SKETCHUP -UR-SPACE

December 2014

COVER STORY

The best Sketchup plugins to improve Designing skills
- **Debamoy Ghosh**

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10 useful sketchup tips to add value to your project

3D modeling in Real Estate

TUTORIALS

Detail Collection of SketchUp 3D warehouse

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Sketchup creates shaker bench

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A letter direct from the editor desk highlighting on August edition

Hello friends!

The latest edition of sketchup ur space is just released. This issue specifically highlights the importance as well as usability of various sketchup plugins & sketchup extensions.

Keeping this in mind, our editorial team presents an exclusive cover story focusing on the most recognized sketchup plugins which can transform your design skill to the next level. All these plugins are supported with live YouTube sketchup videos.

Sketchup plugins are very useful to include & extend various functionalities inside sketchup which are not available with the free versions of sketchup.

In interview section we interviewed Ricardo Botella, the renowned architect and 3d visualizer who shares his professional experiences in 3d modeling & visualization.

In article section, there will be three interesting articles on sketchup & 3d modeling. The first article discusses the usefulness of sketchup tips and sketchup extension which can significantly enhance your 3d modeling speed.

The second article speaks on how the latest 3d modeling technologies provide huge benefits to real estate developers. The real estate developers can use these 3d modeling apps to generate customizable, immersive 3d models of interior spaces easily as well as verify the interior scene by positioning the various 3d models of furniture, walls, windows etc. So the real estate developers visualize what a space will look like before it is presented in reality.

The third article will focus on top 10 ideas before going to select the perfect 3d modeling software to streamline the 3d printing process.

In tutorial section, our editorial team provides an exclusive presentation on new improved sketchup 3d warehouse with sketchup 2015. In sketchup 2015, the 3d warehouse components are extended; glorified and standard component are improved. Till now, 2800 individual contents have been restored in 3D warehouse.

In blog section, our readers will get brief overview on scalp for sketchup. Scalp for sketchup is applied to generate astonishing construction documents inside SketchUp. Skalp takes SketchUp's standard Section tool and supports drawing scales, line widths, line colors, fill colors and even transparencies.

In news section, our readers will be updated with latest news in 3d modeling worlds.

Hope our readers will like this issue very much.

If you have any queries concerning publication, subscription, troubles navigating the site, please mail us at rajib@sketchup-ur-space.com

Best wishes
Rajib Dey
Editor

Interview with Ricardo Botella, the promising architect and 3d visualizer, regarding the importance of 3D architectural visualization & rendering

Interviewer : Rajib Dey (Editor-in-chief)

Please make your brief introduction to our readers?

I'm an architect specialized in 3D visualization. I'm founder of render online, a company focused on quality visualizations for architectural projects and real estate. We also research in new technologies applied to visualization and project development, like 3D printing and augmented reality.

Why you became interested to enter into Architectural Visualization field? Do you undergo any formal training in this field?

I studied architecture as my personal passion, however I always loved computers and new technology, and during my studying I became more and more interested in computer graphics, the way I could better mix my skills. It was a hobby at first, a way to make my degree projects look better and more realistic.

How 3D and visualization evolved over time? What is the existing challenges that the 3d visualizers facing with this type of work?

I believed in entrepreneurship in architecture, and from my point of view that needs to be done by involving ourselves in virtual world and new technologies. When I started, everything was about getting the more realistic images we could. Then, when technology let us reach the limit, visualizers started to think in hyper-realism and more artistic ways of representation. I think now the challenge is the expression, it doesn't need to be as real world, the challenge is to be art.

When did you first get hooked on sketchup?

I started using Sketchup for representing my projects in the first years I was studying. I remember the first version. It was free, easy to use, and quick. I could have a 2D project made in 3D in a few hours before having it ready for the teachers review. The first time I did that was amazing.

Why sketchup is considered as an indispensible tool for architectural visualization?

Sketchup is an amazing tool for designers and visualizers, after years of CAD, sketchup remembered designers the paper and pencil, a quick way to design thinking. Fast do and undo, easy exporting, and with a great community hub that lets you upload and download thousands of designs in a while.

Image Courtesy: render-online.net

What types of project do you prefer to work most and what is your most successful project/render?

I like architectural projects that make me feel they really can be built in our world (or other worlds). The render I like more wasn't successful in business, it was a personal project for a train station, made with millions of polygons with a 2-core laptop, I was learning a lot of new tricks, it was hard but made me feel I could do a lot more with just a bit better machines.

Is there any interesting project that is currently going on?

We are collaborating with specialists in augmented reality to make new ways of visualization for real estate businesses, a way to people understand far better buildings in 3D in real time.

Image Courtesy: render-online.net

What are the most challenging factors in your daily work?

The hardest thing is to get clients, and when you have them, it's making them understand the difficulty of a 3D designer job, many people believe that "everything" is made by computers, and that it's made immediately. The truth is that computers and software are amazing tools, but just tools. The talent is ours.

What importance should be given in executing superior quality 3D visualizations and designs?

I think the key is organization. Whether you make a complete job alone or in teams, it's very important the first planning hour for final success. Making every step right, and saving different versions for changing demands, which are the common thing to happen.

What will be the future prospects of architectural visualization?

As I mentioned before, I believe the future now is augmented reality. Glasses, or lenses, or whatever other gadget we are to see in the next 2 to 10 years will be as popular as tablets and smartphones are today. And again will change the way people see their surroundings. Architectural visualization has to be there.

Will it be possible that 3d visualizations & real photos become identical? Have we already attained to that excellence?

That's a long discussion many CG artists have. I think we can already make them identical, but I personally don't see the point. For me it is far more interesting the propositional views as artists we can make.

Image Courtesy: render-online.net

How can we make rendering superior as compared to finished building?

There are a lot of ways for that, probably each CG artist will tell you different methods. I usually try to make very good and complete models, and try to push the result up in post processing. But it's not always needed to be superior to finished building, in many occasions clients just want a simple drawing representation which lets them imagine a lot more about spaces.

Do you utilize any other software/tools alongside sketchup? How do you select top software for modeling / rendering application?

I use to use 3Ds max, vray, rhino, photoshop. It depends on the project, how every software manages different shapes and textures. For fast work, easy shapes, many changes, it's sketchup. A lot of weird surfaces rhino is great. Photoshop is the king on post processing with a lot of tools, but many times a lighter software can make the deal when images don't need many changes after rendered.

Is there any project where you use augmented reality? Please share your views.

We are working on a project for representing many different 3Ds as fast and with as much polygons with just one marker, making sellers an easy job with a technology that's not completely developed to its limits yet. It's easy to start experimenting with augmented reality, it's harder to make a big project with it nowadays, but we'll make it.

What suggestions do you want to provide to the younger people who want to pursue a striking career in this industry?

We have great tools to make whatever our imagination wants to create. Expertise in CG software takes its time, but it's very important to never lose the creativity, making paper drawings sometimes, writing down your own ideas, etc. will make the difference in the future.

Image Courtesy: render-online.net

How do you evaluate our magazine?

sketchup-ur-space is a great place to stay up to date with sketchup and all its possibilities, and also with the evolution of 3D modeling and visualization. I appreciate this interview, and I like the magazine being open to many professionals and artists to collaborate sharing their experience. Thank you very much and congratulations!

The best Sketchup Plugins to improve designing skills

Debamoy Ghosh

Image Courtesy: landarchs.com

Are you sketchup enthusiasts? Are you looking for some exciting sketchup plugins? This is your turn to get some of them. Ever since sketchup has made the entry in the market, it has become the most used, user friendly 3D modeling software. It has been widely cherished by the students, architect, landscape, animation and videogame specialist. However there are some complexities which cannot be sorted out easily. So, here comes the necessity of rendering plugins. The professionals generally use those plugins. http://landarchs.com/ presents an excellent article of plugins. We bring the excerpt of writer Sha Sulaiman.

Plugins for Sketchup:-

1. Curviloft (free): This is one of the most effective tools among all plugins. It is generally works loft and skinning though sketchup. This is normally used to prepare surface from the curve. There are two methods lofting: firstly, by spline and secondly, by loft alongside with path.

https://www.youtube.com/watch?v=t-mhHiysqAM

2. Bezier Curve (free): How to make polyline, Bezier, spline curve? This tool will help the user make curves standing on control points. This control point can easily be manipulated. Sometime it defines the pre-defined curves.

https://www.youtube.com/watch?v=BmJI1DGBCeI

3. Shape Bender (free): This plug-in assists curving and helps to make curvy roads.

https://www.youtube.com/watch?v=tGHTIOMm_34

4. Joint Push/Pull (free): One of the draw back of the sketchup is it do not assist extruding (push/pull) curved surfaces. But it can be sorted out, by Joint push/pull tool. But undoubtedly, this is the best tool for making volumetric solids and multiple axes (curved-in) and different building elements.

https://www.youtube.com/watch?v=YvcsMZhwMK8

5. Unfold (free): It is a converter. It converts 3D models or objects into a 2D plane or orthographic projection. It is most user friendly and need to unfold only.

https://www.youtube.com/watch?v=FkeoQh0PBFU

6. Round Corner (free): It is very useful for edge correction – especially to decrease and smoothing 3D objects.

https://www.youtube.com/watch?v=Ay-ab8wcB-A

Render Plugins for SketchUp:

7. V-Ray Render (paid, trial pack available): V-Ray is the rendering engine used by more design artists than any other. V-Ray was made by Chaos Group. It uses some of most proceed and sophisticated practice. Such as global illumination (GI), algorithms, path tracing, photon mapping and irradiance mapping.

https://www.youtube.com/watch?v=UDLQGE1980c

8. Maxwell Render (free demo version available): It is a rendering engine. This Raytracer-type rendering engine is impartial 3D render. It utilizes Global illumination (GI) and algorithms based on metropolis light transport difference.

https://www.youtube.com/watch?v=83qtRvpsKgA

9. Kerkythea (free): It is a unique and impartial rendering tool. It works to create raytracing and Metropolis light transport. It is to be used in clay rendering. One of the famous feagure of this trade is Alex Hogrefe.

https://www.youtube.com/watch?v=792QHefWVrY

10. Raylectron (paid, free trial available): This is another rendering engine generally devoid of approximation and/or emulation and ready to produce animation.

https://www.youtube.com/watch?v=9ecijQep3dM

11. SU Podium (paid, free trial available): It is photorealistic rendering image of sketchup model. It uses objects like: texture, colour, shadow, group or background. SU Podium uses ray tracing and global illumination (GI).

https://www.youtube.com/watch?v=Tq0Ay-S_TwM

Reference:- landarchs.com

# 10 useful sketchup tips to add value to your project

Debamoy Ghosh

Many experts are now concentrating on bringing up innovations in the sketchup model. They are putting tireless effort to bring latest free modernized extensions. Some of those experts are willing to spend money for it. These people work with the sketchup programme to turn it best 3D modeling software.

