archicgi digest

#27

FEB 23

CGI inspires trust in an architect's expertise and allows clients to easily understand all the project details

20% of payments from all projects

are donated to support Ukraine

CONTENTS

How ArchiCGI Delivers High-End Projects at a Lighting Speed

3D architecture visualization helps architects accurately show all the design solutions, conduct show-stopping presentations and take their social media marketing to a stellar level. Sounds perfect! Who wouldn't want such a marketing and sales asset?

Except that some architects and developers apprehend that CGI means waiting. Waiting until the 3D artist finishes other projects, until the task is estimated, until the 3D artist submits results, responds to comments, makes corrections if necessary.

However, this is not the only way of working. Speed is the question of competence, smart management, and technology. So many companies have found new smart ways to work and exclude waiting from

their workflow. We cannot speak for everyone, but we can tell how our 3D rendering company have sped up the 3D architecture visualization workflow and delivers projects of all scales in 1 week only. Read on to find out!

#1. A Community of 3D Visualization Experts

When a 3D architecture visualization studio works on a lot of projects, clients need to wait in a queue till there is a free 3D artist ready to start. This waiting can take ages. And then, there is time and cost estimation, gathering of all necessary information, possibly numerous correction rounds.

Fortunately, there is a solution to that problem. For a big team of 3D visualization artists and effective management allow for eliminating the queues. So at ArchiCGI, we have 42 Senior 3D experts on the team. This way, our clients don't have to wait, as there's always a 3D visualization artist ready to start.

Even a greater speed boost can be achieved thanks to instant estimation. We have a whole pool of

effective managers, who send a quotation within 1 hour after receiving a brief. The client gets the exact cost and delivery date, so we can proceed immediately.

#2. Cutting-Edge Technology

The term "rendering process" means computing two-dimensional images from digitally built scenes with 3D models. Naturally, the more detailed the scene is, the more 3D models it includes, the longer the rendering takes.

To accelerate the rendering process, we use render farms. Render farm is a connected system of powerful computers, which are called

nodes. The work volume is shared between them and each computer processes different parts of images. This significantly reduces the time needed to render photoreal masterpieces. Then computers bring the parts together and produce a ready 3D rendering or animation.

Render farms allow processing large 3D architecture visualization projects at a fraction of time. Even a complex 3D animation, that consists of a large number of consecutive images, can be rendered way faster. This allows us to save time, and deliver ready visuals in 1 week.

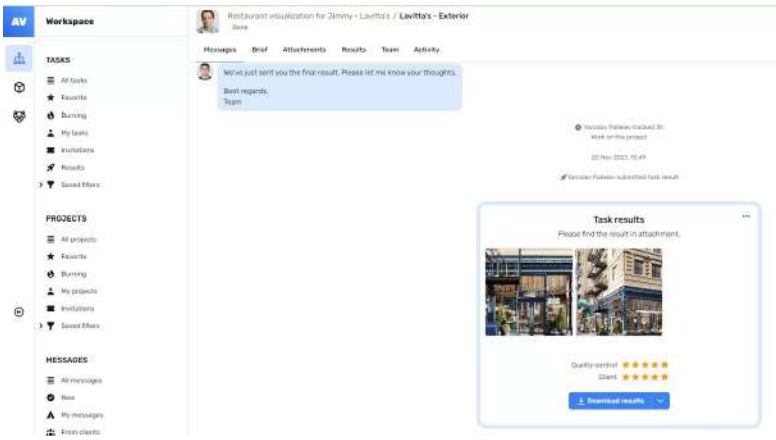
#3. Tailor-Made Online CRM System

A poor communication system can slow down a 3D architecture visualization project. For when there are multiple messengers, it's tough to piece together a comprehensive picture from bits and scraps of conversations. Not to mention find anything when it's needed.

Similar issues may come up with file storage. When the architect and the studio use different hosting services, like Google Drive and DropBox, it's easy to forget where the necessary file is located. Looking for them takes time too.

That's why we have developed a CRM system perfectly adjusted to all aspects of a 3D architecture visualization project management. It allows us to communicate and interact with clients worldwide as

effectively as if we were sitting in the same office space. In our CGI CRM, clients can post project information, attach files, communicate with 3D visualizers and managers, leave comments, check up on the tasks progress, oversee their tasks finance, etc.



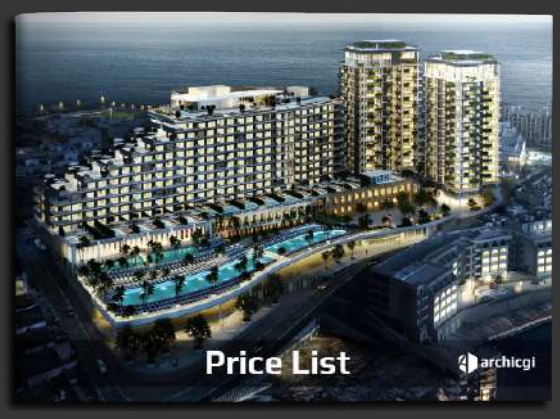
#4. Highly Qualified Project Managers

Delays in completing a 3D architecture visualization project can happen if 3D visualizers have to deal with additional tasks. Depending on the workflow, these may include brief approval, communication with clients, controlling the schedule. As a result, 3D artists have less time for actually working on the imagery, and results get delayed.

For this reason, we hire and train managers who take all this work upon themselves. And they are excellent at it. They ensure smooth communication, accurate data transfer, oversee the schedule and distribution of tasks. Meanwhile, 3D visualizers work on architecture photorealistic 3D renders without interruptions and deliver them faster.

Want to learn how much your project costs? See how we evaluate 3D rendering projects

SEE OUR PRICING



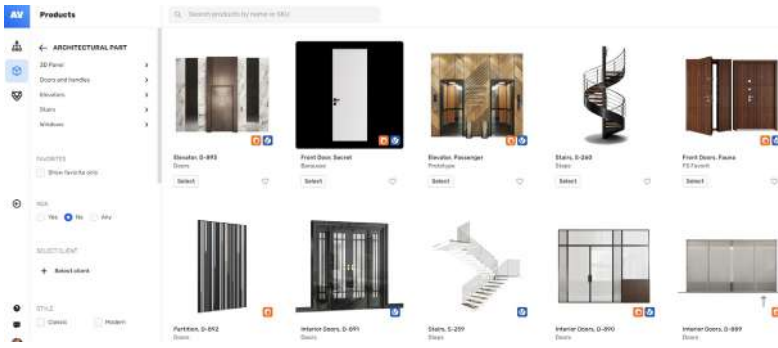
#5. Cloud-based Library of 3D Assets

To showcase interior design in a 3D architecture visualization, one needs lots of 3D models — for furniture, furnishings, architectural elements. But where to find them? Sometimes, architects just leave the selection to 3D artists. But what if they have a specific look in mind?

