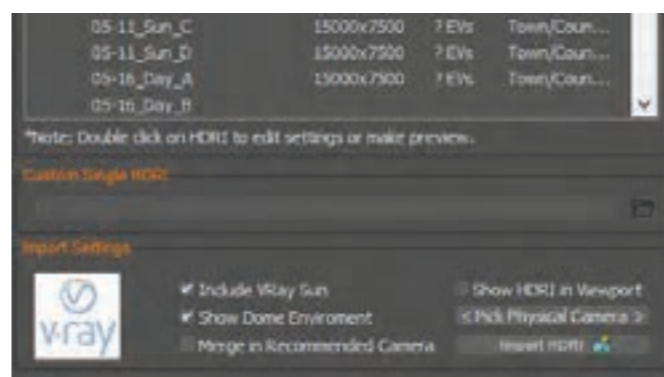
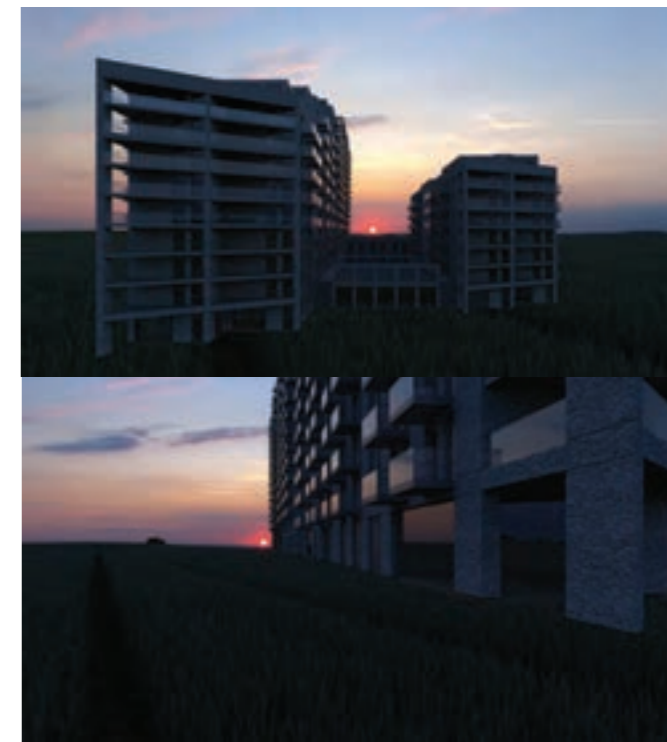
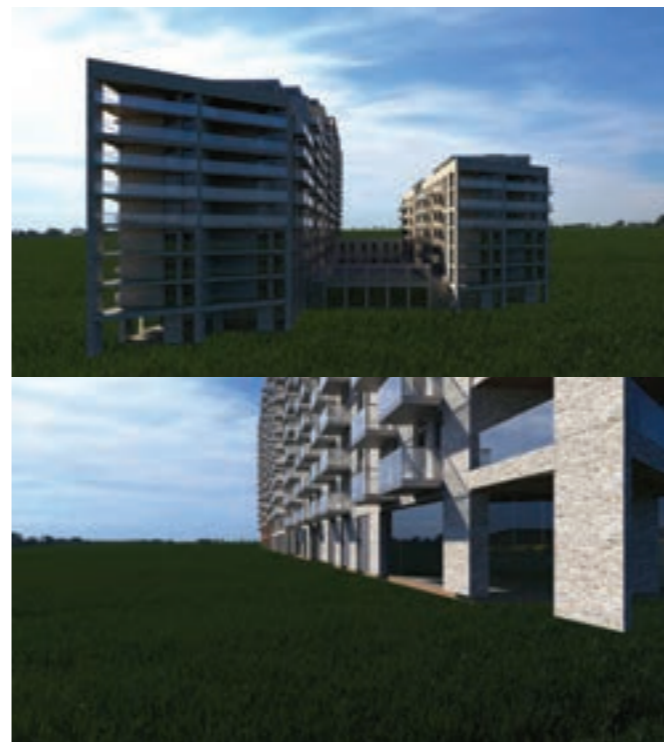
**TIP** - Open IgNite Springboard and Lockdown ALL cameras.



**2.2** Adding light. This can be a complex task depending on the look you are trying to create. SiNi Illumi is a quick plugin you can use to experiment with HDRI lighting, swapping lighting setups with one click. The project uses free HDRIs from Noemotion.com.

Open the SiNi HDRI wizard, Illumi. It automatically scans the HDRI file and sets up render settings based on the selected image.

**TIP** - To set up Illumi preferences, open IgNite Springboard/Config. Go to SiNi Library Paths and add your HDRI library path. Illumi will search this folder, and subfolders, for all HDRIs and generate previews (if selected).



**2.3** Open Illumi. Select the folder you saved the Noemotion HDRIs into and select the daytime HDRI from the list.

In the UI bottom right, Uncheck Merge in Recommended Camera, pick the camera you wish to attach the HDRI to and click on Import HDRI. The HDRI is loaded into the scene.



Select the Illumi icon in the viewport to bring up the side menu. Here you can add multiple HDRIs, adjust their settings and rotate each independently. You can swap between them by clicking on Switch Selected HDRI. Tip - To add more, select +. Add the second Noemotion dusk HDRI.

Please note that we have done this step for you.

With the 05-08 Day\_B HDRI loaded, try rendering the scene.

Then select the 06-09 Sunset\_C HDRI and click on Switch Selected HDRI. Re-render. The lighting automatically changes with one click.

Add more to experiment further.



**TIP** - Remember to rotate each HDRI to a different light position.

**2.4** Now that we have created the building scene and mood setup, we can move on to modelling the ground, landscape and surrounding context.



Matter is a boutique visualisation studio in Wellington, New Zealand.

We work collaboratively with architects and planners at all stages of development. We find ourselves being asked to produce marketing imagery well in advance of the detailed designs.

Our USP is our ability to anticipate how the design will evolve, perhaps trying to influence it in some way. We strive to make the process of commissioning 3D renders an easy, no-fuss process for our clients, and they trust us to always deliver on and exceed their expectations.

Wellington is more of a town by international standards but it still manages to deliver some big-city experiences, albeit on a compacted scale. The landscape is rugged, the weather is fierce and the threat of a devastating earthquake is ever-present.

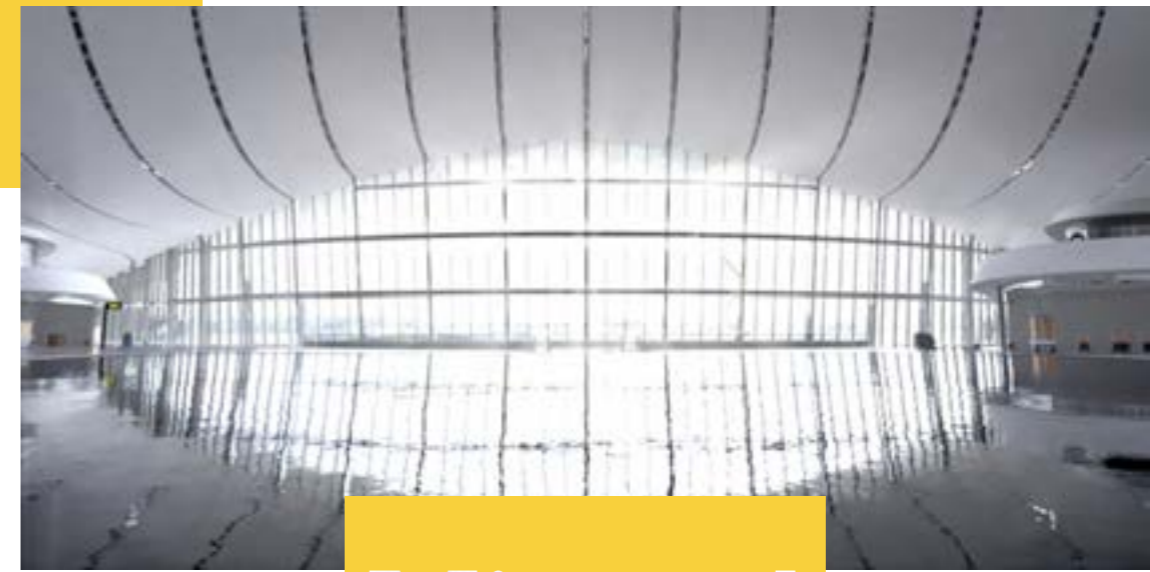
In fact, just a few steps from our desks in the studio, the concrete floor has a long timber panel. I don't tell people that you could see through seven floors when the building split in half a few years ago!

For architecture, the design challenges are enormous and the budgets tight. It's humble, practical and sensible, but Wellington is undeniably a beautiful place to live and work.



**Matter Visuals**  
 Studio Size: 2  
 Locations: **Wellington, New Zealand**  
 Main Work: **Stills, Film**  
 Main Software: **3ds Max, Corona, SiNi, iToo, Adobe CC, UE4**  
 Contact: **Ben Lamason, ben@mattervisuals.co.nz**  
 Website: **www.mattervisuals.com**

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Minmud



## Exceptional Environments. Extraordinary Experiences

Minmud is an art-led content agency creating exceptional environments and extraordinary experiences.

Nestled in the heart of Clerkenwell, Minmud brings together a team of talented and curious artists. Blending traditional skills with the latest technology to create new techniques, Minmud pushes the boundaries of what's possible.



Joshua Newman is the Director at Minmud. A dynamic and original 3D artist, Joshua has an unparalleled track record of managing high profile projects.

He says: 'Our projects vary from full CGI environments and film production to immersive and real-time virtual production with LED stages and virtual reality. We've been privileged to collaborate with amazing clients on incredible projects: from futuristic architecture to the colonisation of Mars. When we are creating, we love to challenge the current techniques and technology and go further'.



# Minmud

## Facts



### Minmud Visualisation

Studio Size: 6  
 Location: Clerkenwell, London, UK  
 Work: Film, Virtual Production, Images  
 Main Software: 3ds Max, Corona, SiNi, iToo, V-Ray, Adobe CC, Nuke, UE4  
 Contact Details: Joshua Newman, [studio@minmud.co.uk](mailto:studio@minmud.co.uk)  
 Website: [www.minmud.co.uk](http://www.minmud.co.uk)

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Minmud is known globally for its exceptional specialist imaging and film services, particularly in 3D, for landmark architectural, advertising and experience projects.





Modelfarm is a boutique 3D studio located in Adelaide, South Australia. Founded in 2017, Modelfarm has quickly climbed the ranks of the archviz industry, servicing property, retail and tourism sectors nationwide.

Shane Aherne is Modelfarm's Founder and Director. With 15 years of visual effects experience, Shane saw a unique opportunity to lend his VFX craft to the visualisation world and has since built a team of six in-house artists with backgrounds in architecture, visual effects and graphic design.

Rising to technical and creative challenges on a daily basis, the team thrives on doing what has never been done, while collectively developing pipelines to enhance realism, efficiencies and output. An evolving enclave of creativity and technical prowess, Modelfarm has plans to expand the team in the coming year.

'Adelaide is the perfect place to build a business of this kind. Not only is it a thriving hub of creativity and talent, but it is also the ideal city to raise a family and enjoy great food, beaches and wineries - Adelaide has it all', Shane says.



MODEL FARM

## Facts



### Modelfarm

Studio Size: 6

Location: Adelaide, South Australia

Main Work: Stills, Animation, Real-Time

Main Software: 3ds Max, Corona, V-Ray, SiNi, UE4, Adobe CC

Contact Details: Shane Aherne

shane@modelfarm.com.au

Website: www.modelfarm.com.au

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‘Our inspiration is drawn from the real world, real experiences, museums and art galleries

# MOMENTUM

## Facts



### Momentum

Studio Size: 4

Location: **Lisbon, Portugal**

Main Work: **Stills, Film, VR**

Main Software: **3ds Max, Corona, V-Ray,**

**SiNi, iToo, Adobe CC, Pheonix**

Contact Details: **Miguel Gomes**

**info@momentum-viz.com**

Website: **www.momentum-viz.com**

All images copyright © 2020 Momentum

**M**omentum is a creative studio founded by Miguel Chuva Gomes and Paulo Quartilho, both of whom have master's degrees in architecture and many years' experience in architecture offices and visualisation studios. The decision to start Momentum was driven by their passion for visualising unbuilt architecture and design.

Momentum was started with the two partners collaborating remotely, with Paulo living in the UK and Miguel in Portugal. Fortunately, because of Paulo's excellent knowledge of technology and Miguel's business management skills, everything went smoothly and the studio grew.

We work with property developers, architects, interior designers, marketing agencies and creative minds to create powerful images and compelling experiences. Our team is continuously experimenting with new technologies and solutions to create the most emotive and engaging imagery.



# MOZSES

Concept communication and exploration of ideas define the core of our work.