Some experts even use beautiful descriptions to it. An example: if sketchup is a smart phone, the extension is apps which make it smarter.

These are some of the best known extensions that Sketchup writer Kevin Pfeiffer knows and express this in landarchs dot com.

- **Weld** – This extension attaches two lines together. It is simple and user friendly.
- **Selection Toys** – this basically selection tools.
- **S4U Make Face** – It is often used for importing the CAD drawing. The 3D model can be made easily by this.
- **CLF Scale & Rotate Multiple** – It credibly plant model and breeze.
- **InstantRoof** – It is a roof maker. A rectangle can be developed into a house.
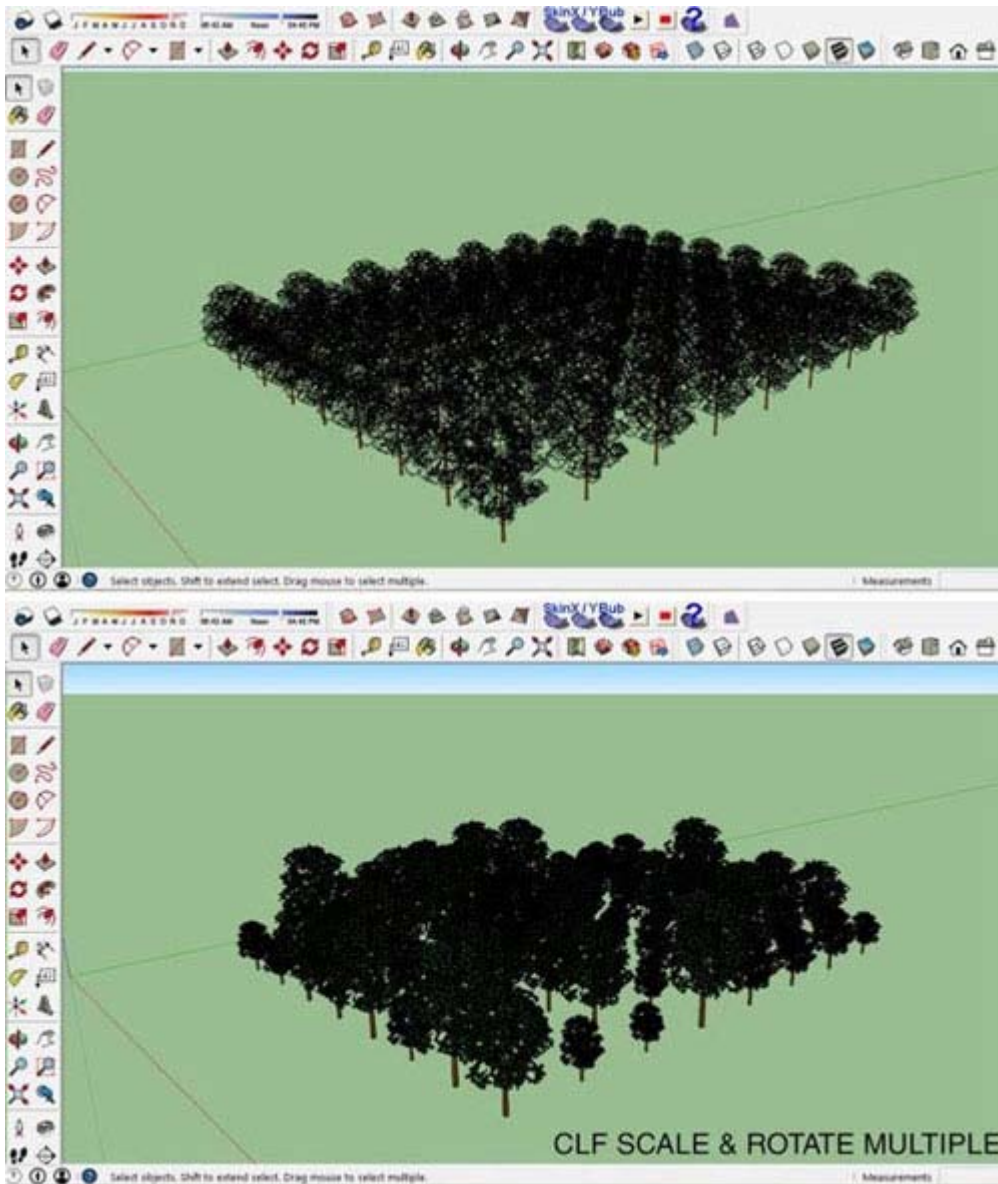
Styles: Style is important in sketchup. Sometime style pens are used, the user can use it to outline. The access is easy. That is: window>styles
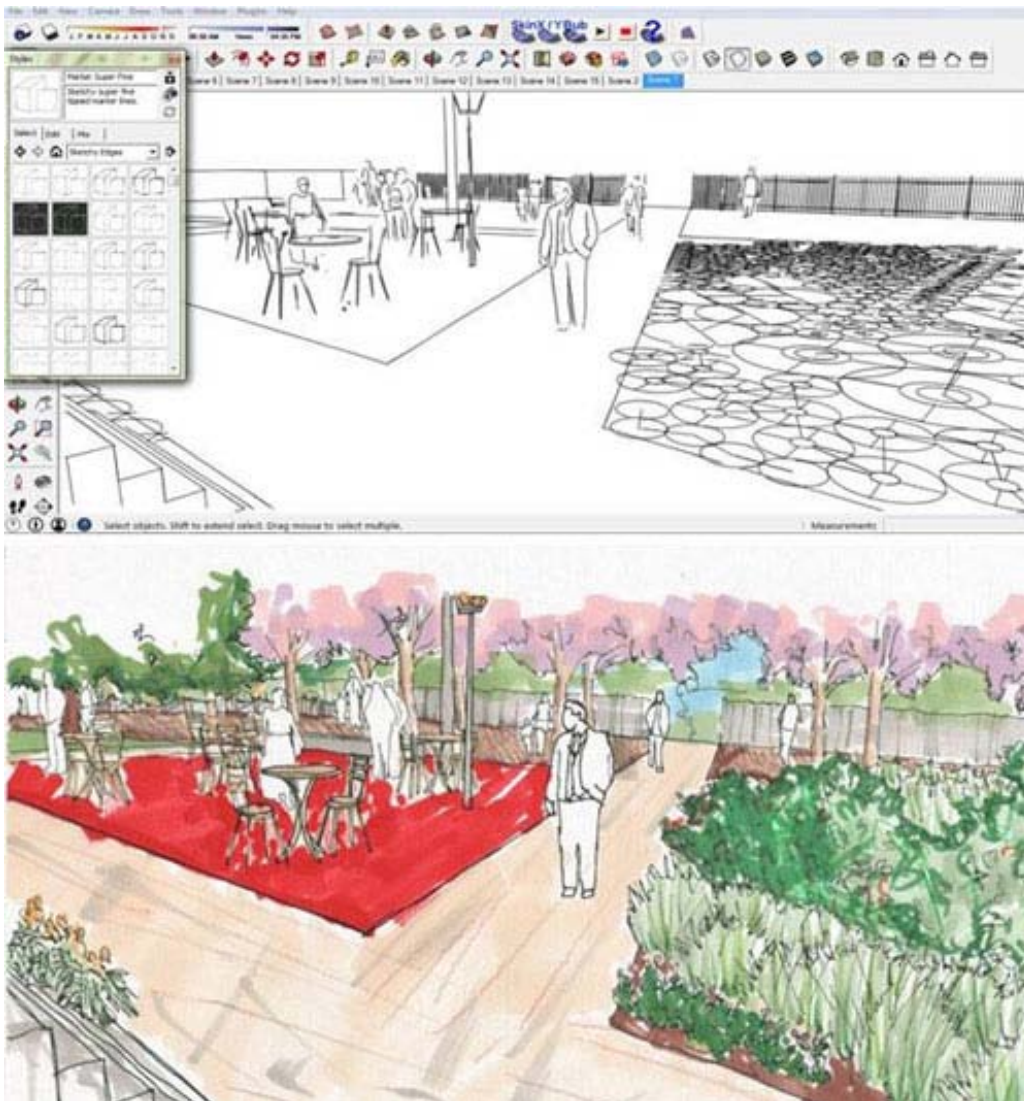

Image Courtesy: landarchs.com

Photo-Realistic Renders: This tool includes shaderlight, Podium, Vray and Twilight. They have price point and learning points.