Usually, architects search for the items on the websites of manufacturers and e-stores and ask them for 3D models of necessary objects. This is a time-consuming and laborious quest.

To simplify this process, we have built up a 3D base of 75,000 CG models and 5,000 ready-to-use scenes. Now the search comes down to browsing through a library with a convenient sorting system and adding selected items to the project. Our clients extensively use the 3D library in their architecture visualizations, and they get access to it completely free of charge.

Now you see that getting powerful CGI for architecture designs



doesn't have to take ages. The technology and management for speeding it up already exist, so all one needs is to choose a 3D rendering partner who uses them. We've accomplished the speed by hiring and training managers, creating a whole community of high-flying senior 3D experts, building up a cg library and a custom-made online CRM. Moreover, we find that the best way to avoid misunderstandings is to gather all the necessary information at the outset. So we have designed a brief that guides our clients on what to mention and which materials to attach.

Need reliable 3D rendering services for getting powerful visuals? Contact us and get your still imagery in 5 business days top!

What Is Grayscale Rendering and How Is It Used by Architects and Designers?

Grayscale rendering is a perfect illustration of the “less is more” principle. While the monochromatic 3D images may not seem like much at first sight, they can be quite useful for architects and interior designers. Grayscale renders provide a clear view of a design, allowing one to focus on the base structure of it without any distractions. So, when exactly should one use these visuals to get the most out of them?

To answer this question, the experts at our architectural rendering company have written this short article. Here, you will learn how you can benefit from using grayscale

renders and see some examples of these CG visuals made by our studio. Let's go!

What Is Grayscale Rendering?

Grayscale 3D rendering is the process of creating a CG image that depicts objects without any colors or textures. It is also referred to as "clay" or "white" rendering. Compared to color CG visuals, these images take much less time to render due to the absence of textures and materials.

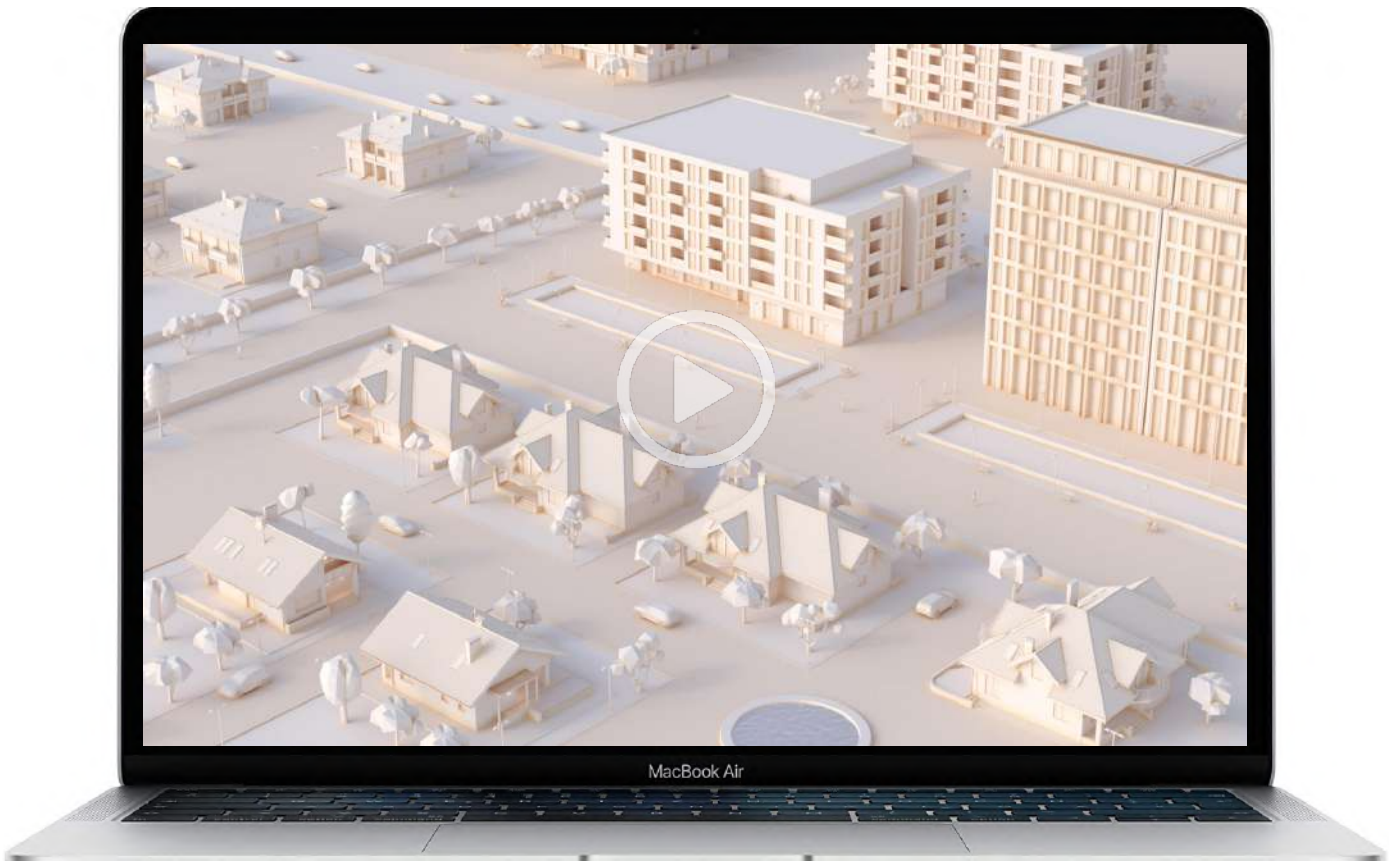
How Are Grayscale Renders Used by Architects and Interior Designers?