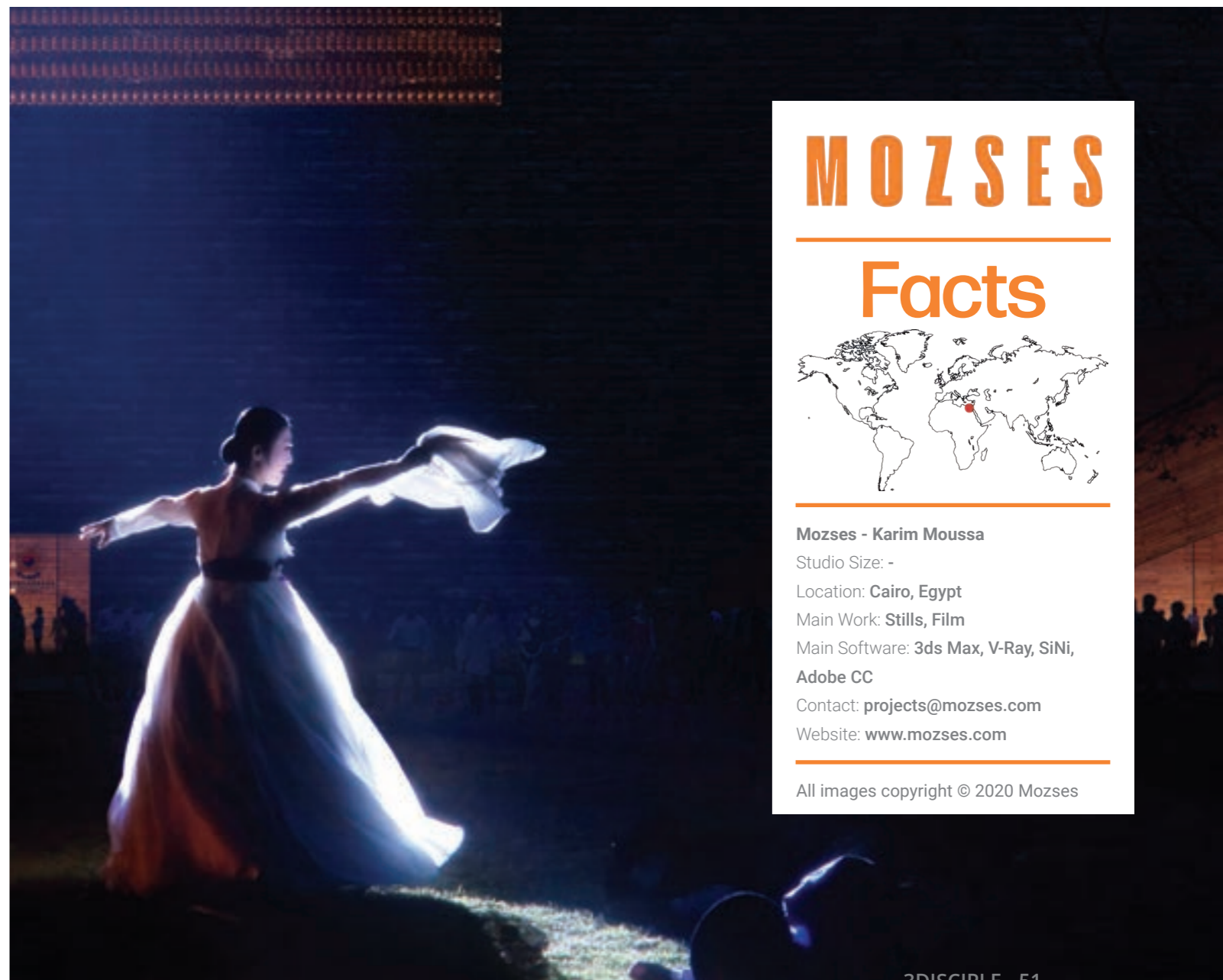
Our expertise in art directing multicultural and diverse scale projects has been forged over many years of work, dedication and experience.

Karim Mousa's Egyptian background led to many 'descendant of the Pharaoh' jokes in the five years he lived in Bergen, Norway, working for the highly regarded design studio, MIR. What his former colleagues may not have

known was his true claim to fame as a former international taekwondo champion!

Karim lived abroad for more than a decade, being based in Dubai for six years before Bergen, where he developed architectural work for global project design consultancies such as Dar al-Handasah.

Today, Karim is still kicking the martial arts sandbag and using his powers of art direction and global experience to bring unbuilt architecture to life through his visual design experiences and explorative approaches.



# MOZSES

## Facts



**Mozses - Karim Moussa**

Studio Size: -

Location: **Cairo, Egypt**

Main Work: **Stills, Film**

Main Software: **3ds Max, V-Ray, SiNi, Adobe CC**

Contact: [projects@mozses.com](mailto:projects@mozses.com)

Website: [www.mozses.com](http://www.mozses.com)

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# Habitat Forestier Part Three

## Build the Environment, Street and Vegetation



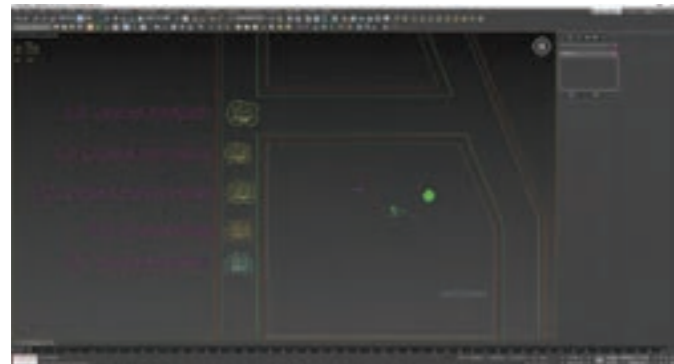
### Part Three

Software used: SiNi - Forensic, Scribe, Sculpt, SiClone, Sculpt, Disperse, Scatter, 3ds Max, V-Ray.

Open the supplied 3ds Max scene model or continue from Part 2.

**3.0** Overview. The objective is to demonstrate how to use the SiNi object plugins to lay out a complex scene in a matter of minutes, by first setting out guide splines for the parametric plugins to follow and use.

If you open our supplied scene, you will see that we've added new splines for you.

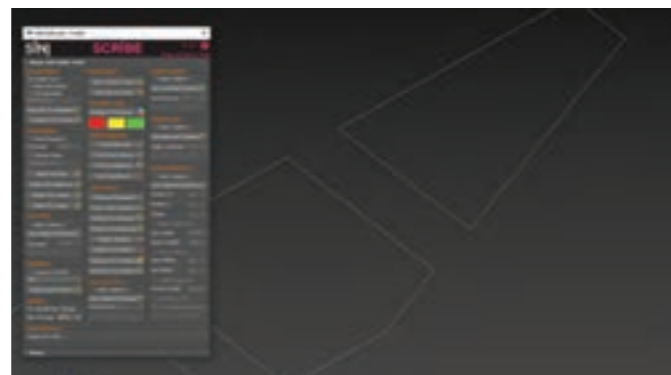


#### 3.1 Scene management.

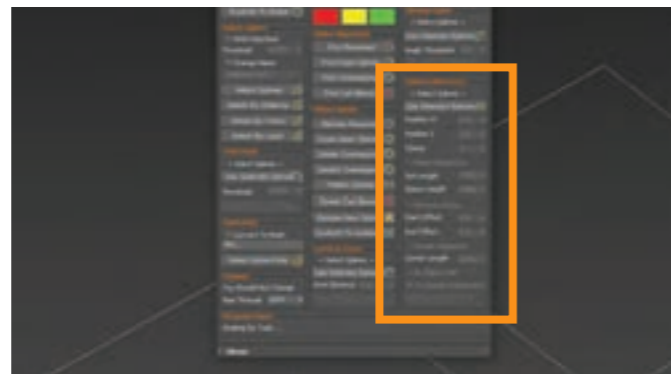
Run Forensic to check progress. It's worth keeping an eye out for unwanted nodes such as Animation Layers, which can slow down 3ds Max.

**3.2** Creating splines. Trace the building outline and offset splines for the footpaths, roads and road markings.

Open the Layer Explorer and the Scribe plugin. Select the Building spline. Rename to PT3\_Spline\_Building Outline.



In Scribe, select the Spline Outline Array.



Position XY (Offset) 2.5m to set the footpath edge. Offset this -1.25m to set the footpath centre spline. Offset Footpath 0.3m, Make Dotted Line and add Corner Segments. Attach both and rename to PT3\_Spline\_Road Markings\_Yellow. Offset PT3\_Spline\_Building Outline 1.25m. Rename this Footpath Inside.



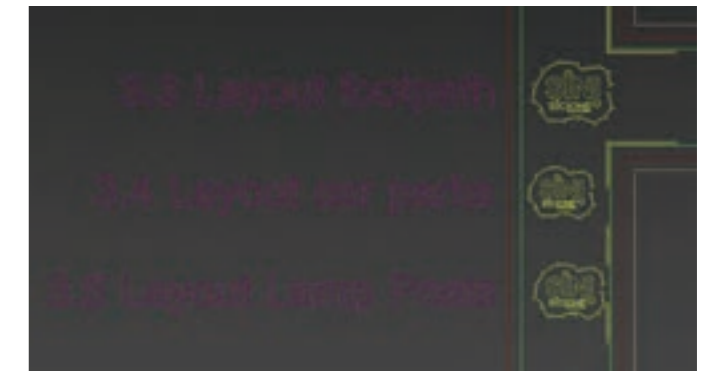
Offset PT3\_Spline\_Building Outline 12.95m. Then trace the spline and delete the original. Rename this Footpath Outside. Select Footpath Outside. Attach Footpath Inside with Footpath Outside and rename to PT3\_Spline\_Footpaths. Clone and rename to PT3\_Spline\_Lamp Posts. Create the footpath profile spline with the dimensions of 2.5 x 0.15m. Create the car park marking spline with the Extended Shapes Tee (dimensions 2.4 x 1.2 x 0.15m). Make the edit mesh.



We've also added extra splines to fill in missing paving by tracing the architects model PT3\_Paving\_Entrance Infill.

**3.3** Make the footpath using the SiClone plugin.

Switch on the SiClone layer. You can see 3 x SiClones we've added to the scene. To add your own, open the SiNi object tools, select SiClone and drag out the SiClone icon in the viewport.

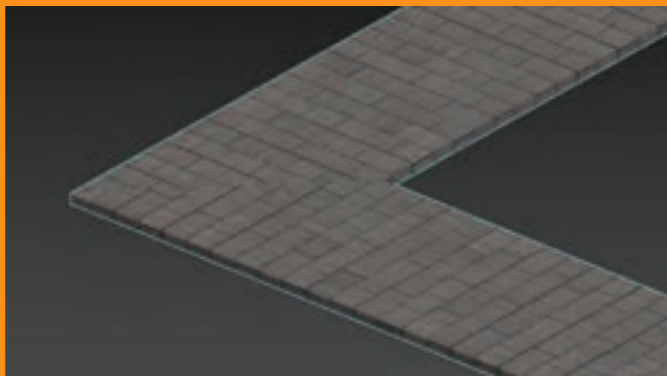
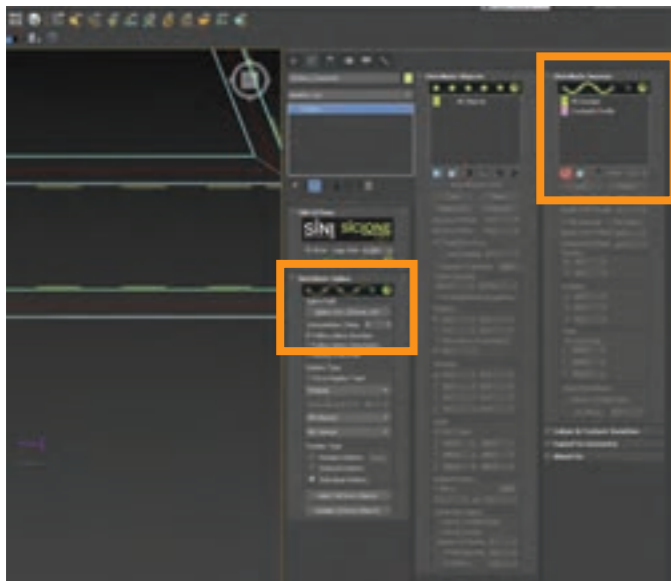


**TIP** - You cannot move it once you add objects to it so place it in a good spot. To help you, we've added text beside each SiClone to locate.

Select the footpath SiClone icon beside Footpath.

The UI rollout opens.





**TIP** - The texture correctly follows corners.

Finally, you will need to move the sweep up by 0.075m as it has been placed at 0.

### 3.4 Street markings. Dotted lines and car parks.

Open the SiClone layer and turn on the SiClone Car Parks layer. Select the SiClone icon (or create your own).



Pick the PT3\_Spline\_Road Carparks spline.

Add the PT3\_Road Marking\_Parking edit mesh to the Distributed Object rollout. It appears in SiClone following the spline. In the Distributed Objects rollout, select the object to activate the transforms. Set the Object Spacing to 6m.

Position. Move in the Z by 0.001m and tick Move From Pivot Point XY 1.25m.

Open the Material Editor and apply the ENV\_RoadMarking-White. Select the PT3\_Spline\_Road Markings\_Yellow spline. Move up in Z by 0.01m and apply a yellow paint material.

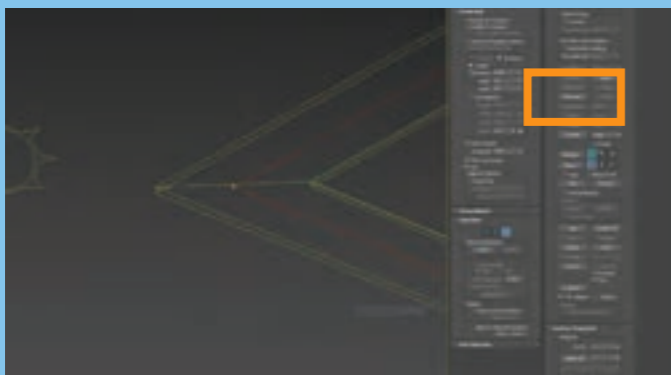
We've done this for you in the project files.