https://www.youtube.com/watch?v=wcJb24Rt3hE

Making of 2D Face Me Trees: There is always been lack of plant species. It is difficult to obtain the free vegetation texture. But it is always easy to capture photos as per requirement.
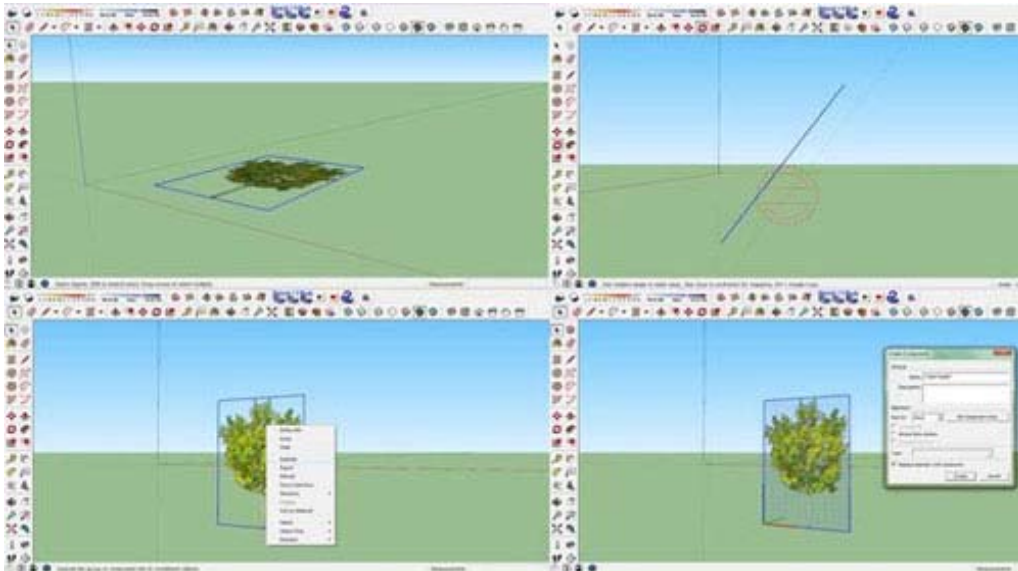
Image Courtesy: landarchs.com

Here is the flow chart:-

Import the photo of any tree> TIF and PNGs format> rotate the image 90 degree angle> face me option to be checked> hide the square board with hide tool if user need it > change the axis to the middle of photo > now user can get site specific tree and vegetation.

Mirror an Object: Mirroring sketchup object is exactly done in scale tool. It can highlight the entity, move it to scale and axis. If you type -1, the mirror will off.
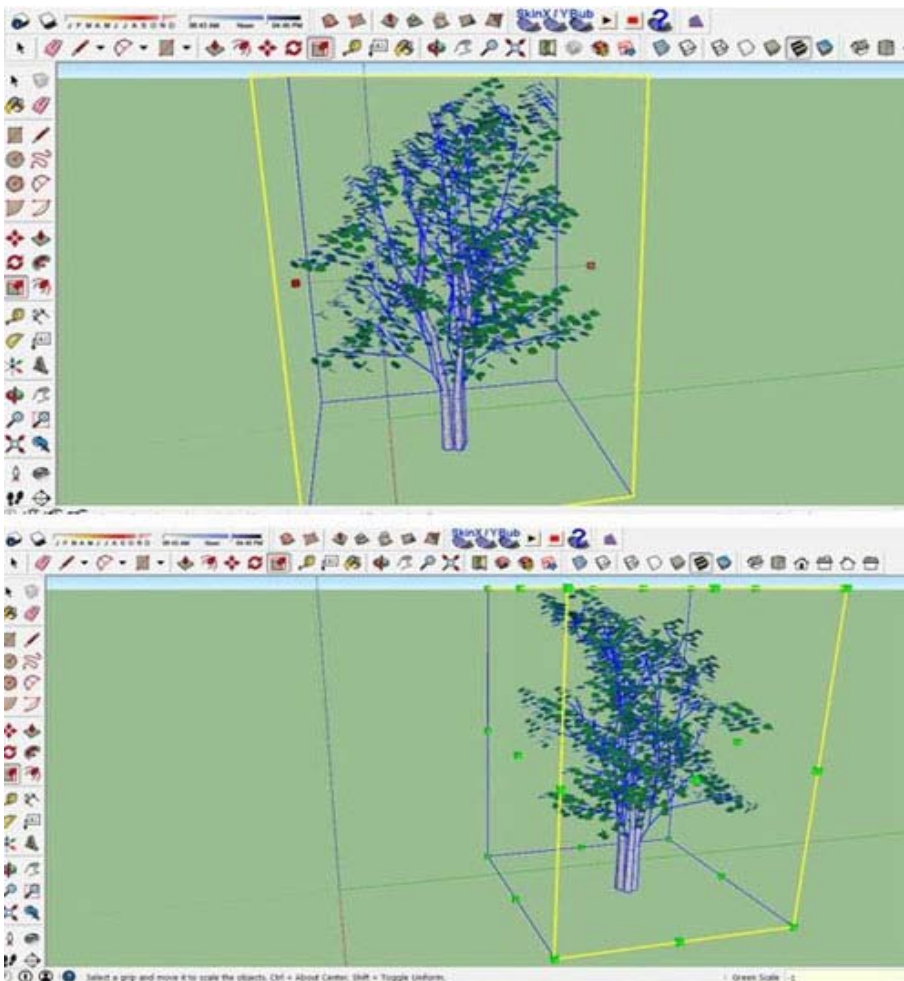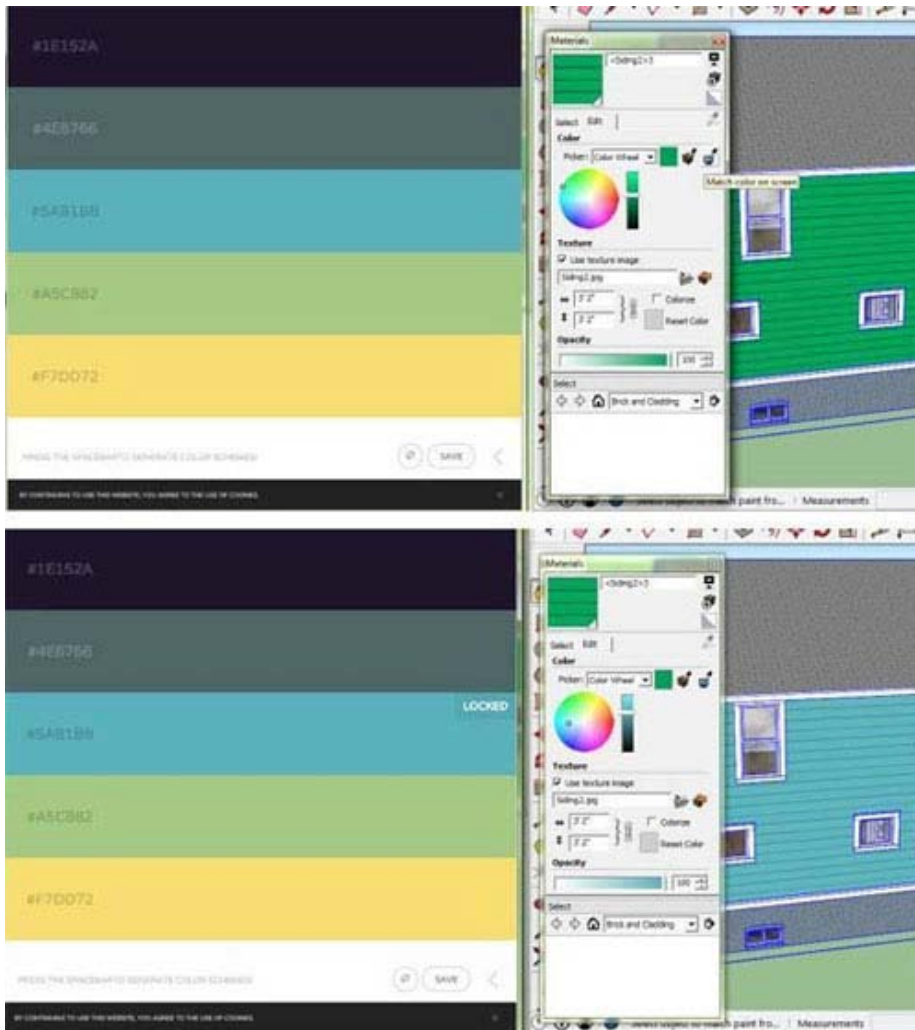

Image Courtesy: landarchs.com

Shift + Mouse 3 for Panning: Mouse 3 can easily be obtainable. But use the orbit, which is mouse 3 itself holding it to shift down.

Colour texture: Use eye dropper tool to picking the colour, here using the material tool is very important.