There are two ways to use grayscale images in the context of architecture and interior design: as a visual aid in presentations and as intermediate results in 3D rendering projects. Let's take a closer look at each of them.

Grayscales as Presentation Visuals

One can use grayscale renders to show the design in 3D when doing a presentation to the client. Usually, it's done by architects who want to get the general concept approved before going into any details. In this case, grayscale 3D rendering offers those professionals the advantage of ultra-fast image delivery. Plus, one can create a unique stylized look for the visuals, like in the ones below, to make them more aesthetic and interesting.

On top of that, one can get a 3D animation to showcase a project in a more dynamic way. Here's an example.



Grayscales as Intermediate Results in CGI Projects

In this usage scenario, grayscale rendering is one of the steps in a realistic 3D visualization process. It allows architects and designers to approve intermediate results by reviewing the geometry and proportions of an exterior or interior, as well as lighting and camera angles. That, in turn, helps to have any major changes made early on, when 3D artists can revise and update renders quickly. Below, you can see examples of visuals at the grayscale stage and their final versions in color.

However, the usage of such images as intermediate results is completely optional. One can always ask the CGI studio to provide color drafts right away when there is no time or need for viewing grayscales.

Overall, the fast turnaround time makes grayscale rendering a great option when it comes to visualizing architectural concepts. On top of that, it can streamline the CGI-making process for both architecture and interior design professionals, allowing them to save time and money on revisions.

Looking for professional 3D rendering services? Contact us at ArchiCGI — we create everything from still renders and virtual tours to 3D animations and AR/VR-ready models!

Will AI Replace 3D Artists or Architects Any Time Soon?

AI is now a hot topic for all kinds of creatives. Some artists are passionately embracing the new technology. Others are staunchly against it because AI is being trained on copyrighted artworks without the artists' knowledge or consent . Some are cautiously optimistic and foresee – in case the copyright issue is resolved – that artificial intelligence will play a vital part in the creative process, giving artists more expressive freedom and speeding up tedious parts of work. Yet many people are concerned that, instead of taking care of boring tasks and leaving humans more time for creative ones , AI will replace artists altogether. The last issue is what we are going to discuss in this article. Will AI replace 3D artists or architects in the

foreseeable future? This is a million-dollar question for both archviz experts and their customers.

As a 3D visualization studio, we keep a close eye on the development of any new technologies which might influence the industry. And AI is destined to do that. But will it replace 3D artists? Let's try to find out!

#1. How does AI work?

Artificial intelligence is a neural network trained to seek and recognize patterns in the received data. The software analyzes and synthesizes it into something new. There are different types of AI tools, but here, we will focus on visual-based ones that are shaking the creative world right now.

The most popular AI software that works with images includes Midjourney, DALL-E 2, Stable Diffusion, Craiyon, Hotpot, Crypko AI, GLIDE, Latent Diffusion, and Artbreeder. Many of these programs have unique distinctive features. For example, NightCafe allows the creation of videos, Deep Dream Generator lets the user edit images, and StarryAI generates NFTs.

So, how does AI work? Let's take a look at how Midjourney, the most popular visual-based AI software, functions. After receiving textual and/or visual input, it produces an image or series of images according to a given request. For the most part, this artificial intelligence uses imagery found online. And it's the point of contention for most creatives who oppose the technology. However, nothing stops 3D artists from setting AI to use their own artworks as references.

Now, let's see an actual example. Our artist took these two renderings from ArchiCGI's 3D visualization portfolio.

He gave them as references to Midjourney. In less than a minute, he got this result.

Looks quite impressive, isn't it?

And here, he took two more of our renders and also combined them in Midjourney.

Eventually, the outcome looked like this.

This is one more pair of our 3D renders the artist used as a reference for AI.

But this time, he also added a textual input. Namely, Midjourney was asked to add evening lighting to the result. Here it is.

How do you like it?

There is also ChatGPT, another AI tool that has swept the creative world. Unlike the ones mentioned above, it's text-based. Still, it has its uses for architecture experts, 3D artists, and other visual creatives. But we will get to that a bit later in this article.

#2. How can AI be useful for a 3D artist?

First of all, AI is very **handy in working with clients during the concept development stage**. Here, AI can assist 3D artists rather than replace them. They will no longer need to spend ages modeling scenes and rendering the images just to get them eventually rejected by a client. Now, 3D artists only need to give a client's visual references or/and text descriptions of the desired result to the AI. It will quickly visualize an idea. Artists can do as many iterations as needed until the AI delivers a concept the client likes. And only after that, one can move on to working in 3ds max to replace AI-produced pictures with high-quality 3D renders.

AI is also great as a source of references for artists who want to **extend their portfolio with personal works**. It can streamline the process of searching for the best angles, shapes, textures, materials, and colors, making the workflow infinitely quicker. In a task like that, AI couldn't possibly replace 3D artists. At this point, human input is essential for choosing the right references and using them creatively. If anything, here AI is more likely to replace moodboards.

Let's take a look at how one of our artists created a piece for his portfolio using Midjourney. He gave it the following key: "scandinavian home winter forest fjord high-quality render". Based on this request, the AI generated 4 options. Take a look.

The artist picked one of the images (the left below). Then, AI made 4 variations of the chosen pic. Here they are.

After a couple more iterations, the picture looked like this.

Based on this result, the artist finished the concept, modeled and textured it in 3ds Max, and rendered the high-quality image you see below.

It will serve as a great addition to his portfolio.

And what about text-based artificial intelligence? ChatGPT provides another opportunity to streamline the architectural visualization workflow. Now, at

ArchiCGI, we record our calls with clients, convert them into text, and feed them to ChatGPT. The AI creates a to-do list based on the input. That saves a lot of time and energy on making a detailed technical assignment, allowing us to complete projects quicker for our clients.

#3. How can AI be useful for architects?

Will AI replace architecture experts? Unlikely. But will it change the industry? Most definitely. And the first aspects to change will be the earliest project stages, which are sketching and creating ideas. “Like architectural sketches, AI imagery is often colorful and dreamlike, but not necessarily actionable as a detailed plan,” a US architect Andrew Kudless claims.

Simply put, AI will allow architects to transform their relationship with clients by showcasing many vibrant, appealing images in the early stages of design brain-storming. Plus, one will be able to delegate monotonous tasks to AI. These may include, for example, recreating repetitive patterns of simple designs in different environments.