In 3ds Max, open both road markings properties and uncheck cast shadows.

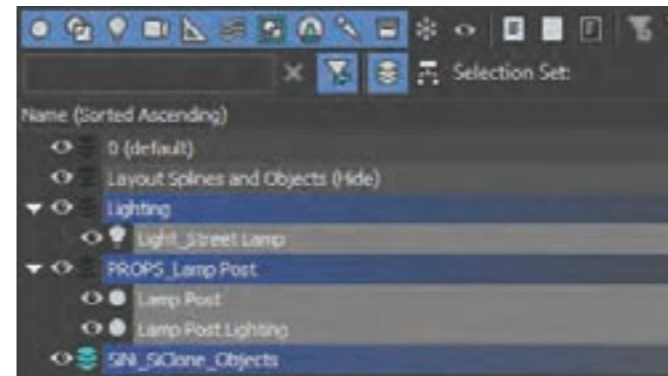
Click on Pick Spline Path. Select the PT3\_Spline\_Footpaths spline.

Next, in the Distribute Sweeps rollout, click on the Add Shape button and select the Footpath Profile. It is immediately added.

**NOTE:** you may find that some of the sweeps are wrong. This happens when the splines are reversed. Simply open the PT3\_Spline\_Footpaths splines and reverse the culprits!



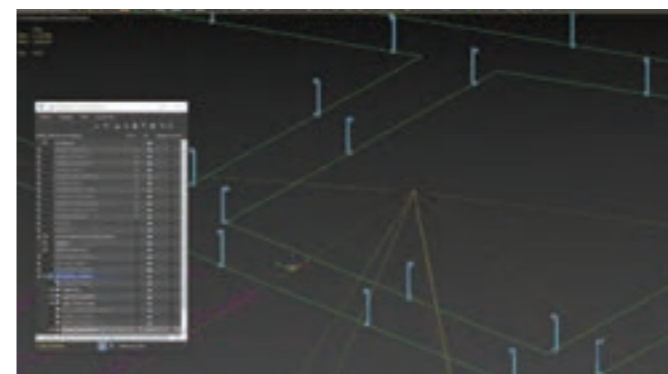
Next, open the Material Editor. SiClone works by applying the material to the splines you sweep. Set the bitmap tiling using the U (width) and V (length). This allows SiClone to sweep along any shape independently of how you transform it.



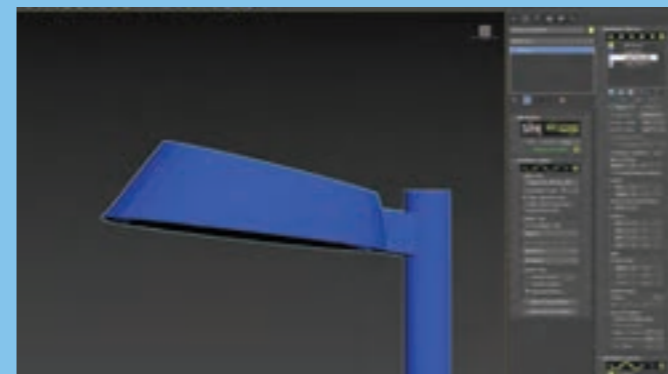
### 3.5 Lamp Posts.

Merge in the Lamp Post with Light model from the Props folder. You will see it comes in with three elements - the Lamp Post, Lamp Post Lighting and Light\_Street Lamp. The lighting is turned off by default and the Lamp Post Lighting layer should be hidden during day views.

Turn on the SiClone\_Lamp Posts and pick the PT3\_Spline\_Lamp Posts spline to distribute. Add the Lamp Post, Lamp Post Lighting and Light\_Street Lamp to the Distribute Objects.

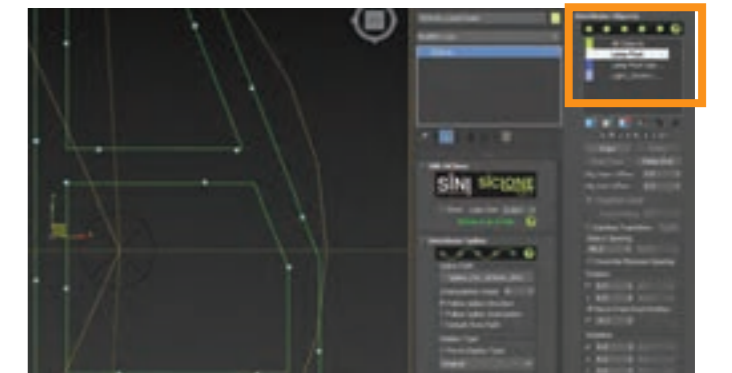


**NOTE:** you will need to do some transform work rotating them in the right direction and moving them vertically.



Select All Objects - Rotation 180. Position Z 0.15m  
 Select the Lamp Post. Object Spacing 40m. Position - Tick Move From Pivot Position XY -0.2  
 Select the Lamp Post Lighting. Object Spacing 40m. Position Z

4.875m. Tick Move From Pivot Position XY -0.3  
 Select the Light\_Street Lamp. Object Spacing 40m. Position Z 4.775m. Tick Move From Pivot Position XY -0.2

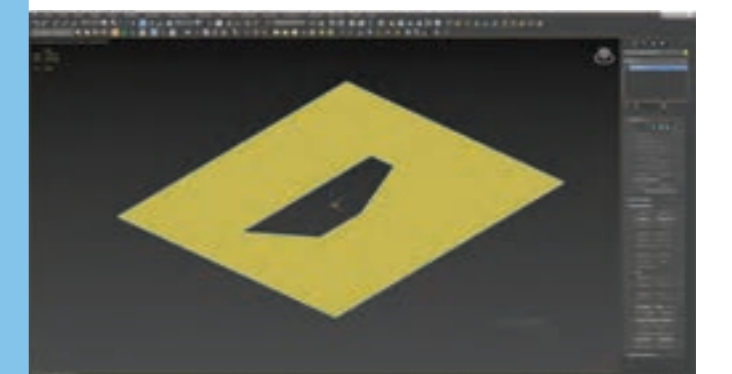


**TIP** - SiClone works with lights as well as objects and splines.



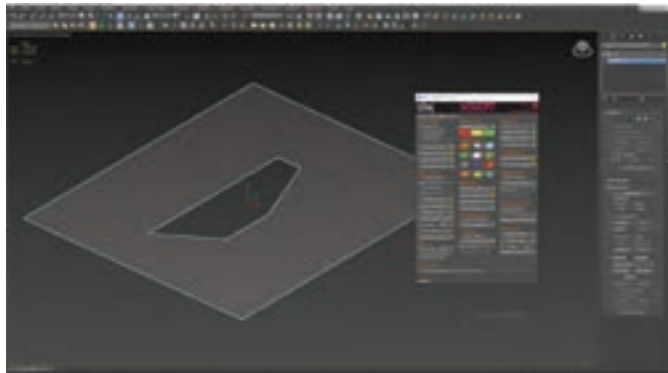
### 3.6 Scatter. Create the hills and add trees.

Select the PT3\_Surrounding Hills spline, clone and convert into an edit mesh.



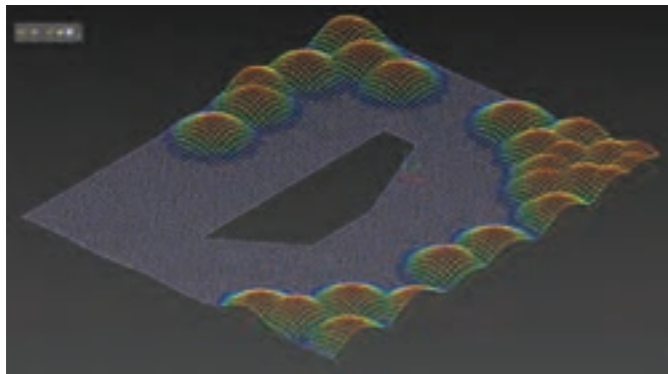


Open SiNi Sculpt to use the Retopologise Plane function. Select the Object and change the Grid Distance to 5m. Click on the button to create.



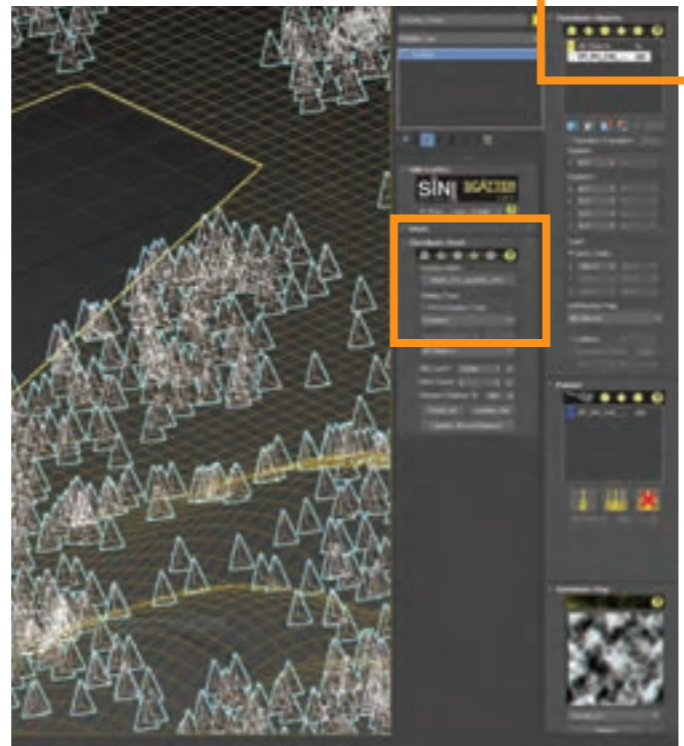
A new quad mesh is created.

Select the mesh vertices and create the hills using soft selection. Use a falloff around 50m. You can merge in the pre-made mesh from the Props folder if you prefer.



Rename the mesh to Hills.

Delete or hide the undeformed mesh and splines.



Select the Scatter Trees icon, open the Distribute Mesh rollout and pick the Hills mesh.

In the Distribute Object, add the tree MT\_PM\_V49\_Acer\_freemanii\_01\_03.

Adjust the transform settings to the following:

Distribute Mesh  
Object Count 6500  
Paint Count 100

Distribute Objects  
All Objects - Tick Random Transform  
Rotation Z 0 / 360  
Scale - Tick Unify Scale 70 / 250

Distribution Map  
Select Full. Tick Collision 2

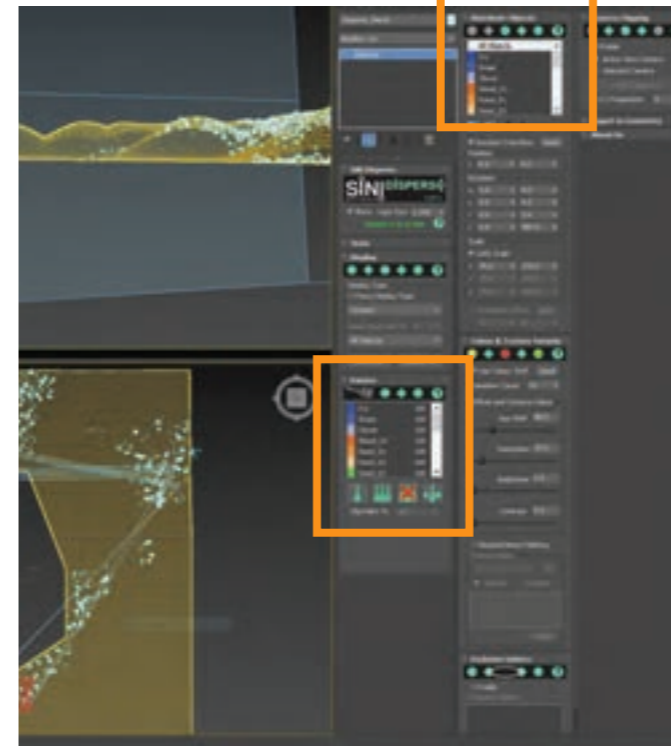
Distribution Map  
Fractal\_01

Colour + Texture Variation  
Tick Use Colour Shift  
Hue Shift 50%  
Saturation 20%

Exclusion Splines  
In the top view, draw where you want to exclude trees.  
Select the spline to apply.

Camera Clipping - tick Enable.

**TIP** - If you want your trees to appear in reflections, turn this off.



**3.7** Disperse. Add bushes and shrubs.

Turn on the Cameras layer to see the visible area in the viewports. Turn on the Disperse layer and merge any 3D plants you want to paint. We have included a selection of plants with the scene.