How to Speed Up SketchUp and Prevention of Crashing: Sketchup can sometime slow its action. It also can crash in the middle of the work. Preventive measure: - Turn off shadow> only use 3D model vegetation > use the layers
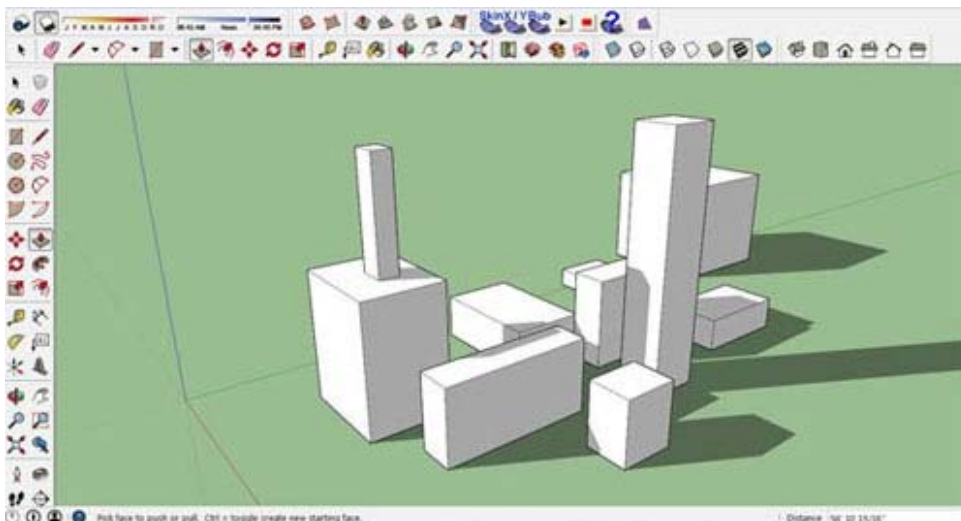

Image Courtesy: landarchs.com

Section View Using SketchUp: The user needs to go to camera and create the parallel projection. Now one can go to the standard views.
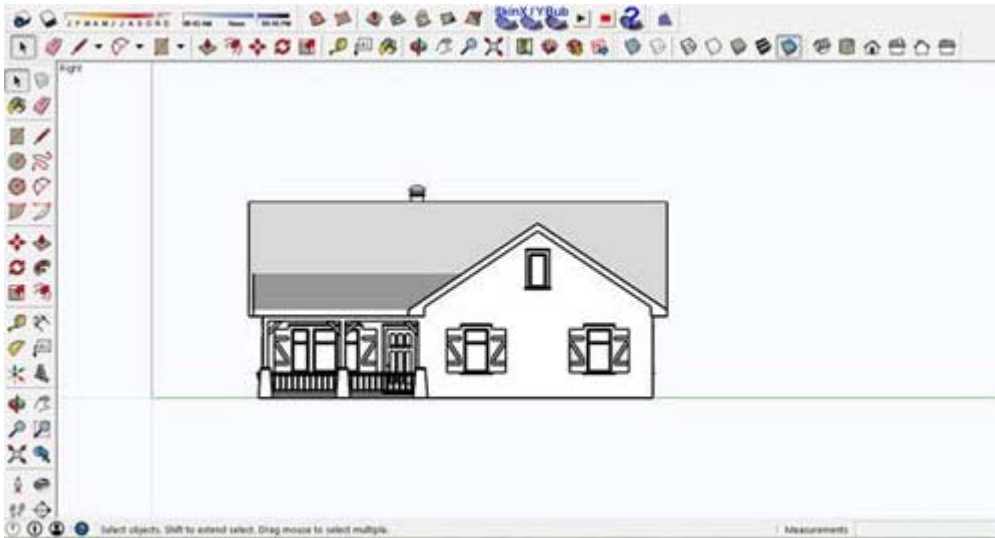

Image Courtesy: landarchs.com

Large Toolset: To obtain to the large toolset user requires doing is view>toolbars…>large tool set.
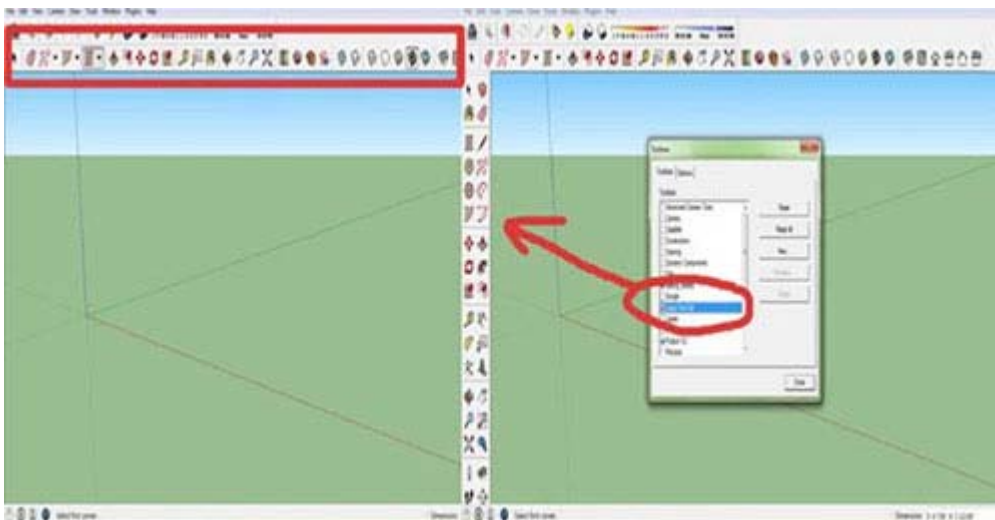

Image Courtesy: landarchs.com

Ref: landarchs.com

3D modeling in Real Estate

Debamoy Ghosh

What is the relation between 3D modeling and real estate? It may be look like irregular question, but just like good funding changes the face of any investment, the 3D modeling could change the concept of real estate. Based on the article of www.realestatetechnews.com we are trying to bring an excerpt for the like minded.

The advanced modeling software has brought the changed. Now the developers can see the scale-down version of layout, even the investor can see it before the construction commences. It will pull down the cost, investor can have fare ideas.

Here is some example: There are many 3D modeling software for the real estate developers. The creators are Dave Eisenberg, Dustin Byrne and Judy He. Things can be made ranging from roof to floor.

Hit this link to get access of seven different real estate apps

Here is a 3D scanner called Matterport. This software instructs the scanner to scale the entire room and make digital representation.

Image Courtesy: realestatetechnews.com

These software's are popular for collecting datas like dimensions, windows placement and empty model, the model at the end of the day can be manipulated.

To get it one step ahead, builders are using this kind of data to discover the idea of using 3-D printed resources in actual building.

NASA emailed a wrench into space. It can also be possible. Now consider about those declare on a better and local scale.

Image Courtesy: realestatetechnews.com

Engineers could print building mechanism used in houses and offices, which would be particularly useful in hard-to-reach or rural parts of the earth; much like going into room.

3D printing can be used for prototyping the building. 3D printing can be varied in the use of real estate. A dutch architect has planned to made world's largest house made of 3D printer. He and his team built Mobius "strip home". The world's largest 3D printer has been used here which will go to get an estimated floor of 12,000 sq feet.
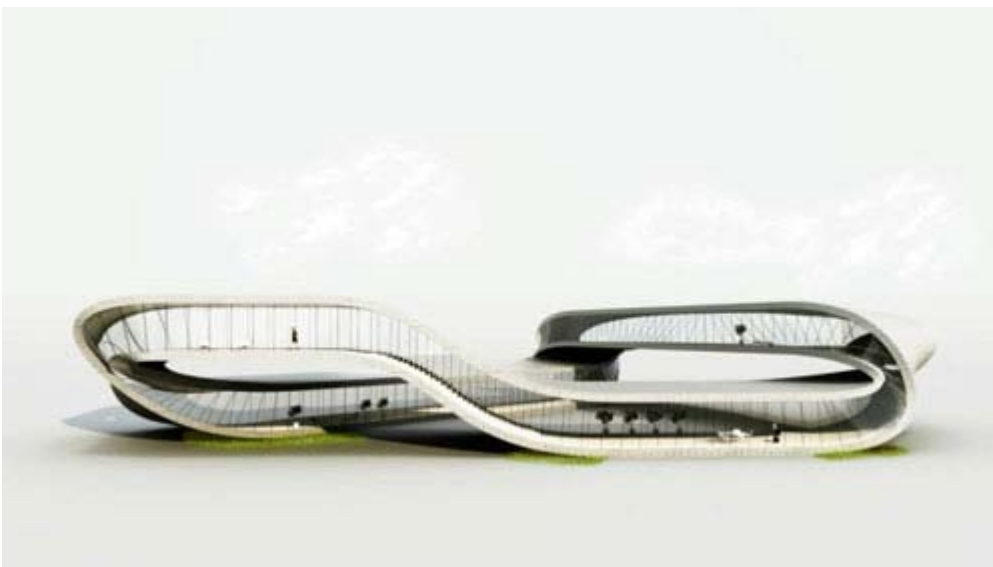

Image Courtesy: realestatetechnews.com

Refrence:- www.realestatetechnews.com

10 Ideas for the Ideal 3D Modeling Software

What is the most perfect 3D modeling application especially for 3D printing? Time is one of major aspect here. Normally it takes 2000 hours to get in the CAD/3D modeling. It takes a considerable amount of time – especially for consumers, patron and clients.

This problem has to be solved for the sake of CAD/3D modeling's long lasting success rate. The business has to be developed here.

It is often seen that there are only one 3D modeler on the whole company and the machine goes unused if the man or woman would busy.

If everybody in the workplace can create simple things then the machine will be in work 24x7. The 3D printing is similar like Gutenberg press, but nobody can read or write.

We require having easy 3D modeling activities preserving millions of people to create new models. This will develop the market significantly.