#4. What can humans do better than AI?

Some people argue that AI using images for training is just the same thing as an artist using references. However, while human artists improve their skills, strive for

an individual style, and, most importantly, are capable of creating an absolutely new concept from scratch, AI can't create anything truly unique and innovative. It just compilates the data. That's why quite often you can see the butchered artists' watermarks on some AI-produced results. So, basically, AI's work is more like a masterfully made collage.

Hence, the things that make AI different from human artists and architects are the creativity, intent, and imagination of the latter. Inspiration and insight are not easy to replace or replicate by a machine. AI can't think as a person does, so to get even marginally useful results, it needs a human counterpart – someone to choose and adjust the input. artist.

#5. What to expect from AI in the future?

So, will AI replace 3D artists or architects anytime soon? The answer is definitely no. However, it is expected that AI will modify many aspects of these professions. Apart from producing impressive concept sketches early on, AI may be used to evaluate and optimize plans and schemes as well as prioritize tasks in the project. It can also be helpful in risk assessment, as it is less unlikely to miss any design flaws.

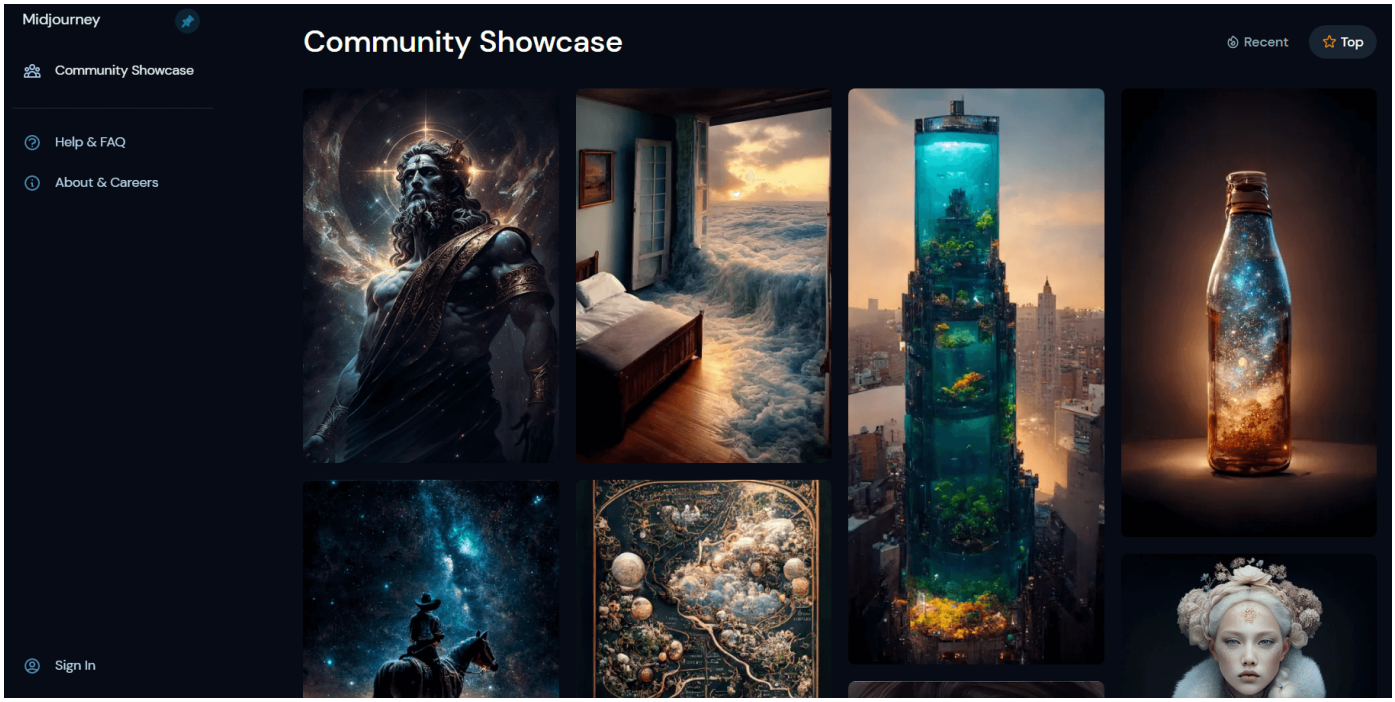
All in all, together with virtual reality for architects, AI technologies are going to bring workflow and presentations in the AEC industry to the next level. A VR tour around an AI-powered yet-to-be-built house? Why not!

Maybe, AI will eventually fulfill one of the humanity's most cherished dreams: robots doing all the boring work while

humans get to be artistic and innovative.

While some do fret over the question “will AI replace 3D artists or architects,” most of the creative community – especially those who have tried working with AI firsthand – agree that the technology will change the industry for the better. And it is very unlikely that it will replace 3D artists, architects, and designers. Though AI does streamline some processes, it always needs a human touch to produce something truly interesting or useful. On a grand scale, AI is similar to photography, which shook the art world more than a hundred years ago.

At ArchiCGI, AI will not replace our experienced professionals, that’s for sure. However, we are already using it to make our 3D artists’ work easier and provide our clients with more impressive results faster than ever before.



Get your project estimated in just 1 hour – fill out this brief!

DOWNLOAD THE BRIEF

How Is Virtual Reality for Architects Created and Used?

The usage of VR in architecture started around 2015 and is becoming more and more widespread. Now, it is used by all kinds of industry players, from giants such as Foster + Partners and Zaha Hadid Architects to emerging firms. So, what are the unique benefits this technology brings to the table? How is virtual reality for architects created and used in practice? And how much does it cost compared to regular 3D renderings?

Our architectural visualization studio has all the answers you need. We work with architects and designers, providing them with top-quality renders and animations as well as interactive AR and VR solutions. And we are happy to share our knowledge on production steps, uses, and advantages of virtual reality assets. So, let's begin!

What Is VR in Architecture?

Virtual reality for architects is an interactive digital environment that allows one to experience a full immersion into

a project. Instead of just looking at drawings or renderings, a person puts on a VR headset — for example, HTC Vive or Meta Quest — and finds themselves inside a yet-to-be-built design. There, one can walk and look around the future building and location. What's more, it is often possible to interact with some of the design elements using controllers. For instance, a viewer can open and close the windows and doors, switch among different lighting scenarios or surface finishings, move objects, and so on.