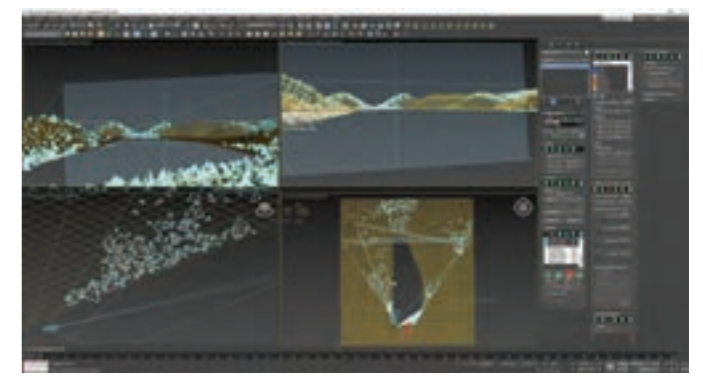
Select the Disperse Plants icon, or create your own and then add your plants to the Distribute Objects rollout.

Adjust the transform settings to the following:

All Objects  
Tick Random Transform  
Rotation  
X 0, 5  
Y 0, 3  
Z 0, 290  
Scale - Tick Unify Scale 75, 175

Select each Single Object  
(Bush1\_LG, Bush02\_SM\_A, Bush02\_SM\_B, Bush02\_SM\_C)  
Tick Random Transform  
Rotation  
N -30, -30 (this is its verticalness from tangent)  
X 0, 5  
Y 0, 3  
Z 0, 290  
Scale -Tick Unify Scale 75, 175

Colour Variation  
Tick Use Colour Shift  
Hue Shift 40  
Saturation 10



Paint the wider context first.

Disperse works by projecting onto geometry without the need to select first, similar to a paintbrush. TIP - Paint in the top, Perspective or Ortho viewport only. Do not paint in the camera view but keep the Camera views open so you can review where you're painting.

Select the objects you want to paint. Select the Bushes in the list, then choose the multi-brush icon. Change the brush size to something large - 20m (broad strokes). Set the Collision Distance to around 3m. Paint close up to camera objects. Change the Brush size to a smaller brush 2-5m and Collision Distance to 1m.

Zoom in and paint more plants visible in the foreground camera views. Keep in mind that the trees will obscure many plants. Delete out-of-shot objects by selecting the Erase icon and select the objects from the list you want to delete.

**3.8** Refining layout

Scatter. Render the camera views. In the aerial view, you may want to cull a few foreground trees. Add more foreground Disperse plants. Infill paving. Add in extra detail to the model as you like.

**3.9** Export SiNi Objects to edit mesh

Select the SiClone Lamp Posts. Open the SiCone Export rollout and export to Single Mesh. Fix the exported lights. Open IgNite Springboard and Select & Rename. Select one of the exported objects and click on the Similar Object button. All objects are selected. Move locally to their correct position. Move to Lighting Layer. Select the SC\_Lamp Post Lighting object and move to Lighting layer. Select the Lamp Posts and move to the PROPS\_Lamp Post layer. Select the Footpath and Car Parks and export to Mesh. Move these to the Ground Layer. Delete Layout splines you don't need anymore.

**3.10** Scene management. Rename objects and materials. It is time to check the object names, layers and tidy them up. We will sort out Materials at the end of Part 4.

**TIP** - Use the IgNite Springboard Select and Rename tools! Open the supplied 3ds Max scene model or continue from Part 3.

# Selecting our Cover

## Judged by the 3Disciple-featured Women in Archviz Facebook group members

After the spectacular issue #1 award-winning cover by Arqu9, the bar was set very high in finding an image for issue #2 that represented the summer publication. The decision was made to hold a competition amongst the contributors, who put forward images they felt would make a great cover. To assist with the judging and selection process, I asked the six featured artists from the Women in Archviz group if they would be interested. Thankfully, they all agreed.

The rules were simple - select a cover with an image you like that works compositionally as a cover. All entries were anonymous. Judging took place in late April, over the course of a week, with our esteemed judges diligently debating the merits of each image. They then filled in an online judging form making their top 5 selections from 1 to 5. The points were tallied, with the top 3 all within 1 point of each other!

The judges provided interesting feedback. They all agreed early on that the larger projects and aerals, although fantastic, represented a blue-chip, out-of-reach aspiration for a young artist.

*'I feel there's more emotion in a close-up image rather than wide shots and aerals'*  
-Fiona Turnbull

The more accessible and abstract eye-level views felt more achievable and therefore within reach for such artists.

*'I believe big studios tend to do things in a specific way for big clients and I feel, as judges, we all gravitated away from those images because we wanted to see something different that speaks to us, on a level that is more personal than what we see day-to-day at work'*  
-Kay Sames

Emotion and image empathy played a role, with many judges preferring images that attempted to tell a narrative story. In some cases, this led to lengthy chat threads discussing the story the artists were trying to tell.

The winning image, 'Family Trip' by ALT/SHIFT, was made specifically for the cover competition. Patrick Vogel states 'We wanted to make an abstract, playful image only. The flamingos in the pink setting just came to mind!'

A few of the judges felt it had gone too abstract, but all agreed that it is wonderful and should be the cover.

We would like to thank everyone who submitted cover images and to thank our judges for their collective effort and for picking the winner. It really was a hard decision and all are cover-worthy.

3Disciple would also like to thank Brick Visual, which decided to hold an internal image competition specifically for the cover. See the two final candidates below.

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Copyright © 2020 Riccardo Rovoletto / Brick Visual



# Student Ambition!

## An interview with Chaos Group's Lon Grohs, Global Head of Creative.

By Nigel Hunt

Peter Mitev and Vlado Koylazov receiving the Sci-Tech plaque for V-Ray at the 2017 Academy Awards, recognising V-Ray's role in filmmaking. Vlado collected the award on behalf of the whole Chaos Group team. They met at University 20 years ago.

Photo © Chaos Group

**Lon Grohs - Global Head of Creative, Nigel Hunt - 3Disciple Editor-in-Chief and SiNi CEO.**

**Nigel Hunt** I myself started out in archviz in the early 1990s and quickly adopted 3rd party renderers as a personal choice to create better work.

I moved from Accrender to Lightscape to Mental Ray to Brazil and in 2004 settled on V-Ray. For 16 years my studio grew to depend on it, rendering millions of images for both stills and film projects. It was the only renderer for 3ds Max that could handle city-scale 3D environments.

Like thousands of others around the world, the silent partnership or software marriage an artist has with his or her tools is the backbone to success. However, the scores of people involved in software development who enable this success often go without thanks and are largely uncredited.

Most artists subconsciously package tools into a singular brand name, never really appreciating the human endeavour that sustains great software and subsequently supports all computer graphic artists careers.

I first met Vlado back in 2007 when he and a small team came to my

studio, lugging a massive suitcase-sized workstation around London to promote V-Ray door-to-door. How times have changed!

This is my first interview with Chaos Group and I hope you enjoy it.

**Question: If you can, describe the history of V-Ray and the beginning of Chaos Group. Who built the company into what it is today?**

**Lon Grohs** Chaos Group got started in the late 1990s by Peter Mitev and Vlado Koylazov. They met in college while studying computer graphics at Sofia University. The story I've always heard—or at least how I remember it—is that Vlado was writing a simple game engine, sort of like Doom. One day, when Vlado was coding in the computer lab, Peter noticed what Vlado had been developing and pitched the idea of working together. At first, Vlado said no—but it was really more like 'not yet'. Vlado wanted to finish school first and after he did, the two teamed up.

The first software they worked on was actually Phoenix, not V-Ray. Phoenix started as a plugin to cheat fire and smoke effects, not the full fluid simulator it is today. While working on that plugin, they needed a way to cast proper shadows from the smoke. So Vlado started writing a ray tracer. And V-Ray was born.

# CHAOSGROUP

**Question: Chaos Group put Sofia on the CG map many years ago, pre-EU membership. What's the Sofia secret for computer graphics and tech?**

Sofia University, where Peter and Vlado went to school, is well known for maths and physics, and Bulgaria seems to have had a strong reputation in tech for years. I've even heard it referred to as the 'Silicon Valley of Eastern Europe'. In fact, the building where we host Total Chaos is named after Jonathan Atanasoff, a famous Bulgarian credited with inventing the first digital computer.

**Question: Did Chaos Group set out or have a mission to support architecture from the outset? Why do you think V-Ray became so popular with archviz from the start?**

**Lon Grohs** From its beginning, V-Ray was built to handle anything you throw at it. That makes it a perfect fit for 3D generalists, which I think most archviz artists are at heart. Architectural scenes are of-

ten enormous, with lots of detail, and V-Ray has always been smart about how it handles complexity.

In the early days, computing power was a real challenge for rendering. Does anyone even remember 32-bit computing? V-Ray always seemed to find a solution to these problems. Proxies helped manage the memory limits for complex geometry. Irradiance maps helped bounce light in interiors. Even ray-traced shadows and reflections, which were relatively new at that time, rendered so much faster with V-Ray. It helped bring a new level of realism to architectural renders. I remember those early days in production well. Before V-Ray, I had used Lightscape to calculate lighting and global illumination, and it was incredibly finicky, to say the least. With V-Ray, I selected the pre-set, and it was done. I never looked back.

**Question: Describe Chaos Group today. Especially the 3ds Max team and archviz-orientated operations.**

**Lon Grohs** The entire Chaos team now includes over 350 people

worldwide. Sofia is our headquarters, and we have local offices in the Czech Republic, Japan, Korea and the US. As we've added new products to the portfolio—Chaos Cloud, Project Lavina, V-Ray for Cinema 4D—we've added new teams.

For the past two years, the V-Ray and Corona teams have held a render-thon, short for rendering hackathon. The first was in Sofia, and this year it was in Prague. The teams get together for a week, at least once a year, to share any breakthroughs and explore ideas.

Each of the development teams has its specialty. For example, there's a core team focused on the V-Ray engine itself, another working on GPU rendering, and others focused on integrations. Since V-Ray for 3ds Max was the first integration, it's been the one to lead the way, with the others following soon after.

The same can be said for the use of V-Ray in architectural visualisation. It started with V-Ray for 3ds Max, followed by integrations with SketchUp, Rhino, Revit, Cinema 4D and Unreal. Architectural visualisation plays a vital role in the development of all our products, including Corona, Project Lavina and Chaos Cloud. Phoenix FD fluid sims have become more popular in archviz projects as well.

**Architectural visualisation is a niche industry that has grown exponentially over the past ten years. The undisputed dominant software of choice has remained Autodesk's 3ds Max and Chaos Group's V-Ray and more recently Corona. With so much competition in rendering technology, why do you believe Chaos products are so popular?**

**Lon Grohs** We've been working closely with the community, working together to solve its unique problems, since the very beginning. But that doesn't mean the work is done. We're always envisioning what's next, and there are exciting new developments coming in the near future.

I think Project Lavina is one of those breakthroughs. I mentioned earlier that archviz projects tend to be detailed and heavy. They're easily billions of polygons once you add everything—buildings, trees, grass and cars. Getting those massive scenes into real-time has not been easy. In fact, just opening the scene in its native 3D app can take a long time, not to mention moving around once it's finally open. With Project Lavina, we asked, 'What if we could remove those obstacles by creating a real-time ray tracer from the ground up?'

With a real-time ray tracer, you don't have the limitations of a raster solution—no polycount budgets, UVs to unwrap, or light to bake. That means you can create your production scene the way you're used to, drag and drop it into Project Lavina, and you're exploring in real time. From there, you can adjust lights, set up views, and present to your client—all interactively.



Photo © Lon Grohs, Chaos Group



**Question: Many new artists today are choosing Corona Renderer over V-Ray for rendering, citing the fact that it's easier to get out-of-the-box results - a point-and-shoot solution, if you like.**

**Should technology be made simpler, making it more accessible to enable artistic-oriented people to feel more comfortable working with CG technology without a steep learning curve?**

**Lon Grohs** I think it's always about finding the right balance between functionality and ease of use. Corona offers a certain simplicity. V-Ray offers versatility. And there's definitely room for both. V-Ray has been getting much easier to use as well, and we're always looking to streamline workflows all around.

**Question: In the past, it's been very much a male-dominated technical culture, but in the past five years, more women have entered archviz as a career choice, again citing artistic freedom over technical know-how. How is Chaos Group working with educators to enable students to flourish quickly in their impatient desire to create artwork?**

**Lon Grohs** More diversity in the industry is a benefit to everyone, and I certainly hope that trend continues. Our education team is passionate and dedicated to empowering students and educators alike. They've been hard at work designing courseware and curric-

ulums to make it easier to learn and teach our software. I'm consistently amazed by the quality of work and the talent of the young artists and designers out there.

**Question: Looking to the future, with your undisputed success in computer graphics rendering, where do you see the archviz industry going?**

**Lon Grohs** I'm really curious to see what happens when more archviz artists get their hands on Project Lavina and to see how real-time ray tracing evolves. My hope is that this will open the door to even more artistic creativity and designs that will improve the future of our planet—and maybe others.

**Question: If I was a student wanting to learn the tools I'll need for my future career, there's a big incentive to learn game engine real-time tech such as Unreal Engine or Unity. Is there a future in old-school CPU rendering if everyone now desires real-time gratification?**

**Lon Grohs** It's certainly an exciting time in computer graphics with a lot of options to choose from. All of these tools, from real-time to offline rendering, have their advantages, and will be around for a while. It starts with what you want to communicate—what story you are trying to tell and how best to tell it. Should it be a still image? An animation? An interactive presentation? All of the above? When you know this, you can pick the right tool(s) for the job.