Good steps have been taken so far over the year. Now the experts can use MineCraft for 3D printing like 3DTin and TinkerCAD.
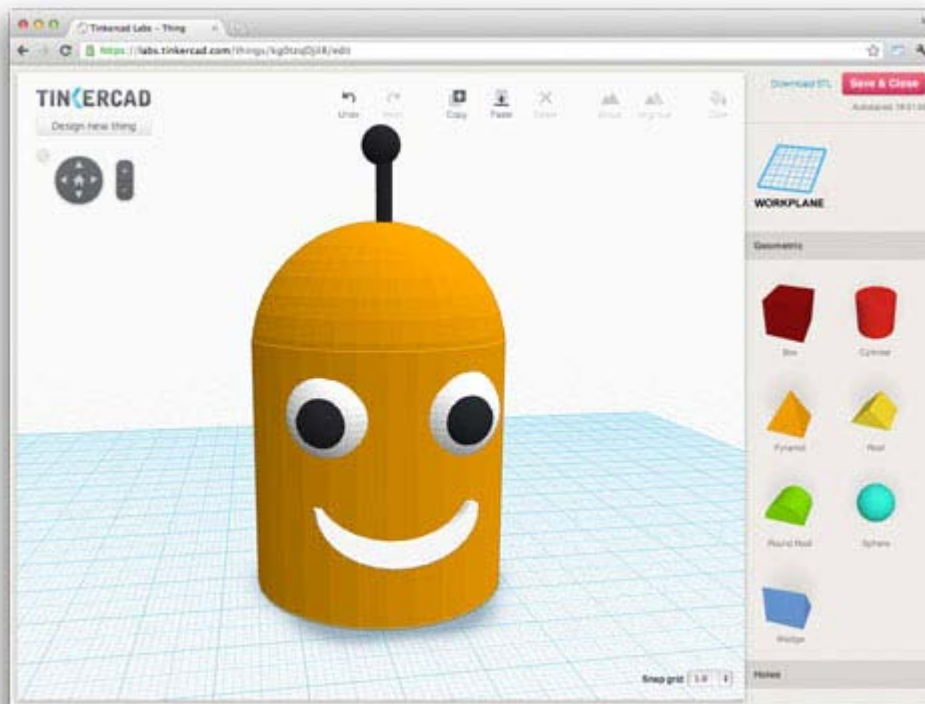

Image Courtesy: www.3ders.org

Joris Peel writes in www.inside3dp.com that he has trained kids given a link to 3Dtin and 80% of the group would be capable to create a 3D printable model. This would be extremely dissimilar with customary CAD packages.

3D Systems Cubify Invent and Cubify Design are awesome tools. The preponderance energetic party in making simple 3D modeling tools is Autodesk. Their 123D suite contains 10 tools to be able to use to make. My favorite is Meshmixer which is a great push/pull tool for creation.

Below are ten thoughts for the ideal 3D modeling tool that would thrust 3D printing forward:-

- TinkerMixer: TinkerCAD's building up of blocks and pushing and pulling models to create them more organic.
- SolidDots + smooth surfaces: - SolidDots is an iPhone
- Creepy Facebook App: People can take help from Facebook. Facebook app that inquires people about what design items, shapes, products, brands, and paintings can be possible.

- DarkerDepth: People sometime face problem transferring 2D to 3D. 3D shape is a complex shape to be formed. But it can be drawn. You can use Ipad drawing app wherever needed in darker the color used. This would let a person sketch in 3D.
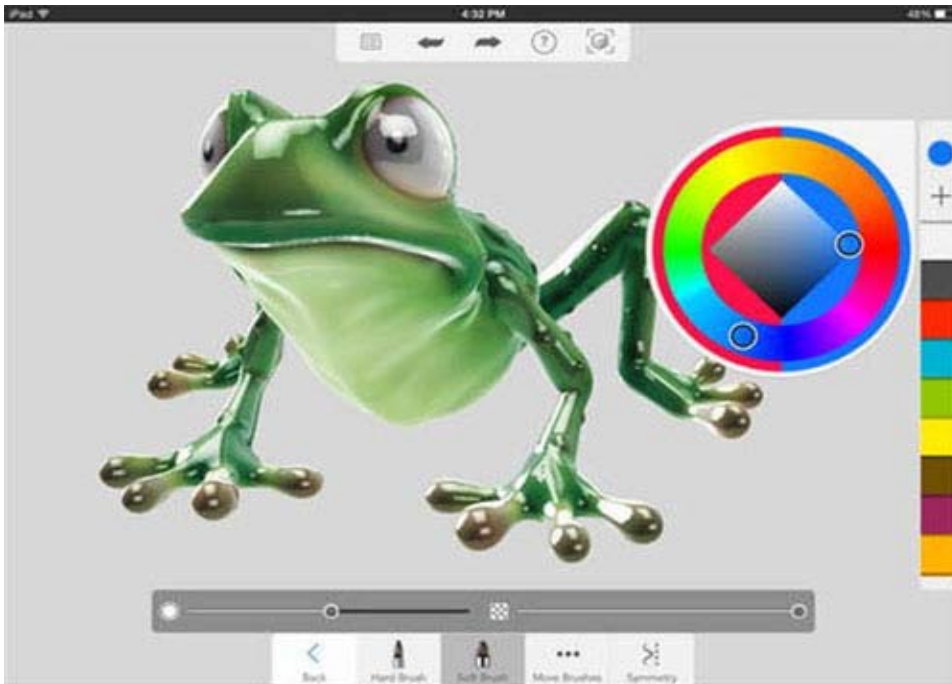- Kinect Draw: Xbox Kinect for scanning is necessary.

Image Courtesy: www.3ders.org

- Wii Controller Light Sabre 3D modeling: What if you could wield you'll Wii controller sort of a lightweight saber and in a funny approach, with the accompanying noises at an object and creates?
- Lego Virtual Designer: Lego set already has tools to allow you to style on-line. What if through associate degree app you'll just about build things out of Lego set bricks then either constructs them in real or 3D print the output.
- Beautiful Modeler: It brings out the virtual clay in the iPAD.
- ClayService: It is a 3D scanning activities by which clay model can be made.
- D Scanner for iPhone:- Many people area unit engaged on this however if a reliable 3D scanner for the iPhone were to emerge that makes good STLs then any quite input or object may well be 3D written. What does one think? What ideas does one have for a perfect 3D modeling app.

Image Courtesy: www.geeks3d.com

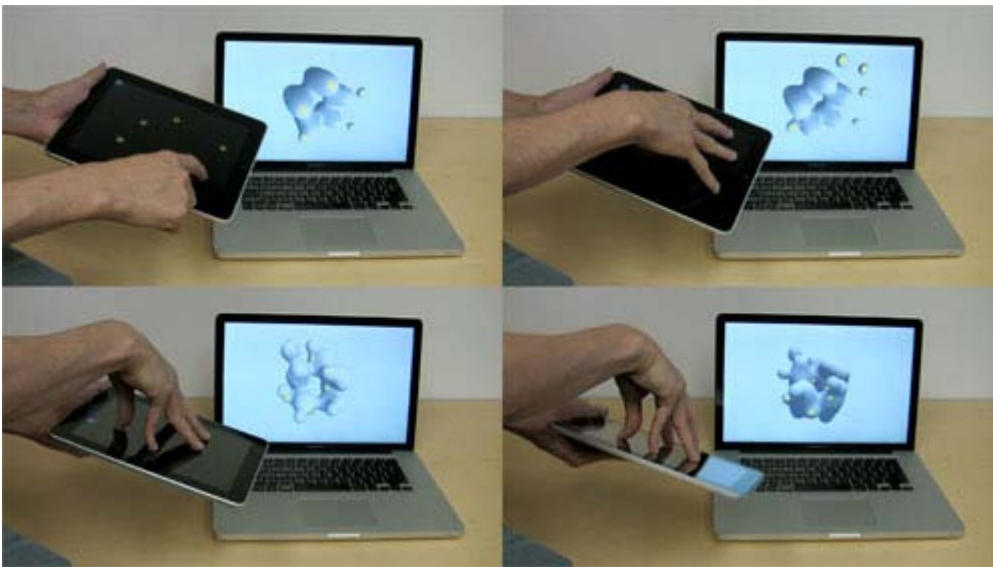Image Courtesy: cronosal.blogspot.com

Image Courtesy: interactivefabrication.com

Reference:- www.inside3dp.co, influenced by the article of Writer Joris Peels

Skalp sections and patterns for Sketchup

skalp4sketchup.com

Skalp has been designed and built as an easy to use yet powerful Live Section Tool. It represents the key missing features needed to realize a long standing dream: Create stunning construction documents inside SketchUp.

„I don't use cad anymore! SketchUp, Layout and Skalp is all I need." - GW., architect

„game changing"

The Skalp development Team has its roots in architecture and 3D software, but that does not mean Skalp is intended for architects only! SketchUp is being used in numerous disciplines nowadays, which is why we intended Skalp to be as 'generic' as possible. This means we do not want to change or disrupt the user's existing workflow: Skalp should support whatever is already being done in SketchUp, yet simply offer the ability to create superb drawings as a game changing bonus.

„a joy to use"

Skalp takes SketchUp's standard Section tool and puts it on steroids. It literally solidifies your cross sections. Offering automagical updates and a great user interface filled with relevant features, making it a joy to use.

„I have been using Skalp from the moment it was released and it has changed my workflow dramatically." - Jason Wolfe-Daimpré, interior architect

Integrating Skalp in your design workflow is intuitive and effortless. Sections fill while the model changes. This holds true even during group or component editing, nested or not.

„super easy"

Skalp sections support drawing scales, line widths, line colors, fill colors and even transparencies. Skalp's Pattern Designer creates tileable SketchUp textures from standard CAD pattern files. Just import your own, preview, use and tweak them, it is super easy.

„very powerful"

Skalp Styles: tailor your sections exactly to your needs. Apply separate drawing scales and looks onto section cuts being used in multiple scenes. Manage them with ease.

This is what Skalp Styles are all about. You can use tags, layers, textures or other meta data to customize your own representations. Skalp offers a very powerful yet intuitive way to manage section representations.
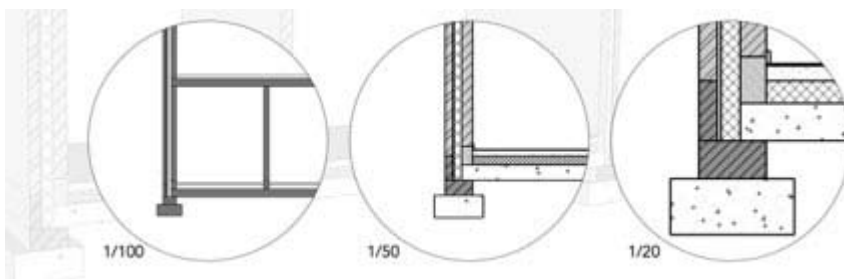
„great output"

With Skalp your drawings In SketchUp Pro's Layout can superbly replace your traditional cad plans.