The experience can be accompanied by music and realistic sounds. These can be the sounds of steps, chirping birds, pouring water, and more. That makes a VR journey absolutely life-like.

How Is Virtual Reality for Architects Created?

First, using 3D modeling software such as 3ds Max or Blender, a CG artist creates all the objects and environments necessary for visualizing the architectural design. After that, all the assets are exported to Unreal Engine — the best modern tool for creating real-time immersive 3D experiences.

In UE, an artist sets up the lighting and materials. At this point, the intermediate results look pretty similar to regular visualizations made in 3ds Max, as you can see in the image below.

Then, using Unreal Engine, an artist designs all the features for the first-user virtual reality experience. They program interactive objects to make them responsive to a viewer's use of the controllers.

Also, an artist adds music as well as other sounds and links them to a user's actions where neces-

sary. For instance, a CG expert can make sure that a viewer hears the murmur of water when coming closer to a fountain. Overall, at this stage, it is possible to design literally any experience architects want for the final result. With virtual reality, the sky's the limit.

The final stage is optimizing all the created assets and compiling them into a folder that contains a .exe file. By opening that file, architects and their clients can start the VR running, just like a computer game. Below, you can see how the resulting visualization looks and works for a person who puts on a virtual reality headset.

On the technical side, this VR experience is actually a game. The only difference is that its mechanics are designed for architectural visualization purposes.

What Is the Cost and Production Time of Virtual Reality for Architects?

The answer depends on the architects' creativity and requirements for the VR experience. Let's say you want a simple virtual reality visualization, like the one above where

a user just takes a walk around the location. In this case, the cost and turnaround time of a project would be around 20-30% higher than those of an architectural 3D animation for a similar scene.

However, if you wish a virtual reality journey to be longer and include more interactive features, the timing and budget are likely to go up. To get an exact quote for VR projects, architects should contact our client managers.

The Uses of VR for Architects

Virtual reality can benefit architecture specialists at two crucial stages of their work: designing and presenting projects. Let's see how.

Virtual Reality for Architects at the Design Stage

VR technology streamlines the architectural design process to a great extent. Architects can use VR to review the model of the future building with their team inside a life-like simulation in the early stages of a project. This way, it is easy to make sure that all the team members and stakeholders are on the same page. It can be harder to achieve that with 2D drawings or even 3D renders, especially with remote workers.

With the level of realism available in VR, architects can spot design errors and come up with the best way to improve the project easier and quicker than ever. That means that when it comes to the presentation, they will be able to showcase the most refined and polished version of their work.

Virtual Reality for Architects at the Presentation Stage

There is no match for VR in terms of presenting architectural projects. No other technology allows one's clients to get such a comprehensive, immersive, and realistic impression of the future place.

With VR, architects do not need to go into detail about technicalities and other design aspects because the client sees everything with their own eyes. After viewing the project in virtual reality, a person feels like they've actually visited the place that is yet to be built. This way, VR creates a truly memorable experience and a deeper emotional connection to a project. Also, it paves the way for giving better, clearer feedback to the architect.

Virtual reality is a game-changing tool that makes things easier for both architects and their clients. It provides architecture specialists with the opportunity to create great designs much faster and makes the entire process more interesting and collaborative than before. And clients, in turn, can enjoy breathtaking, fully immersive presentations that feel more like a mix of a time travel and computer game experience.

5 Ways 3D Visualization Enhances Experience of an Architect's Clients

For any architect, a project starts with a presentation of a concept to a client. Which means that first pitch must be as thought-through and polished as possible. Especially when the client is a large development firm or a property owner with an overly refined taste. Most likely, they have a revolving door of architects trying to convince them they are the ones for the job.

However, those candidates are never chosen randomly in the first place. Nobody likes wasting their time, so the customers usually go through multiple architectural portfolios to know what they can expect. Now, it's good when those portfolios feature photos of complete projects, but true professionals always have more to show. Amazing concepts might get no green light due to a multitude of reasons completely unrelated to their design qualities. But that doesn't mean they should be buried somewhere in the archives as nothing more than hand-drawn sketches. And then there are always iterations and even completely new ideas created as an exercise or a personal passion project.

Today, in order to impress potential clients with their portfolios and presentations, more and more architects are choosing to use 3D architectural visualisation. It strikes the perfect balance between the attractiveness of its results and the practicality of execution. And, it provides just the right amount of technical details needed to secure the initial approval. Now, this probably doesn't sound specific enough yet. So here are 5 ways partnering with an architectural visualisation studio actually helps to improve customer experience. Let's see what they are!

#1. Architectural Visualisation Helps to Convey Ideas Clearly

First things first, 3D visualisation allows architects to communicate their concepts clearly to potential customers. It makes any presentation look professional and shows that the architect is up-to-date with modern technology actively used in their field. Furthermore, architectural visualisation can be extremely photorealistic, and there is some power in demonstrating a non-existent object as if it's already there in brick and mortar. And when the concept is conveyed clearly from the beginning, the client can easily

form an initial opinion at once. So they will be able to ask relevant questions, propose changes and adjustments and learn about possible design iterations at the very first presentation.

It's important to note here that architectural visualisation can be done in different formats: still renderings, animation, and 3D floor plans. The renderings show the future objects from multiple angles, highlighting all the prominent design details. Architectural 3D animation can tell the clients how various elements will work together, which is really informative in the case of more complex architectural projects. For instance, a fully sustainable, energy-positive house with passive design. Finally, 3D floor plans are necessary to provide details regarding such things as scale, dimensions, and interior layout in an understandable and visually attractive way.

#2. Architectural 3D Visualisation Makes It Easier for the Client to Plan the Budget

An accurate representation of project design features is not only meant to impress potential customers. It also serves a more practical purpose, allowing the latter to plan the construction budget with precision. With photorealistic architectural visualisation, the client can, first of all, see why the choice of materials matters a great deal, especially in highly conceptual projects.

The unique qualities of different materials determine which of them support the particular concept the most, be it high-tech eco-minimalism or traditional luxury. And precise calculations used to create 3D visualisation provide all the necessary information to estimate the exact quantity and cost of those materials. Furthermore, using such architectural visualisation technology as BIM (building information modeling), one can make all the construction-related calculations right within specialized software. Because in this case, 3D models of buildings are fully based on actual data.