**Question: Many archviz artists using Chaos Group products for 3ds Max also rely on plugins such as SiNi and iToo to extend their workflow. Will Lavina support this plugins workflow?**

**Lon Grohs** To a certain extent, yes. At the moment, it depends on how well everything translates to the V-Ray scene file format. One bit of advice is to use simple shaders. Currently, they work best with real-time ray tracing.

**Question: Finally, if Vlado could go back 20 years to meet his younger self, what advice would he give himself?**

**Lon Grohs** No clue. Maybe invest in Google and Apple.

Thank you to Lon at Chaos Group for taking the time to answer our questions.

Please note: 3Disciple Magazine is not affiliated with Chaos Group. The answers and information discussed within this interview are from an online interview between the agreed parties. 3Disciple Magazine was not sponsored for the publishing of this content and shares it with the community as is. We will not be held liable for omissions or accuracy of published facts and figures. All content has been shared with Chaos Group prior to publication.

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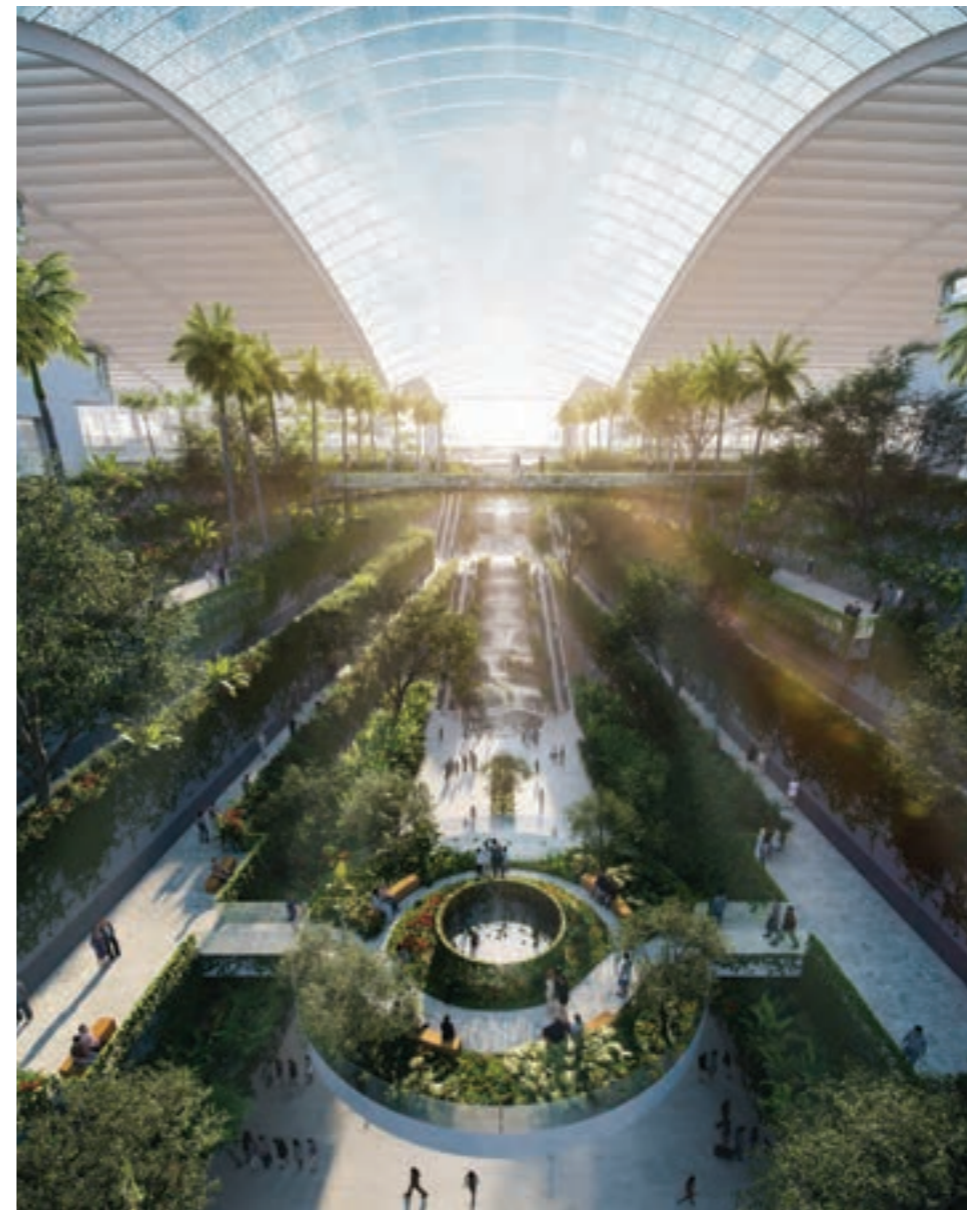
# NEOSCAPE



Established in 1995 as a visualisation firm, Neoscape has evolved into a full-service creative consultancy with studios in Boston, New York City, San Francisco, Chicago and Dallas.

Over the years, our team has witnessed numerous fads, boom-and-bust cycles, business challenges and technological revolutions. All the while, we have worked tirelessly to grow and nurture both ourselves and the archviz industry as a whole. Our expertise has allowed us to deliver large-scale projects with challenging deadlines and complex scopes while bringing a fresh perspective to each and every opportunity.





Our industry-leading infrastructure includes a dedicated green screen studio with motion capture, an unsurpassed 3D and film team, and access to ample shooting platforms. We have delivered 8K-stereo fully rendered content on our 3980 CPU-core render farm, and our pipeline is built to handle the most complex real estate marketing challenges.

## Facts



### Neoscape, Inc.

Studio Size: 90

Location: **Boston, New York, San Francisco, Chicago and Dallas**

Main Work: **Marketing & Digital Media Creation**

Main Software: **3ds Max, V-Ray, Photoshop**

Contact Details: [info@neoscape.com](mailto:info@neoscape.com)

Website: [neoscape.com](http://neoscape.com)

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# PIXELFLAKES

Pixelflakes is a London based studio that specialises in visualising unbuilt architecture. It was founded in 2012 by Matthew Reid and Marvin Nooitgedacht, childhood friends with a passion for media, 3D technology and architectural design.

Within the past eight years, they have built a team of 18 talented individuals. The team's skill, talent and enthusiasm to create work of the highest calibre have cemented on-going working relationships with the studio's clients. While the members of the Pixelflakes team are all drawn from different backgrounds and nationalities, we share a common passion and language for quality artistic visualisation.

Our camera-sketch process has developed from ongoing requests for imagery formed around loose information and early-phase concept design. We create imagery with relatively little design input in order to form fully fleshed-out camera drafts to help spur discussion around design and narrative. This sketching process allows the Pixelflakes team full creative freedom (something we always push for in our work) to suggest compelling moods and perspectives that help enforce design philosophy.



While still imagery remains at the core of the work produced by the Pixelflakes team, we are currently looking to the future. We are developing various interactive applications and digital documents that can be updated throughout the design process before being distributed to key investors and stakeholders.

We also create interactive work for various projects to help guide conceptual design ideas through the early stages of feasibility utilising our imagery as a core feature. It is these projects that help push the boundaries of architectural visualisation within the Pixelflakes studio and allow both our talented team of artists and the studio as a whole to evolve.



**Pixelflakes**  
 Studio Size: 18  
 Location: London, United Kingdom  
 Main Work: Stills, Animation, VR  
 Main Software: 3ds Max, V-Ray, SiNi, iToo, Adobe CC  
 Contact Details: Matthew Reid, Marvin Nooitgedacht. hello@pixelflakes.com  
 Website: www.pixelflakes.com

**PIXELFLAKES**

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# Habitat Forestier Part Four

## Add Props and Finishing Detail



### Part Four

Software used: SiNi - SiClone, Disperse, Jumble, Sculpt, Unite, 3ds Max, V-Ray.

Open the supplied 3ds Max scene model or continue from Part 3.

#### Overview

The objective is to demonstrate how to use the SiNi object plugins to add 3D entourage detail to your scene, adding random transforms to make objects appear more realistic.

#### 4.0 Scene management.

Merge in your 3D cars and 3D people. Check with Forensic for issues including missing textures. Open Unite to find and repath missing texture maps.



#### 4.1 Layout and add cars.

Create a SiClone. Add the PT4\_Spline\_Cars spline and the Car\_Lay-out 3D mesh. In the Distribute Objects rollout, select the Car in the list. Object Start Offset 3m  
Object Spacing 6m  
Position, tick Move From Pivot Position XY 1.2m  
Export to Single edit mesh (SiNi Version 1.21.2 and above).  
In the top viewport, delete some cars to make it look more natural.

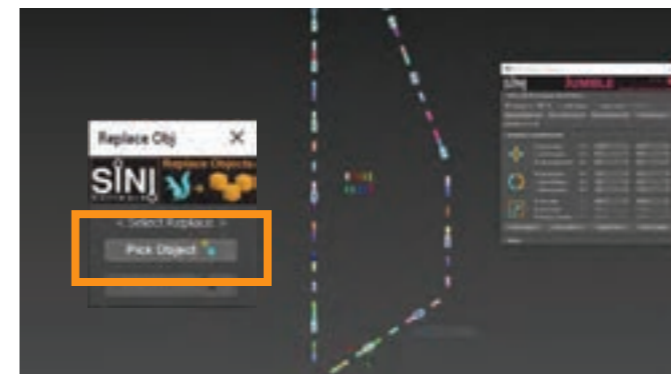


Open Jumble and click on Make Selection Set. This creates a random selection. Keep it at 50%. Rotate the selection 180° using the local pivot transform. 50% of cars are now facing the other way.

We will add a little parking variation. Select all and change to the Street Camera view. With Jumble open, use the Random Transformation controls to move and rotate a small amount. Position X-0.05, 0.05, Rotation Z 2, -2.

Replace the box cars with high-resolution Car models. For this, we use a combination of Jumble to randomly select objects and IgNite Springboard Replace Object. In our case, there are 10 cars to select from, so set the Random selection to around 25%. TIP - Make sure the PROPS\_Cars layer is current.

Select the box cars and using Jumble, Make Selection Set and click on Random Seed until you find a selection you like.



In IgNite Springboard, click on Replace Object and click on Pick Object in the small dialogue box. Select the first high-res Car and click Replace Object.

**Tip** - In Jumble, you must Clear Selection Set each time to reset the cache.



Repeat the process until all the cars are replaced.

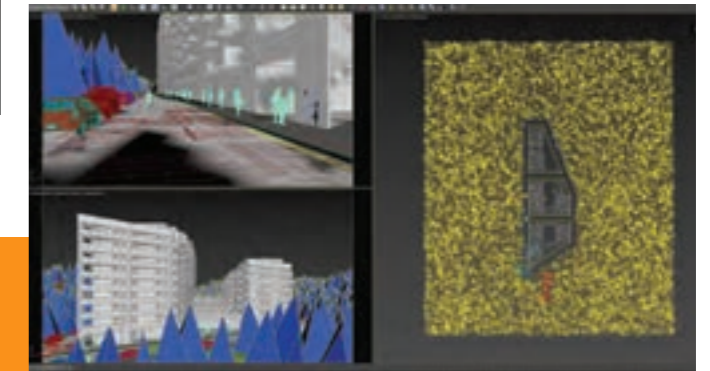
#### 4.2 Disperse People.

Create a new Disperse Object. Add your people to the Distribute Objects. Turn off all layers except the ground and Cars. In the Painter, select the people you want to paint. Set the brush size and Collision Distance and paint in the Ortho or Perspective view, with Camera Views open.



#### 4.3 Finishing detail. Decals.

Add additional entourage and window lights. Merge in the Decals model to add road damage and graffiti. Move as required. Experiment with painting more trees and plants to the building roof courtyards. Adding window lights. Merge in the Building Window Lights model from the PROPS folder. These were created as the building eleva-



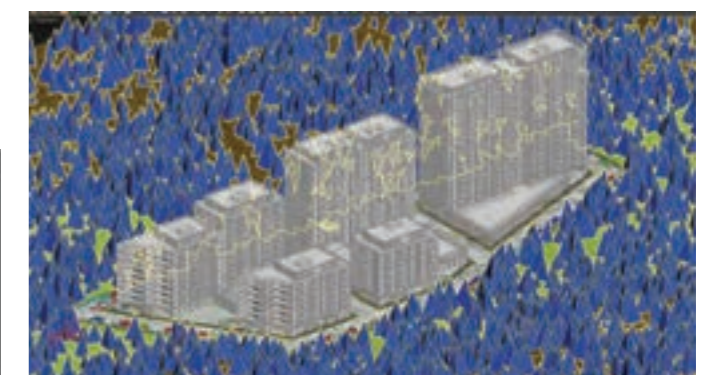
tion lacked panoramic windows to the balconies. They are single planes with multi-sub-material applied.

#### 4.4 Scene management. Proxies, rename objects and materials.

Select cars. Open IgNite Springboard/Workflow. Choose the proxy folder. Bulk convert to V-Ray proxies. Select the people in Disperse. Open the export rollout and export as Single Mesh. Repeat for the trees and plants, saving out as single mesh and converting all to the V-Ray proxies, saving to V-Ray Proxy folder.

**NOTE:** you can skip this and move to the next part as we've done this for you (It can take a LONG TIME to convert the Scatter objects - for this scene, 40 minutes).

Delete all non-required objects and splines. Open the Material/Map Browser and rename any unnamed materials.