Or you can integrate your SketchUp / Skalp designs in your prefered cad based workflow: we've integrated DXF export with vectorial hatch definitions.

„Skalp is a hugely useful plugin and is worth every cent you pay for it." - Edson Mahfuz, architect

If you want to know more about Skalp, visit our website at skalp4sketchup.com
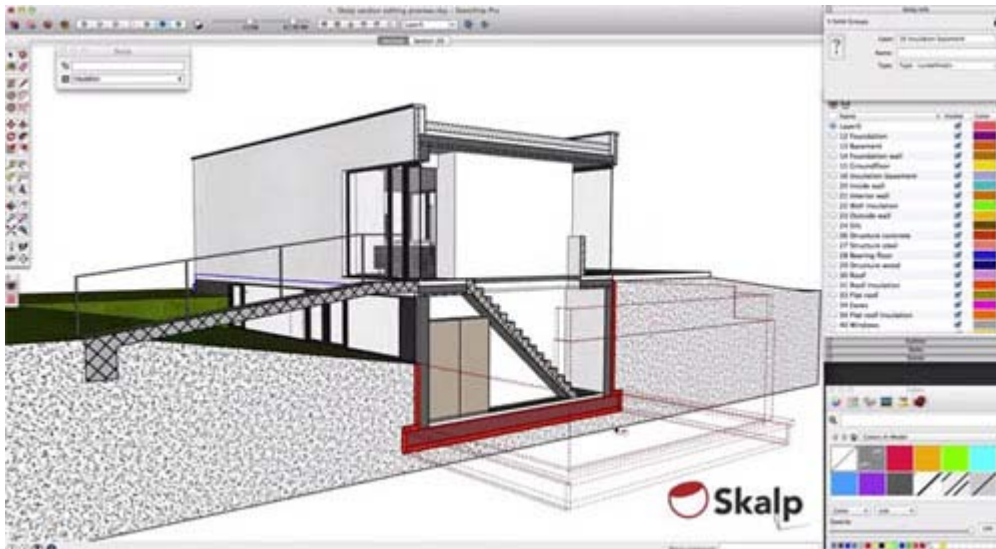
Live and Online Sketchup training

Debamoy Ghosh

Good opportunities never repeat. Live and online SketchUp training is one of such opportunities that help the budding designers to learn more about SketchUp.

www. sketchuptrainer.com presents classes across the globe. Acclaimed designer Daniel Brown will be in the trainer seat to instruct the artists.

The venues are as follows:

- Boston
- New York City
- Philadelphia
- Washington, DC
- Chicago
- The online and monthly training has been commenced already.

   Place: New York City
   Date: February 4-5

- The first day will train you the basics to make a successful modeler. The second day will contained with CAD and Sketchup work flow and the photorealistic rendering happens. Detail

   Place: Washington DC
   Date: February 18 - 19

- This is also short term training. The first day of the training will show the basics and second day will be filled with CAD, sketchup work flow and photorealistic rendering. Detail

   Place: Chicago
   Date: February 19-20

- Within two days, this training will ensure a budding artists that how to become a modeler and extensive knowledge about CAD, sketchup work flow and photorealistic rendering. Detail

   Place: Philadelphia
   Date: March 4 – 5

- This is also a short term learning programme. This is almost same as Washington DC, Chicago or Philadelphia. Detail

   Place: New York City
   Date: March 25 – 26

- This is really luring. This short time training programme will give you lesson, become modeler and knowledge about CAD, workflow and rendering. Detail

   Place: Washington, DC
   Date: April 8 – 9

- The first day will train you the basics to make a successful modeler. The second day will contained with CAD and Sketchup work flow and the photorealistic rendering happens.Detail

   Place: Boston
   Date: April 15 – 16

- Within two days, this training will ensure a budding artists that how to become a modeler and extensive knowledge about CAD, sketchup work flow and photorealistic rendering. Detail

Ref: sketchuptrainer.com

Detail Collection of SketchUp 3D warehouse

Debamoy Ghosh

If you remember component bonus, you will also remember 2D and 3D tree and how it make and those beautiful woodwork, joints and roof. Now these components, mainly composed by the team sketchup have always been added to 3D warehouse.

In the sketchup 2015, it has been extended; glorified and standard component has been improved. Till now, 2800 individual content have been restored in 3D warehouse the repeated browsing reveals many collections. These theatres light are the best example.

These improved, developed components are genetic in nature. The title of new components is 'detailed'. If you take the search results, it would show: "HMI Light 4000Watts with Barndoors" with all display simplified and detailed display.
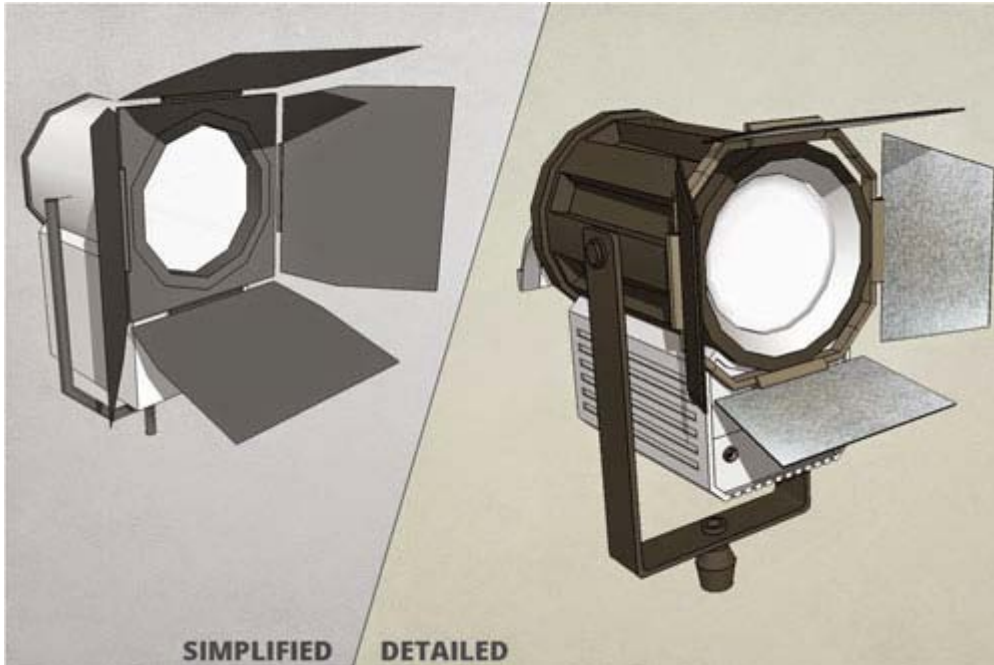

Image Courtesy: sketchupdate.blogspot.in

These components are characteristically 'geometry heavy'; the user has to consider the use of sketchup model. The simplified components can be considered as proxies and replaced it with detail version.

The way to access of content is: 3D Warehouse Detailed Collections via SketchUp's 3D Warehouse window (File > 3D Warehouse > Get Models) or via your web browser. These are all filled with information together with IFC attributes and metadata. They will always try exporting to Tekla BIMsight or Trimble Connect – both accept IFC files.