#3. It Allows to Avoid Unpleasant Surprises During The Process

The use of 3D technology in architecture provides for a more interactive and immersive customer experience, making the client involved in and aware of the property development process like never before. Apart from the various output formats mentioned above, architectural visualisation can be used to create VR tours, where the customers can virtually walk through a place and take a look around as if visiting a finished building.

It is also possible to view 3D models with AR applications, which allows to see the end result of the project right on location where it will be built. Or to see the next steps of the process once the construction has started. This way, it will always be clear what exactly is happening on the site and for what purpose. Which means the client won't experience any stress throughout their whole journey, knowing for sure what to expect at every stage of their project.

#4. Clients Can Use Architectural Visualisation Materials for Marketing

If the client is satisfied with the architectural visualisation and gives the project a green light, they might want to use those CGI visuals in their marketing campaigns for the property. In this case, the studio that created the original visualisation can easily make all the necessary changes in the 3D models they already have. Since different content formats serve different marketing purposes, additional materials can be made to cover all the customer's needs. For instance, still renderings are normally used for publications on social media platforms like Facebook and Instagram as well as professional architectural platforms like Houzz and Archdaily. Then, animation is perfect for Youtube, Vimeo and TV commercials. And 360 tours are now actively used by property developers on their websites.

#5. It Tells Clients about the Architect's Expertise with a Stunning Portfolio

Architectural visualisation is not meant to be only used once. Even after a project is completed, the architect still has those beautiful 3D images, ready to be uploaded to a personal website and social media accounts. Moreover, some ideas are worth to be visualised and displayed even before there is a demand for them. Who knows, maybe some long-abandoned concept will be the one to draw a new potential customer's attention.

With an impressive portfolio, future clients will be able to see the architect's expertise and know whether they could share the same vision for a project of their own. hey might instantly feel that they've found the right person for the job and will

want to work with no-one else. Which will definitely save time and money for both parties. Sounds good, right?

So, those were the 5 ways architectural visualisation helps to significantly improve customer experience. In fact, it benefits both sides here, the architect and the client alike. And although architects are probably aware of how CGI makes their own work process easier and more efficient, they may not always think how much it matters to their customers as well. Ultimately, it is safe to say that architectural visualisation is a great tool that facilitates communication between the key stakeholders at the early stages of a project. It inspires trust in the architect's expertise and allows the client to easily understand all the details that would otherwise require lengthy and tedious explanations.

CGI Case Study

Exterior CGI of Apartment Complex Clubhouse in Palm Bay, Florida

When it comes to real estate design presentations and marketing, 3D architectural exterior visualization is an invaluable asset. It allows developers to effectively promote properties that are still under construction. As a result, they can get extensive media coverage and create visually appealing listings to attract interested prospects in advance.

In this project, our architectural visualization studio created photorealistic CGI for that exact purpose. The client here was Rebecca Mu, Development/Asset Manager at Prospect Real Estate Development Group. She needed an exterior view of the clubhouse in one of her company's latest active developments — a 184-unit rental apartment complex in Palm Bay, Florida.

We worked on this 3D visualization in September 2022. In this case study, we will show our production process from receiving references from the client to delivering the final result. Let's take a look!

The Brief

Our task was to visualize the clubhouse at the entrance to the apartment complex. For that, Rebecca provided us with the following references:

- architectural drawings of the clubhouse and surrounding buildings in PDF and CAD files;
- exterior 3D renderings created earlier by a different studio as material references (the blue color was to be changed to gray);
- and a landscape plan of the complex.

Now, let's see how the project went from start to finish.

The Workflow Process

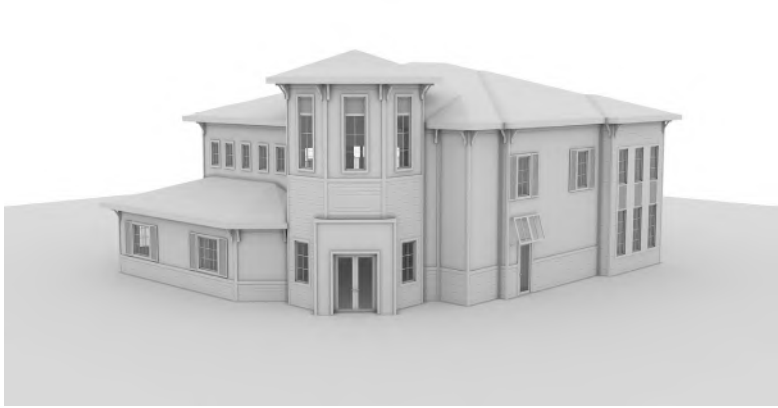
The making of the 3D architectural exterior visualization consisted of three parts:

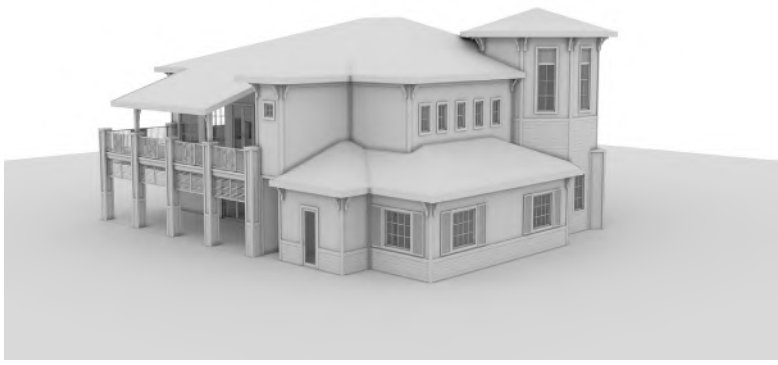
- modeling of the clubhouse;
- modeling of the surrounding buildings;
- photorealistic rendering.