**IMPORTANT** - SiNi does not recommend converting the Object plugins objects to 3ds Max objects or proxies if you don't use 3rd-party software such as Lavina or Unreal Engine.



# ROCKHUNTER

Rockhunter is a creative illustration studio working across all sectors of the construction industry.

We have two offices, in London and the North West of England, and we are immensely proud of both. They employ a stalwart of humble yet hugely talented creatives with backgrounds not just in architecture and structural design but also in graphics, photography, illustration and print.

Our South London studio is housed within a creative mews. Working alongside sculptors, fine artists, filmmakers, videographers and architects, the studio incentivises creativity at every opportunity. Weekly life drawing, photographic workshops, internal competitions and knowledge shares all feed the imagination and help drive the company's ambition.

We attend industry events each year to keep abreast of trends and advancements, while also maintaining healthy relationships with friends and ex-colleagues from other practices, which we admire and respect in equal measure.

Set up at the turn of the century, Rockhunter and its founder Jason Mabelis have helped develop an industry once perceived as a mere flourish into an integral part of the design & build and marketing process. Operating with a robust pipeline and methodology set up for AVR imagery partnered with a consummate understanding of DAS and marketing images, we will continue to help define an industry which in itself helps define the urban fabric within which we exist.



## Facts



ROCKHUNTER

**Rockhunter**  
 Studio Size: 12  
 Location: London & Preston,  
 United Kingdom  
 Main Work: Stills, AVR, Animation, VR  
 Main Software: 3ds Max, Corona, SiNi,  
 iToo, Adobe CC  
 Contact Details: [info@rockhunter.co.uk](mailto:info@rockhunter.co.uk)  
 Website: [www.rockhunter.co.uk](http://www.rockhunter.co.uk)

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R Y A N  
W A I K I N  
L A M

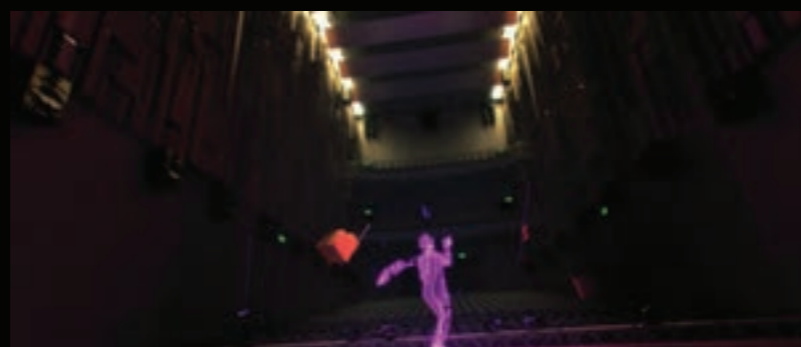
*The Prince of Darkness*



### Ryan Wai Kin Lam - Director

I've been in the archviz industry for seven years. I currently work in Foster + Partner's film team, directly involved in the whole film pipeline from concept art through to editing and music.

I am currently pursuing a film director's career path in the archviz industry.



RYAN  
WAI KIN  
LAM

### Facts



**Ryan Wai Kin Lam**  
Studio Size: N/A  
Location: London, UK  
Main Work: Film, Painting, Stills, Music  
Main Software: 3ds Max, V-Ray, SiNi, iToo, Adobe CC  
Contact Details:  
waikin182@gmail.com  
Website: <https://waikin.artstation.com/>



### Film making - Unseen Grace II

A tribute to the people who preserve and improve our spaces.  
Check out the full film here <http://vimeo.com/waikin/unseengrace2>



S A N D E R S S T U D I O S<sup>®</sup>



Established in 2003, Sanders Studios is a boutique visual communication studio working predominantly across architecture, marine and aviation. Based in the UK's far South-West, a region synonymous with creativity and the arts, we feel privileged to work on exciting international projects while having easy access to stunning coastline and countryside (which has been made even more desirable by the recent Covid outbreak and lockdown!).

The studio has built many loyal long-term relationships with its clients, forged through mutual respect and a strong emphasis on professionalism, client service and team nurture. In a competitive market, we feel these values make a difference.

Our collective team backgrounds include architecture, design, photography and film. We are currently in a good place - each artist has his/her individual strengths that can be called up when needed. A lot of our clients are very design-led so a solid foundation in design is imperative, particularly when working with clients from concept stage to completed proposal. Each artist has the opportunity to work on all stages of a project and liaise with the client directly.



When recruiting, creativity and a strong design sensibility are imperative. For us, an image needs to be more than a technically accurate snapshot. Our ethos is to approach a shot, film or VR experience the way a film director would - to make it 'Cinematic'.

In terms of 'What's next?', SS is looking forward to the day when films are shot in full 360. The audience will subsequently be taken on an immersive journey with the ability to look around and experience the set in detail, with sub plots happening here, there and everywhere. The gaming industry appears to be driving this tech so no doubt there will be a much closer synergy in the coming years.



## Facts



### Sanders Studios

Studio Size: 10

Location: Falmouth & London, UK

Main Work: Strategy, Stills, Film, VR

Main Software: 3ds Max, Corona, SiNi, iToo,

Adobe CC

Contact Details: Alan Sanders,

studio@sanders-studios.co.uk

Website: www.sanders-studios.co.uk

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# soluis



Soluis Group exists to drive enhanced engagement across every aspect of property development, with the aim of improving dialogue in every stage of the project life-cycle from its Glasgow and London studios.

Over the years, the company has constantly 'dabbled' with new ways of working and this typifies the spirit of innovation that still challenges the established norms of this industry at every opportunity. Aside from the various software development initiatives that have helped propel the company to new heights, it was also one of the earliest proponents of real-time visualisation.

Having identified the problems with offering a reality-based experience to a market where most key participants wouldn't indulge the use of wearable technology, Soluis looked closely at large scale projection systems. The issue here was that most systems at the time were designed for temporary events and were not of a display quality that would stand up to the continued scrutiny of an audience conditioned to the precision and quality of traditional CGI production. Soluis decided to limit the use of novelty event screens and considerable investment has been made in developing a proprietary solution - the Reality Portal™.

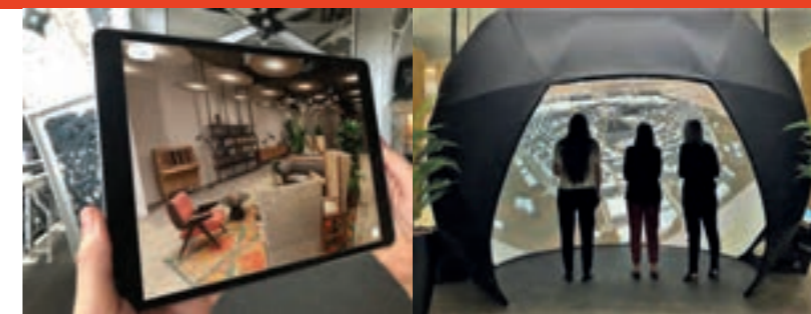




This went beyond the unconvincing flat and cylindrical screens the industry had to contend with, and created a unique dual-curved projection surface that more closely mimics the effects of a VR lens. This delivers a much more accurate viewing experience and allows all forms of media to be scaled up for what is arguably the most accessible and impressive way of delivering visualisation as an experience.

The core of the business is a diverse and talented team, which continually strives to better its last project by blending the best of the available creative tool-sets and technology platforms. Our entire approach is based on the principles of user experience and whether the task is simply to produce a marketing film and accompanying set of images. The same thinking is just as applicable, and ensures that the engagement can be scaled to suit different scenarios.

This philosophy has seen us work increasingly with the lead parties on major developments in sectors as diverse as sports, banking, pharmaceutical and retail, and some of the biggest projects in the Middle East, including the legacy development for Expo2020.



# soluis

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## Facts



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### Soluis Group

Studio Size: **50**

Location: **Glasgow, Scotland.**

**London, England.**

Main Work: **Interactive, Stills, Film**

Main Software: **UE4, Unity, 3ds Max,**

**V-Ray, SiNi, iToo, Adobe CC**

Contact Details: **Mia O'Neill**

**mia.oneill@soluis.com**

Website: **www.soluis.com**

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# Habitat Forestier Part Five

## Atmospherics and Rendering



### Part Five

SiNi - Illumi, 3ds Max, V-Ray.

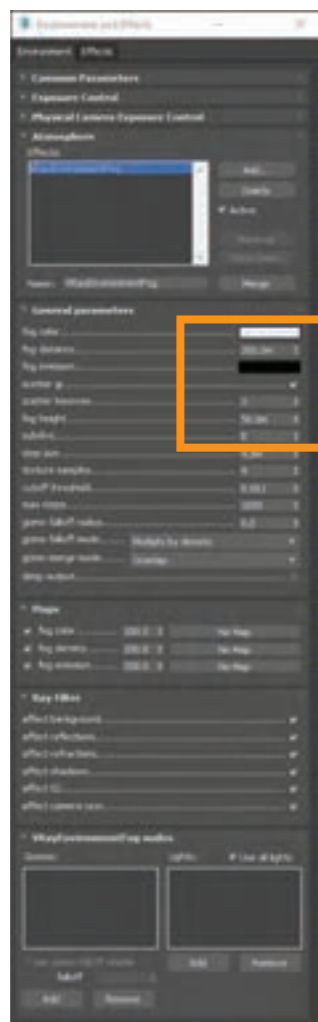
#### 5.1 Adding fog for realism.

Dust is always in the air and the density adds to the fogginess of an image, adding to its depth and realism. If you inspect a photo, the blacks get lighter as you look further into the distance, as atmospheric haze builds up. In CGI, try to add this as often as you can.

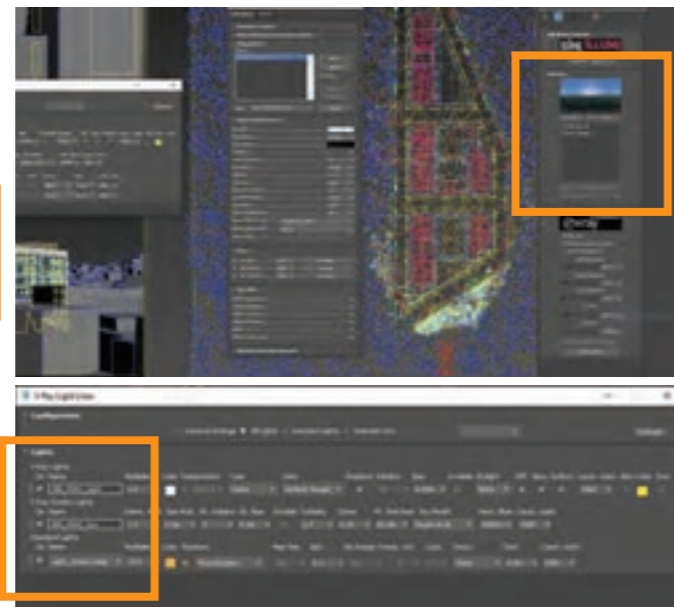
In 3ds Max, open the Rendering/Environment and Effects and open the Atmosphere rollout. Add V-RayVolumetricFog.

Set the following parameters:  
Fog Distance  
Day distance 1500m  
Dusk distance 200m

Fog Height 50m



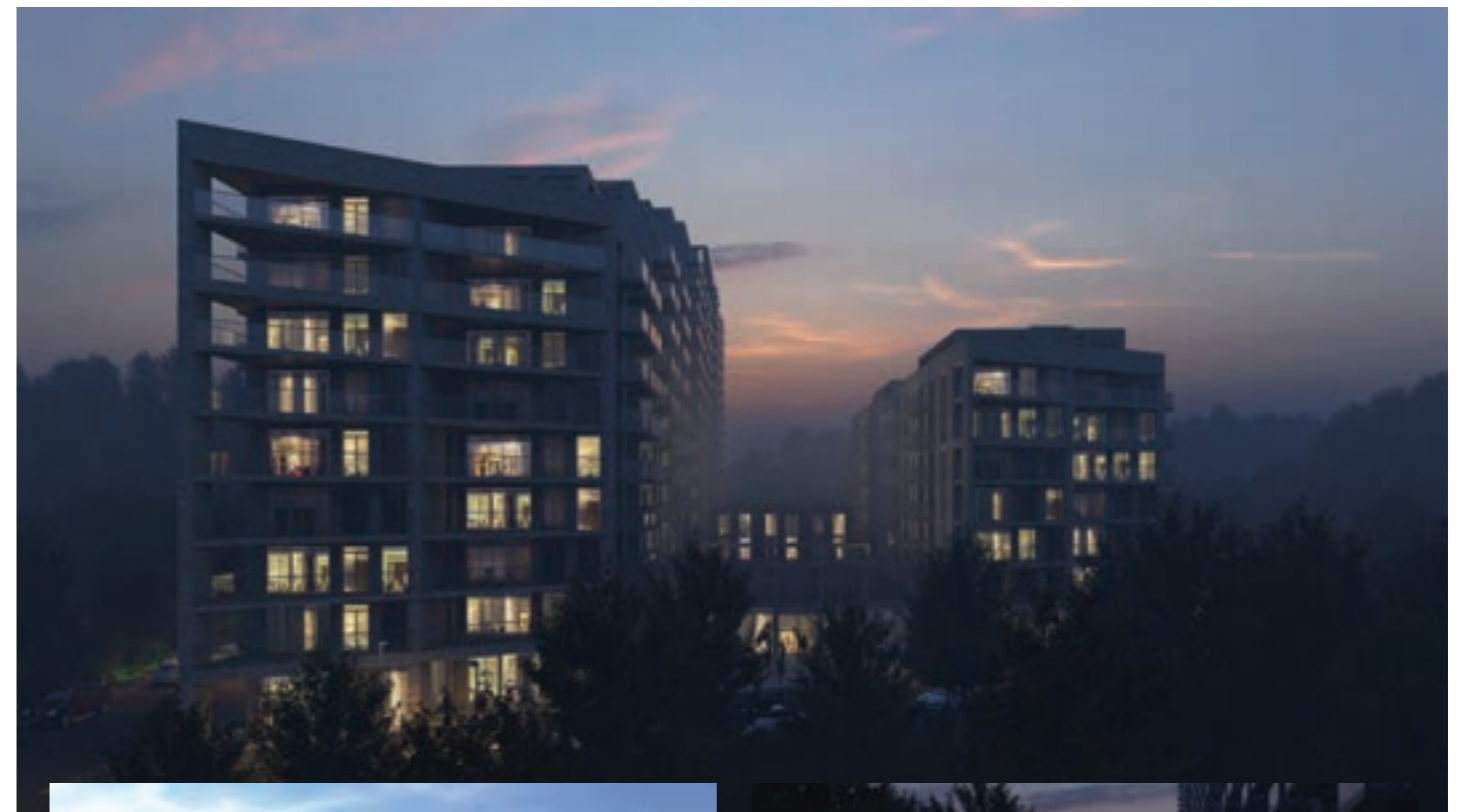
#### 5.2 Open Illumi and swap the HDRI light rig to the appropriate set-up. For dusk views, remember to switch on the Lighting layers and lights in the V-Ray Light Lister.