One can browse 3D warehouse for those contents. Special care has been taken to add relevant tags. The collections are electronics, cranes, jibs and cranes.
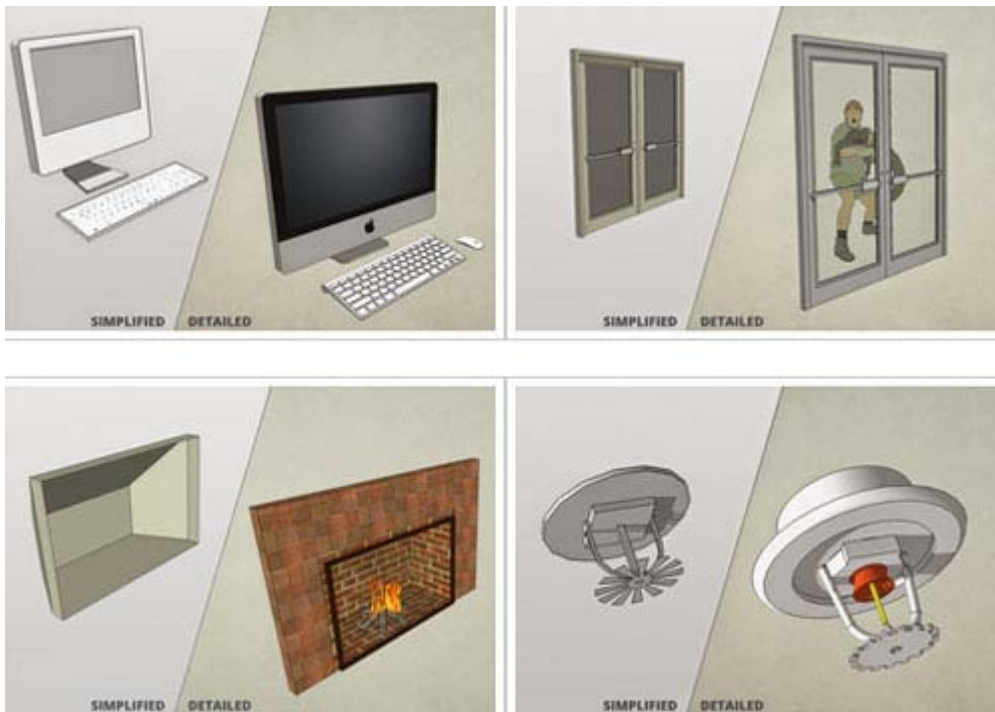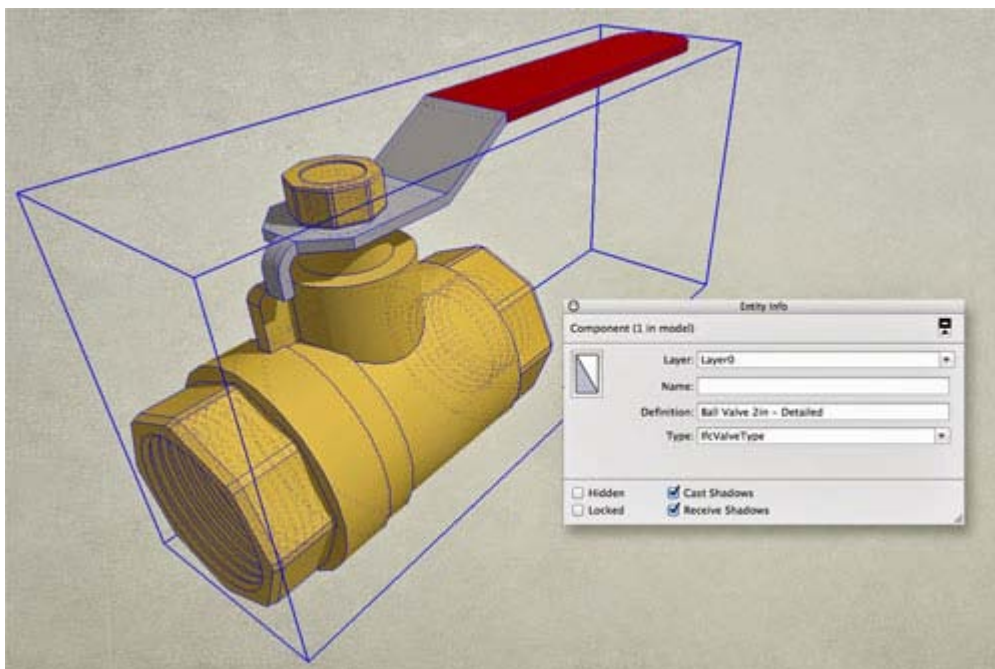
Image Courtesy: sketchupdate.blogspot.in

Image Courtesy: sketchupdate.blogspot.in

Ref: sketchupdate.blogspot.in

Sketchup creates shaker bench

Debamoy Ghosh

Preparing a custom project is not so easy. There is a requirement to ready every single part always. The project can be created custom. Simply the user has to take a stock at it and add a personalization. Author Randy Maxey has written on this issue on woodworkingnetwork.com

This construction (Shaker-style sitting bench) is a very simple construction. The conventional shop tool (CNC machine) has been used to make it. The maker can add CNC or hand-carved detail too here or both in the rail.

The overall size can be altered too. But it will depend on the appeal of the customer. This is basically a blend of power and hand tools. The carpenter's hand can be help for carving. Here in this construction, only 4-5 poplar are used. It was going to add carving details to the rails, the carpenter used basswood. The rails are 3/4 ″thick.

Even, the final size can be altered as the customer's choice. The legs are connected to top with wedged through tenons in unlock mortises in the pinnacle. The rails contain 1/4 -deep dadoes on the rear that fix into 1/2 -deep notches cut into the legs.

The legs of the table are connected to the top of stuck by tenons in open mortises in the top. It gives the rail the favored power that they should have.

This consents the rails to provide power against racking without the use of bind. The carpenter should the bent outline on the legs and rails at the group proverb and sanded them flat with a swing spindle sander.

The rails were embossed before meeting. For end product, the monument was tinted with acrylic paint. A coating of linseed oil was permitted to cure for 24 hours before it was lying. There are three coats of water-type polyurethane. The plan of the bench added the facility to personalize it for each customer makes it alluring. It's a well-liked project that acquires a lot of awareness.

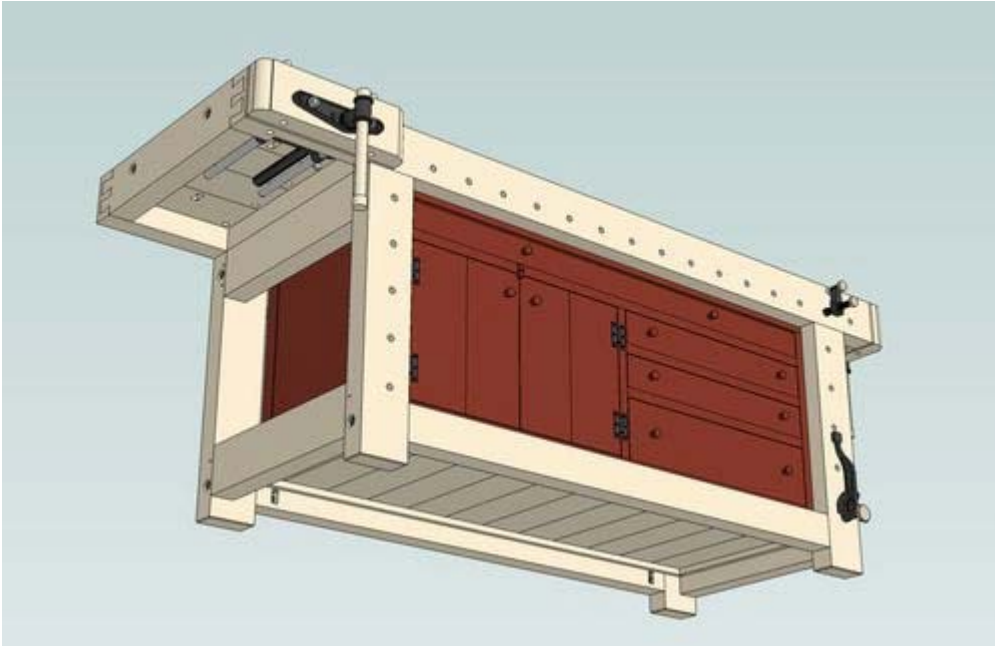Image Courtesy: woodworkingnetwork.com

Image Courtesy: lumberjocks.com

Ref: www.woodworkingnetwork.com

Smoothie 3d the newest free 3d modeling software

Rajib Dey : Editor-in-chief

Smoothie-3D, an exclusive free 3d modeling software that produces 3d printable smoothest 3d models. These 3d models can be used for advertising, 3D visualization, 3D games, web and any other field belongs to 3D design.

The Smoothie-3D software contains astute modeling proficiencies. You can load any image, instantly illustrate an outline of the several parts associated with that image as well as convert any 2D photo into a 3D dimensional printable model right away.

Smoothie-3D contains the following exclusive features :-

- Apply a background image for making the design and texturing as well as transforming it into a 3D model
- Import 3D models from STL or OBJ files
- Export models to STL, OBJ, VRML
- Transfer models to Shapeways, Thingiverse or i.materialise
- Symmetry management method
- Create models from strokes
- Produce smooth shape design, extrusion, revolution, text and classic primitives
- Capability to subdivide and smooth models

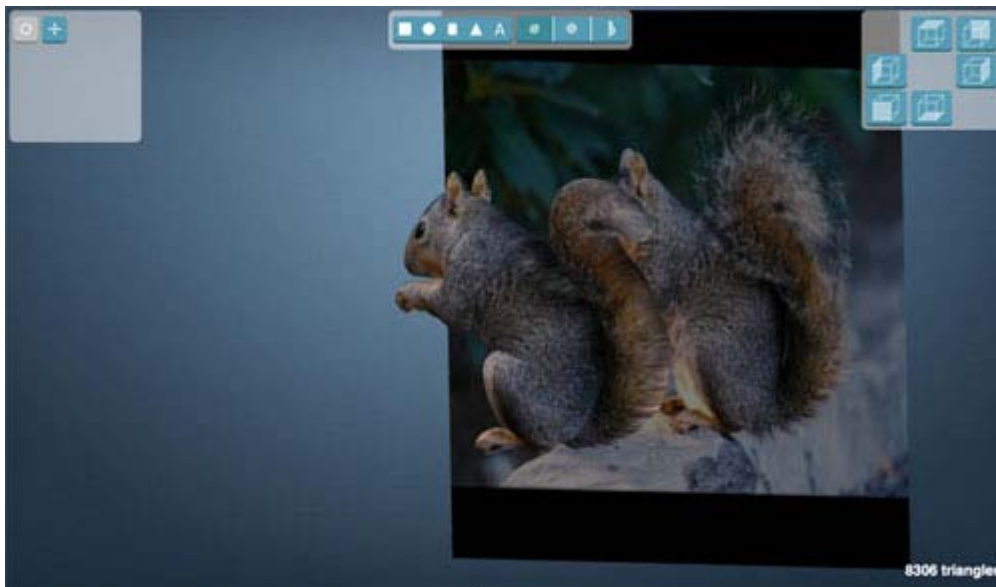Watch the following video presentations to learn how it works.

https://www.youtube.com/watch?v=fbEHGUnpMxI

https://www.youtube.com/watch?v=fbEHGUnpMxI

Image Courtesy: 3dprintingindustry.com

VisualARQ 1.8 - BIM and Architectural Tools for Rhinoceros

Rajib Dey : Editor-in-chief

VisualARQ is a useful free-form architectural software for Rhinoceros that can generate architectural interiors instantly. If you want to include architectural features and parametric architectural objects in 3d modeling & 2D documentation, then VisualARQ is best fit software.