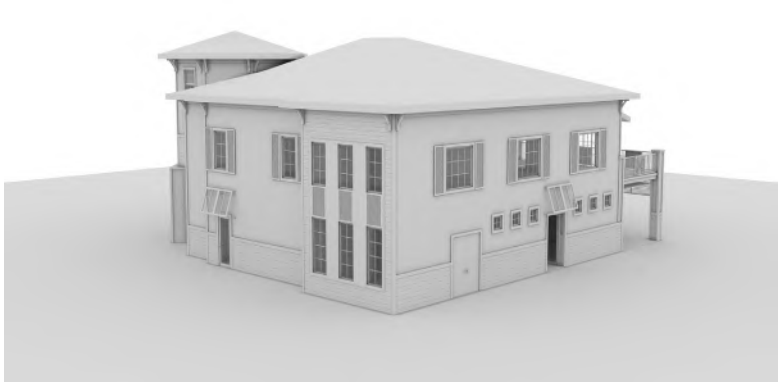
Read on to learn more about each of them.

#1. Modeling of the Clubhouse Exterior

At the first stage of the 3D architectural visualization process, our CG artist used the drawings from the brief to create a detailed 3D model of the clubhouse exterior. He then sent grayscale renders to the client to get the geometry of the building approved. You can check them out below.







During the 3D modeling process, our CG artist also made a video so the client could get a full 360 view of the 3D exterior.

Rebecca approved the model, and we moved on to the next stage.

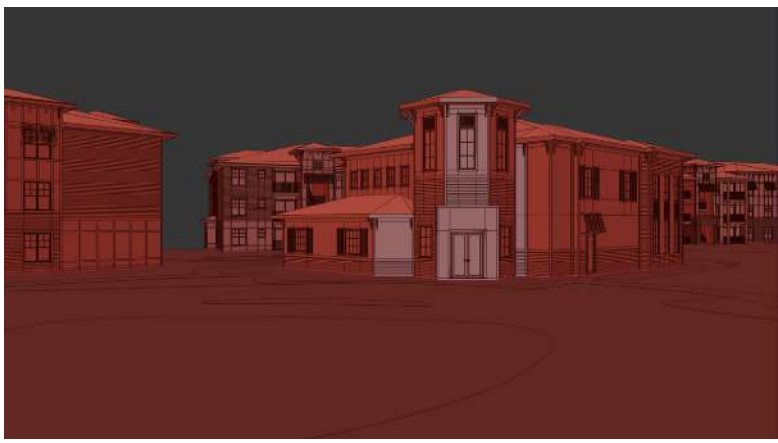
#2. Modeling of the Surrounding Buildings

The site plan showed that some of the houses were located close to the clubhouse. That meant they would be visible in the render. They all had very similar exterior design and were quite far away in the background. So, our architectural visualization specialist didn't need to create three different 3D models. That's why he modeled only one building. You can see it in the image below.

Then, he placed all the models according to the site plan and began to prepare the scene for 3D architectural exterior visualization.

#3. Rendering of the Complete 3D Scene

The client did not mention any preference regarding the camera angle other than it had to be slightly above eye level. So, our CGI specialist suggested a view that showed the clubhouse in the most informative and appealing way. He also left enough space for the entrance sign, for which we didn't have a reference at the time, as well as some people and cars. The 3D artist sent this screenshot to Rebecca to see if she liked the angle.



She approved the view that we offered, and we continued the work. Namely, our 3D artist:

- added textures and materials;
- added 3D models of plants according to the landscape plan;
- set the lighting;
- placed 3D models of people and a car in the scene.

The result was a vibrant, photorealistic 3D architectural exterior visualization. You can see it below.

Rebecca loved everything about the image. Her only request was to change the road material from brick to smooth vehicular paver.

At this point, she also sent us the image of the entrance sign her landscape architect designed for this project. She wanted us to copy the design but change the inscription to “astor BAYSIDE”.

After the 3D artist changed the road material, and modeled and added the sign, we were ready to show the final result to the client.

The Result

Overall, the project took 90 hours. And here’s the final 3D architectural exterior visualization in 4k, 300dpi resolution.

We really like the sunny, calm, and inviting atmosphere of this place. Our team loved working with Rebecca and would be happy to do more architectural visualization projects together with Prospect REDG. Meanwhile, we’re sure that the apartments in this complex will find eager tenants even before the units become available for rent.

CGI Case Study

Exterior & Interior CGI of Lavitta's Creole Restaurant in New York

Restaurant design 3D rendering is the key to achieving two goals for restaurateurs. First of all, it helps them present the future look of the place to the city administration and obtain the construction permits. In addition, photorealistic 3D rendering helps to start an effective marketing campaign early on. With CGI, one can get potential guests interested before the restaurant construction is even finished. That is why Jimmy Thomas, a restaurateur and chef from New York, decided to use 3D architectural visualization services for his project — an elegant dining spot called Lavitta's Creole.





Jimmy contacted our studio in November 2021 for exterior and interior design renderings of the restaurant. Since then, the planned location of Lavitta's has changed twice. Only in November 2022, the chef finally found his dream space in Upper Manhattan. Our team is happy to have helped him along the way, making the restaurant design 3D visualizations for each location. And we were excited to know that our joint efforts paid off! The restaurateur got all the necessary permits and is planning to open Lavitta's Creole in spring 2023.

In this case study, you will see how our cooperation with Jimmy went. You'll learn everything about the creation of restaurant design 3D rendering: what references it requires and how the workflow is organized. In the end, you will see all the renders we've made for all three locations our client was choosing from. And, of course, we'll tell you which one of the 3D versions will come to life. So, let's dive in!

#1. The Concept and Scope of Work

Jimmy dedicated the restaurant to his beloved mother and even named it after her. So, he wanted it to be a place his mom would fall in love with at first sight. When describing the concept and its atmosphere, our client said that the restaurant would have to feel homey and warm. Also, its design was supposed to look classic and authentic, standing out beautifully in the urban surroundings of New York.

As for the scope of work, our team was to make 2 interior and 2 exterior views. Let's start with the latter.

#1. The Making of Exterior 3D Renders

Our task was to create 2 eye-level exterior views of the future restaurant:

- one rendering demonstrating the front view of the place. It must be focused on the entrance design;
- and the second rendering showing the restaurant at a 3/4 angle a bit from afar. It was supposed to give a fuller picture of the location.

Let's take a look at the reference materials Jimmy provided to help us complete this restaurant design 3D rendering task.

#1.1 The References

Our client did not have drawings of the building. Instead, he took lots of photos of it from different angles and sent them to us. Also, he provided our team with precise measurements of the ceiling height, the dimensions of the facade details above

the entrance, and the height and width of the windows. The restaurateur noted he would like us to make the windows a bit taller in the CG imagery.