#### 5.3 V-Ray setting and Render Elements.

We won't cover render settings in this project, but you can see we've set this up for you in the supplied file.

Always render out Render Elements to composite together.





# Facts



## steelblue

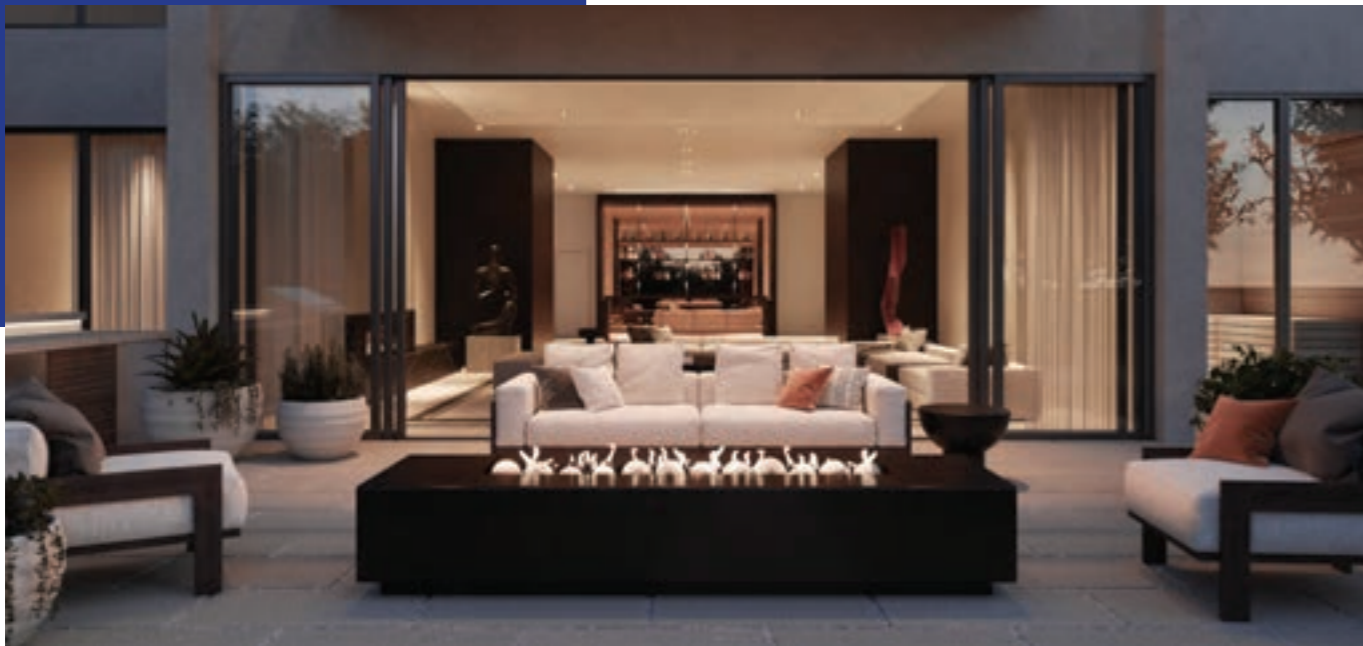
**Steelblue**  
 Studio Size: 23  
 Location: San Francisco, USA  
 Main Work: Stills, Film, Strategy  
 Main Software: 3ds Max, Corona, SiNi  
 Contact Details: O'Brien Chalmers  
 hello@steelbluellc.com  
 Website: www.instagram.com/steelbluesf/

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Steelblue is a creative agency that works in real estate in partnership with elite developers and architects. Founded in San Francisco in 2008, we discover and distill the unique purpose and identity of each project to create tailored visuals and award-winning visual communications strategies. Our client relationships are genuine and lasting because of the integrity of our work and the personal bonds we develop. We have an extraordinary team of creative thinkers and doers that are the smart, enjoyable, interesting friends you'd want to share a drink with.





Steelblue brings a wealth of insight and innovative thinking to each venture with the richness of experience and perspective of an exceptionally diverse team. Yet our focused size, location, and harmonised pursuit of excellence make us nimble and cohesive as a working team and closely bonded like family. We invest in our community, our team and memorable adventures, like sailing around San Francisco Bay and zip-lining through the redwood forest in California's wine country.



# TANGRAM 3DS

Tangram 3DS is an internationally-recognised 3D visualisation, animation, digital and graphic design studio founded by CEO Stefan Vittori in 2003. We've done extensive work in architecture, real estate development, interior design, product design, yachts and VR tours for proposed and existing spaces—all from our cozy headquarters in Kittery, Maine.

Many years ago, founder Stefan Vittori was watching TV in Austria when a wireframe of a building came on the news. This captured the young architecture student's imagination and drove him to become one of the earliest adopters of 3D visualisation technology. After moving to the US, Stefan built a team from all walks of life—a true strength in a creative industry.

Rick Knight, Managing Director of our Ohio office, started with Tangram as a 3D modeller out of architectural engineering school.

A middle school creative outlet—Macromedia Flash—sparked Creative Director Jared Foley's professional passion for 3D visualisation. Jacques Pena is an award-winning, independent 3D computer and anime artist when he's not on the clock as Tangram's Director of VRX. Other artists started out in video games, special effects and film production. The variety helps us use diverse software tools (and produce well-rounded work).

The greatest strength of Tangram 3DS is teamwork. We want clients to see us as partners. After all, the journey matters as much as the destination. Attention to detail, constant communication and extensive background research ensure that we're fully immersed in each client's project. This way, we can transform their visions into compelling experiences that tell a story—their own.



Stefan built a team from all walks of life – a true strength in a creative industry. Diversity helps us tailor our artistic approach to each client's unique vision.



## Facts



### Tangram 3DS

Studio Size: 15

Location: Kittery, Maine & Columbus, Ohio, USA

Main Work: Still Renderings, 3D Walkthroughs & Videos, 360 VR Experiences, Branding for the CBRE and A/E/C Industry

Main Software: 3ds Max, V-Ray, Adobe Creative Suite, Revit, SiNi Software

Contact Details: [info@tangram3ds.com](mailto:info@tangram3ds.com)

Website: [www.tangram3ds.com](http://www.tangram3ds.com)

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98 - 3DISCIPLINE



*'We're forward-looking. We have a vision for where we want to get to, and the focus to get there. We see things others don't.'*

# UNIFORM

3DISCIPLINE - 99



***'We keep exploring. By staying curious, we keep the conversation interesting.'***

**W**e bring visionary places, spaces and ideas to life. Because without context, vision is just a dream.

Uniform has been realising the creative ambitions of the world's leading developers and architects for over 20 years.

Founded in 1998 by three product design students based in Liverpool, the business has grown from strength to strength, and now has a team of 70 based in two studios in the UK.

We have pushed to be at the forefront of the visualisation industry since the start. From our early days of developing products like the world's first tabletop warm sake dispenser for Simon Woodroffe at his fledgling Yo Sushi to designing Mixmag's club interior of the year - the attitude of trying new ideas and taking on new challenges has kept us fresh and innovative through the years.

From day one, we felt Uniform would always be bigger than its founders. We always wanted to do impactful and creative work, but it quickly became about building a great business too. And that's still at the heart of Uniform today.

Part of our ethos is trying to find the clients that share both our values and our ambition. We constantly want to try new ideas and push the boundaries of what has been done before, both creatively and technically.

Our Visualisation Studio gives shape, context and reality to the world's most inspiring projects in the built environment.

Working at the point where art and technology meet, we inspire people to share and believe in our client's vision.

We use CGI, film and immersive tech to tell complex, multi-layered stories – building bridges between present realities and future possibilities. Everything we do is guided by our principles: to evoke emotion, move beyond the ordinary, create balance, spark intrigue and capture vision.



## Facts



**UNIFORM**

### Uniform

Studio Size: 70

Location: Liverpool & London, UK.

Main Work: Stills, Film, VR

Main Software: 3ds Max, V-Ray, Corona,

SiNi, iToo, Adobe CC

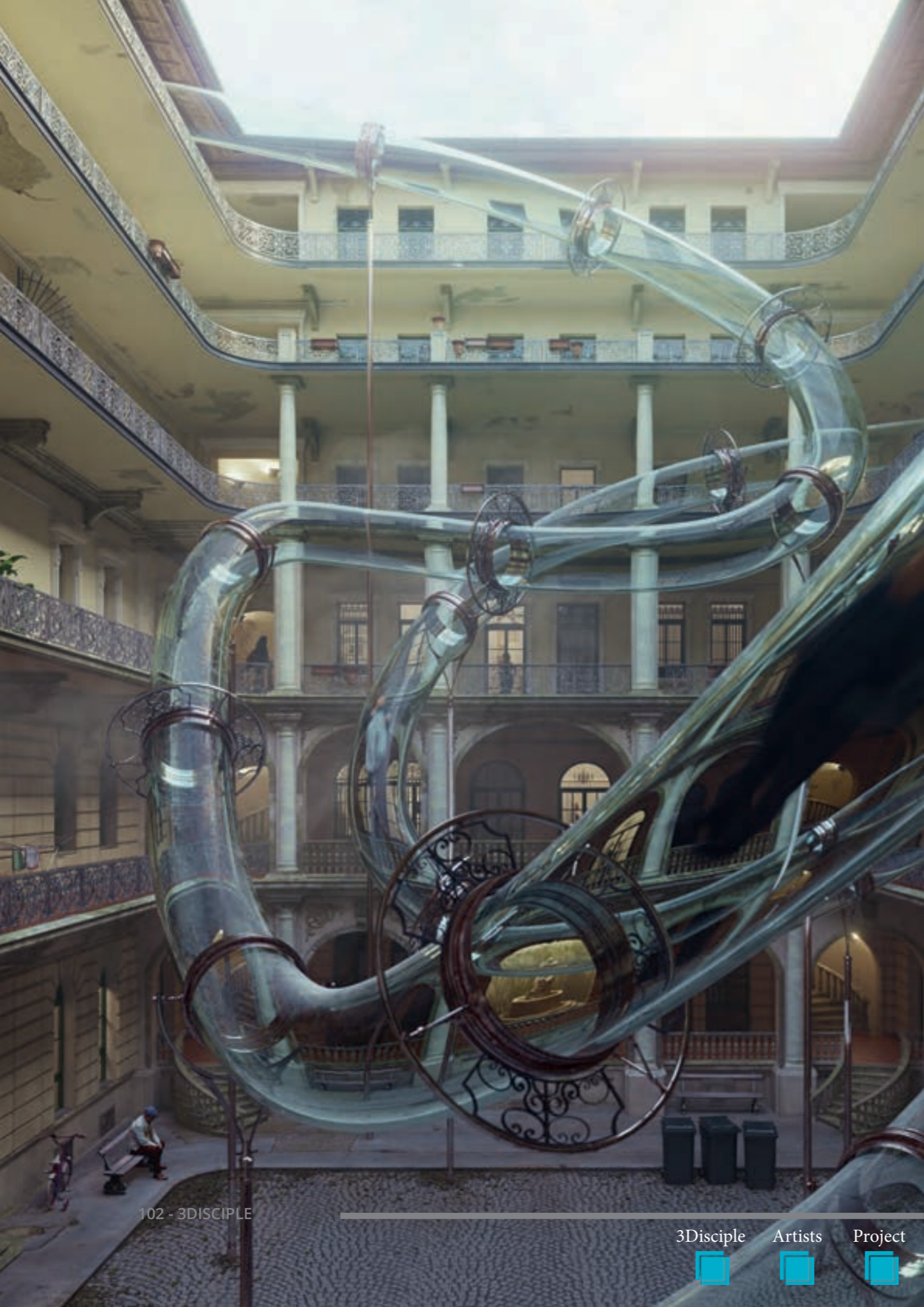
Contact Details: Mark Lee.

mark.lee@uniform.studio

Website: www.uniform.studio

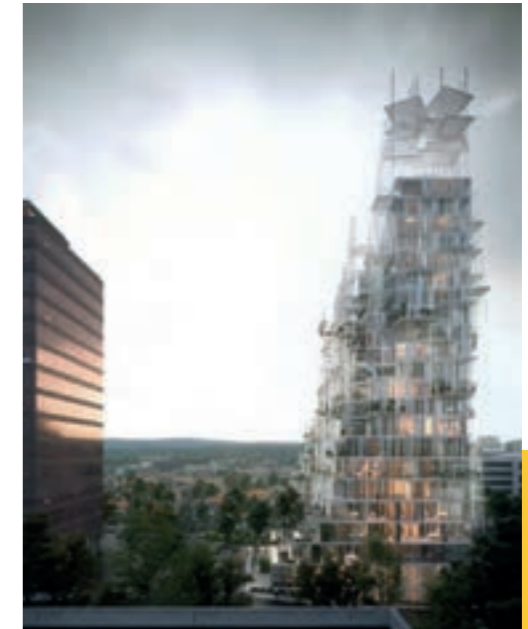
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# VIRGINLEMON

*Imagery and animation*



Our main objective is to tell sensitive stories through a multi-dimensional process that integrates both technical skills and intuition.