He also gave us a Google maps location of the place so that we could examine it in more detail.

To illustrate his preferences for the entrance and facade design, Jimmy sent us a couple of photos of places he liked.

As for the season and the time of the day in the rendering, the restaurateur told us to go for a fall sunrise. A setting like that would allow him to show the lighting inside the restaurant in the best way.

Having received these references, we were all set to start. Now, we'll show the further process to you step-by-step.

#1.2 The Workflow

First, our artist modeled the building and its surroundings in 3ds Max. This is what the scene looked like in grayscale mode, with no colors.

Then, the artist set the lighting and applied materials and textures. The next steps were rendering the images and showing them to the client.

Jimmy liked these restaurant design 3D rendering results. He said:

The client requested that we make a few tweaks to the plants and decorations as well as add a signboard and a standing menu holder. After doing so, we submitted the updated renders to him. Here they are.

As you can see, these renderings didn't show the interior in the windows yet. That's because it was yet to be added. How so?

The thing is that the interior and exterior rendering parts of this task were done by two different 3D artists. They worked in parallel to make the whole process faster. Eventually, both scenes had to be merged to give a complete picture of the restaurant's design.

So, let's see how we created interior 3D renderings and find out how they were combined into one whole with the exterior ones afterward.

#2. The Making of Interior 3D Renders

We were asked to make 2 interior views of the future restaurant:

- a down view showing the overall space design, including furniture layout and an open kitchen;
- and an eye-level view, demonstrating the interior closer and in more detail.

The restaurateur provided us with a comprehensive pack of references for the task. Let us show you what it included.

#2.1 The References

Jimmy sent us measurements and photos of the future restaurant's internal space. He also provided us with photos of the interiors that inspired him and mentioned a few furniture brands he liked. In addition, our client chose plenty of references for furniture, decor, lighting fixtures, tableware, and cooking equipment in our extensive library of 3D assets.

Having considered all the references and requirements, we got down to work.

#2.2 The Workflow

Our artist started by modeling the space in 3ds max. After the scene was ready, she made a couple of viewport screenshots and sent them to Jimmy for review. At this point, it was necessary to receive his feedback on the interior architecture and furniture layout.

Jimmy confirmed that everything was correct. So, we moved on to the next stage. Our artist set the lighting and added textures, materials, and all the necessary details to the scene.

Then, she proceeded to render the 3D images. She made two views that were agreed on at the beginning and also decided to offer a third, bonus rendering. The artist did so because she found this close-up angle of the space exceptionally atmospheric. Here are all three CG images.

Jimmy was happy with the results. He just asked us to make several adjustments regarding colors and secondary details such as lighting fixtures and plants.

Our artist introduced all the necessary corrections and also did CGI post-production to fine-tune the lighting and details. Here is how Jimmy reacted once he saw the finalized result:

At this point, the only thing left to do was to merge the exterior and interior scenes. It was needed to make the interiors visible in the windows in the exterior images. For this, our artist had to do the following:

- export the 3D models from the interior scene to the exterior one;

- check settings to make sure all the materials still looked photorealistic and fix them if necessary.

Our CG expert did that and then completed the images with some finishing post-production touches. Now, let's take a look at the outcome.

#3. The Result

Here are the final results of this restaurant design 3D rendering project. They were all made in 4K, 300 DPI resolution to be further printed in A3 format for a presentation.

Do you like it? We were completely in love with this design!

However, Lavitta’s restaurant 3D rendering story did not end here. That’s because Jimmy was still in search of the most suitable place to realize his project. So in a few months, he contacted us again and asked to make renders of the same design but at new locations. Of course, we were glad to help.

#4. The 3D Images of the Restaurant Design for New Locations in NYC

These times, the process went much faster, as our team already had ready-made models of furniture and decor and knew the client's preferences for design, colors, lighting, and camera angles. What's more, we already had a scene with the modeled architecture. It helped us a lot, as the new locations looked pretty similar to the first one. That meant we just needed to tweak the existing scene instead of making new ones from scratch. So, here are the images we've made for the **second spot**.

These renders look just as good as those of the previous location, don't they?

But only at the third attempt did the restaurateur find and lease the perfect place. Just like two previous times, it was on the corner of an old brick building in Manhattan. Let's view the renders we made for the **final spot**!


ONE WAY

And by looking at the images below, you can compare the real photo of the location (on the left) to the 3D rendering of it (on the right). As you can see, the only significant difference between them is the presence of the yet-to-be-built restaurant in the 3D visualization. Isn't it a perfect visual to present the design and promote the place?

The ArchiCGI team is very grateful to Jimmy Thomas for entrusting this beautiful restaurant design 3D rendering project to us. We wish that Lavitta's Creole is always full of happy guests and that it makes its owner prosper. Our team hopes we will be lucky enough to visit this dining place ourselves one day. And, of course, we're eager to work on more amazing projects together!

Need quality 3D rendering services for your commercial or residential design projects? Contact us to schedule a call with our client manager who will consult you on the types of 3D visualization you need and quote your task!

ARCHICGI TEAM

Now, we'd like to introduce you to some of our amazing 3D artists. You can see the entire team of 3D ninjas on our website.

Anna Shevtsova

Team Leader & CGI Artist

Anna is a Mentor, Art Director, and architectural design connoisseur. She is such a skilled 3D artist that we believe Anna had learned 3ds Max and Corona before she learned to write! Apart from CGI, Anna is into yoga and traveling.

Ilya Mikhailenko

Mentor & CGI Artist

With 10 years of work in CGI and professional artistic training, Ilya is an ultimate authority on realism and design. His imagery is technically impeccable and insanely creative! As for hobbies, Ilya loves cycling and winning airsoft wars.

Igor Tsogla

Mentor & CGI Artist

Igor is an SoA Academy graduate and CGI expert with 11 years of experience. He says working in 3D is a mindset: one can always get creative, go beyond what's asked, and impress the client. In his free time, Igor is a mountain climber and a wine taster.

Mariia Polchenko

Senior CGI Artist

Mariia is one of the most hardworking and joyful people we know. She used to work as an architect, but 6 years ago converted to CGI. She says 3D allows seeing the future and just loves to admire the design in different views, and weather conditions.

archicgi
digest

www.archicgi.com
sales@archicgi.com
+1 607 383 2001 +44 203 617 1683