It's not only about achieving photorealism. Lights, colour and detail are the main elements to portraying a sense of place and creating a unique atmosphere.

We approach our work in a collaborative way, bringing people from different backgrounds together. We remain curious and look for inspiration everywhere we can.



# Facts



VIRGINLEMON

## Virginlemon

Studio Size: 3

Locations: Paris, France. New York, USA

Main Work: Stills, Film

Main Software: 3ds Max, Corona, V-Ray,

SiNi, Adobe CC

Contact: Carlotta and Tamas

tamas@virginlemon.fr

carlotta@virginlemon.fr

Website: www.virginlemon.fr

www.instagram.com/virginlemon

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## Tamás Fischer

CG Artist & Co-founder

Tamás graduated with a degree in architecture from Budapest, then moved to Paris to work as a concept developer and 3D artist for architecture studios.

## Carlotta Cominetti

CG Artist & Co-Founder

After studying architecture and photography at Politecnico di Milano, Carlotta moved to Paris, where she co-founded archviz studio Virginlemon with Tamás. She views her work through a camera lens and captures every moment in the most interesting light.



# Vismo



Vismo was founded in Copenhagen in 2008. It was started as a one-man-army by Morten and over time has turned into a multinational company with artists and clients from all over the world.

Vismo's nordic background can be seen in the visuals, as cold colours tend to dominate our images. Cyan is a favourite colour and a cold blue sky is typical for our style. The international team has helped to develop this style and give it more edge, and today we are producing visuals for clients around the globe.





# VISMO

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## Facts



**Vismo**  
 Studio Size: 5  
 Location: Copenhagen, Denmark  
 Main Work: Stills, VR  
 Main Software: 3ds Max, Corona, SiNi, iToo, Adobe CC  
 Contact Details: Morten Haugaard.  
 Olesen, mo@vismo.dk  
 Website: www.vismo.dk

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# WAX

## Envisioning The Unbuilt

We create architectural imagery that goes one step further. We believe that every project has a story and we're here to help you tell it. With a focus on lighting and composition, we envision unbuilt environments from the human perspective.

We strive to create compelling visuals that look equally believable and remarkable. We admit that we're a little stubborn - we won't stop until we're satisfied. And you can bet that we'll go out of our way to make sure that our clients are as well.

We're a group of energetic designers that share a background in architecture and a passion for photography. We always strive for a balance between artistic feeling and technical skill. We really enjoy what we do and where we do it - we're part of the creative hub BINK36 in The Hague.

We start the day with a fresh cup of coffee roasted by our neighbours and play BBC Radio 1's Essential Mix, featuring the right kinds of tunes to keep us focused.





# WAX

## Facts



### WAX

Studio Size: 6

Location: **The Hague, The Netherlands**

Main Work: **Stills, Sketches**

Main Software: **3ds Max, V-Ray, SiNi,**

**iToo, Adobe CC**

Contact: **Joost van Rossenberg.**

**connect@tobewaxed.com**

Website: **www.tobewaxed.com**

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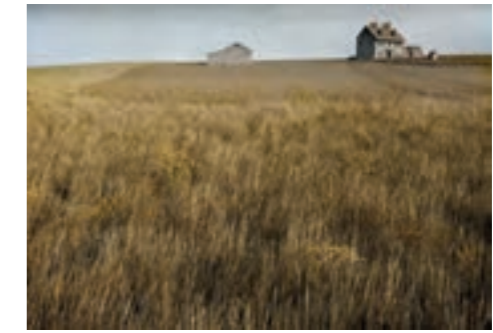


# ymage works



## Yulia Arzhantseva

Yulia Arzhantseva is a visual designer and founder of Ymage Works.



Yulia completed a bachelor's degree in architecture at Cal Poly, California, and then lived and worked in Italy, Poland and Ukraine before returning to New York City.

She is a mix of different cultures that have had a huge influence on her work. On her return to New York, Yulia joined architects A+, where she works as a visual designer.

To feed her creative ambitions, she also works on private projects. Curiosity to recreate familiar famous paintings led to a series of images entitled re-Ymaged. The aim of this project was to explore lighting techniques in the 3D space interpreted and translated from the paintings. Another goal was to experiment with the narrative difference in paintings that include people compared to those with empty architecture and environments. Overall, this was a great experiment and brought a lot of satisfaction and media attention.

Alongside personal projects and when time allows, Yulia participates in industry talent competitions. Early in 2020, Architizer held the international One-Rendering Challenge in which she was awarded a place as a finalist within the top 10 global artists and was recognised for her captivating storytelling.

## Facts



### YIMAGE WORKS

Studio Size: 1

Location: New York City, USA

Main Work: Stills

Main Software: 3ds Max, Corona, SiNi, iToo, Adobe CC

Contact: [ymageworks@gmail.com](mailto:ymageworks@gmail.com)

Website: <http://ymageworks.com/>

Images copyright © 2020 Ymage Works

# Habitat Forestier Part Six

## Export to Project Lavina



### Part Six

SiNi - Scatter, SiClone, Disperse, IgNite, 3ds Max, V-Ray, Project Lavina.

**6.0** Overview. Project Lavina is highly recommended for all V-Ray users as it is a seamless workflow for reviewing your scenes.

**Note:** if your project is created using Corona, you can convert to V-Ray proxies using the IgNite Workflow tools. This excludes materials converting.

**6.1** Convert SiNi Object plugins to V-Ray proxies, if you have not done this already in Part 4.

In each of the SiNi Object plugins, open the Export to Geometry and select Single Mesh (v1.21.2).

Convert objects to proxies. If you wish to bulk convert objects to V-Ray (or Corona and SiNi proxies), open IgNite Springboard and the Workflow tab.

Select objects. Choose the proxy format V-Ray.

Select file path to save proxies and display type. Click on Create Proxy.

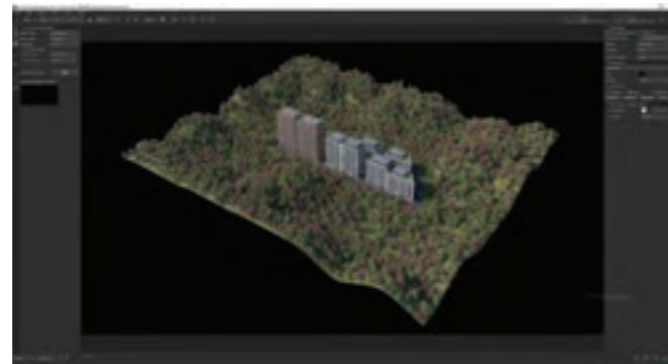


**6.2** Chaos Group - Project Lavina

In 3ds Max, right-click in the viewport and select .vrscene exporter. Save the file to the project folder.

Open Project Lavina and open the .vrscene file you exported.

This will load the entire 3D model along with V-Ray proxies and lighting. For more information on Lavina, we recommend checking out the Chaos Group website.



# Habitat Forestier Part Seven

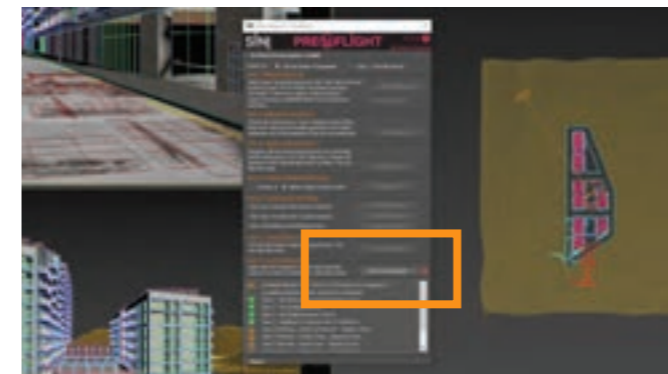
## Export to Unreal Engine



### Part Seven

SiNi - Preflight, 3ds Max, Unreal Engine, V-Ray for Unreal.

**7.0** Overview. There are three SiNi methods to process and send your models to game engines such as Unreal Engine or Unity. For this project we used Unreal Engine, native and V-Ray for Unreal.



**7.1** Export to UE4 using SiNi Preflight

Delete all the trees, bushes, people and cars. You will need to recreate them in UE4.

Open Preflight and select everything you wish to export. Run through the checklist and finally click send to Datasmith. Now open UE4 and import the Datasmith project.



**7.2** Export to UE4 using V-Ray for Unreal.

Open Unreal Engine and install V-Ray for Unreal plugin. A 30-day trial is available. See Chaos Group's website for details.

V-Ray for Unreal uses the same .vrscene as you created for Project Lavina. It is therefore our preferred choice for ease of use and quality of images as it uses the V-Ray materials!



**Note:** on large scenes, we recommend that you only export the building and environment geometry. You can import the entourage independently.

Importing your scenes into game engines such as Unreal Engine can take time and is a completely different workflow. The SiNi tools can assist in preparing the geometry prior to export, but you will need to spend time recreating the scene, importing assets, texturing and lighting.

This project tutorial covers the 3ds Max pipeline only.

# Archviz Index

# Archviz Plugins

## Global Archviz and 3D Meetup Groups

[3ds London](#)  
[3ds Gothenburg](#)  
[3ds Copenhagen](#)  
[3ds Romania](#)  
[Archviz Talks](#)  
[Berlin Archviz](#)  
[3D Meetup](#)

[3D:NY](#)  
[3ds Montreal](#)  
[Architectural Visualization](#)  
[3ds Max Meetup](#)  
[CAVIA](#)

[Nelson Digital Artists](#)  
[Creative Ones](#)  
[DFL Melbourne](#)  
[CG Sessions](#)

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 Chicago, USA  
 San Diego, USA  
 Toronto, Canada

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 Adelaide, Australia  
 Melbourne, Australia  
 Sydney, Australia

## Conferences

[Vertex](#)  
[Viz. Arch Viz](#)  
[Total Chaos](#)  
[AVD](#)  
[EUE Connect](#)  
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[D2 Conference](#)  
[State of Art Academy](#)  
[Architecture in Perspective](#)  
[Archviz 2020](#)  
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[3December](#)

[RenderIT](#)  
[Unhide](#)

[Immersive Architecture](#)

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 Kiev, Ukraine  
 Barcelona, Spain  
 London, UK  
 London, UK  
 Lviv, Ukraine

**America**  
 Monterrey, Mexico  
 São Paulo, Brazil

**Oceania**  
 Singapore, Singapore

## Archviz Education (Excludes online)

[YRGO](#)  
[3D College](#)  
[Solent](#)  
[Kent School of Arch](#)  
[Fabrice Bourrelly](#)  
[Creative Lighting W/Shops](#)  
[Glasgow Caledonian Uni](#)  
[The College](#)  
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 Madrid, Spain

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## Awards and Competitions

[Architecture in Perspective](#)  
[The Rookie Awards](#)  
[CGArchitect Architectural 3D Awards](#)

## Organisations

[American Society of Architectural Illustrators](#)  
[Society of Architectural Illustrators](#)  
[Architectural Visualization Association](#)

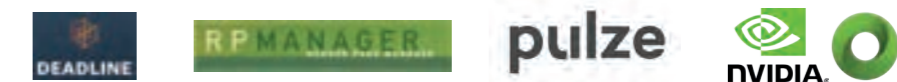


FORENSiC

## Archviz Plugins (our 3ds Max recommendations)



IGNITE SCULPT SCRIBE JUMBLE UNITE ILLUMI  
 SINJSCRIPT DISPERS SICONE SCATTER PROXSI



Get started with SiNi in seconds

1. Download and install.



**DOWNLOAD INSTALLER**

3Disciple.com or SiNiSoftware.com

2. Register on [www.sinisoftware.com](http://www.sinisoftware.com) and log in to your account to activate the 30-day trials.

3. Open 3ds Max and log in to the Desipher license manager using your username and password.

3Disciple Magazine

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