VisualARQ contains the following exclusive features:-

- VisualARQ is a powerful feature-based editor to produce and edit parametrical objects.
- Generate lights and allocate materials to objects, to obtain superior quality images of interior and exterior architecture.
- Simplify any architectural project design and create complicated architecture design with curved walls, free-form surfaces, free-form beams.
- VisualARQ is completely based on Rhino interface which involve Rhino-like menu, toolbars and command's behavior.
- The Grasshopper Components add-on facilitates the users to deal with VisualARQ objects directly from Grasshopper.
- Cut sections, make plans. No matter how complex your design is. Save time getting all project documentation automatically from the 3D model.
- VisualARQ allows you to generate floor plans, sections, elevations, surfaces, dimensions, and all object information from any 3D model.
- VisualARQ offers a standard 2D architectural representation of the 3D model in real time.
- If any modification is made, all drawings are automatically updated.
- Model through 3D smart architectural objects.
- VisualARQ contains an extensive library of parametric architectural objects like walls, beams, Columns, Windows, Doors, Slabs, Stairs and Roofs.
- Any object can be easily generated, altered and edited at any time.
- There is option to produce custom objects, styles, and object libraries.
- Import your Autocad 2D files as well as create them in Rhino. Transfer lines in 3D walls, roofs, slabs, etc. with single mouse click.
- VisualARQ includes BIM (Building Information Modeling) features to Rhinoceros by linking geometry and object data and export files .IFC file format.
- VisualARQ supports other Rhino plugins for architecture like Grasshopper, Dynamic Display, Paneling tools, Savanna 3D, etc.
- VisualARQ material manager supports materials of all render engines having compatibility with Rhino.

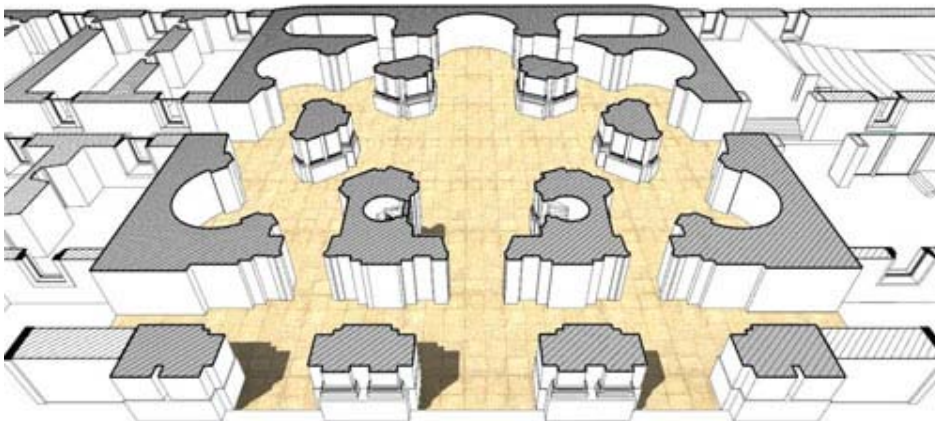Get a free online demo

For more information, visit www.visualarq.com

http://vimeo.com/107746650

Image Courtesy: blog.visualarq.com

SketchUp 2015 Comes Out With a Colossal Popularity

Rajib Dey : Editor-in-chief

An exclusive online video training course on sketchup 2015 conducted by Linda. George Maestri will perform as the course instructor.

By undergoing this exclusive **sketchup course** one will be familiar with how to create drawing, designing, and animating your ideas with SketchUp, the leading 3D modeling program used for diverse applications ranging from architectural rendering to game design. In this course, George Maestri focuses on the fundamentals of **SketchUp**: navigating around the interface, maneuvering objects, drawing in 2D and 3D space, dealing with materials, and using textures. Besides, one can also learn how to generate uncomplicated animations and export any artwork in 2D and 3D formats.

This sketchup **video** course supports both SketchUp Make, the free version of the program, and SketchUp Pro.

Topics covered:

- How to produce camera views
- Shading faces and edges
- Selecting, moving, scaling, and rotating objects
- How to generate basic circles, polygons, and arcs
- Creating 3D text
- Labeling a drawing
- Handling layers
- How to get and use components from the 3D Warehouse
- How to apply materials and mapping textures
- Animating artwork
- Exporting sketches in 2D and 3D

Get more information on this sketchup coruse
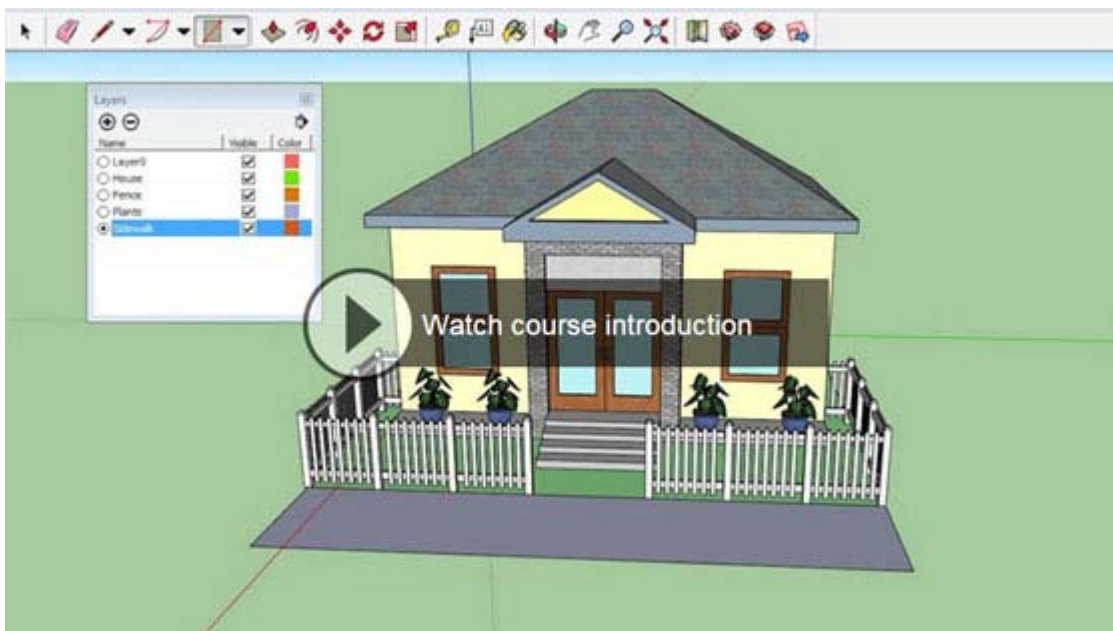
Revolutionize your 3d modeling process with Augmented Reality App "Lego X"

Rajib Dey : Editor-in-chief

Gravity, a London based studio, is going to introduce an augmented reality app alias Lego X to produce digital (and scalable) models of your design in reality through the use of location-mapping and gyroscopic sensors.

Lego X can easily makes the edges smooth as well as connect corners with the help of an algorithm that facilitates trouble-free amendment and flawless 3d printing.

In the near future it will be possible to create digital models through standard LEGO-sized bricks devoid of any computer software. This can make a sea change in generating and printing any building models as well as distribute them online.
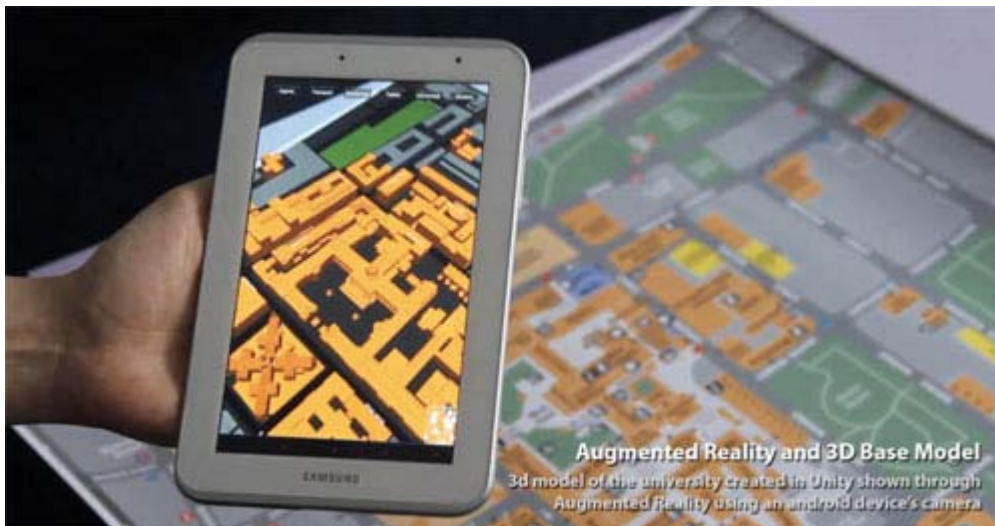
https://www.youtube.com/watch?v=LGqvLzRqiC4

Image Courtesy: archinect.com

World Tallest 3D printed building in China

The Chinese construction firm that astonished the world last Gregorian calendar month by making 3D printing ten homes from second-hand concrete in twenty four hours is back with a lot of success – it's shaped the world's tallest 3D-printed building, along side a housing villa, beat solely ten months.

A five-story housing building (the world's tallest 3D-printed building) and a sumptuousness mansion capacity one,100 sq m ar now on show at Suzhou piece of ground in Jiangsu province, all engineered from second-hand concrete and absolutely adorned with internal and external fixtures.

WinSun Decoration style Engineering Co is that the product of Ma Yihe, connected the inventor primarily based in Shanghai whose dream is to make eco-friendly low-priced homes mistreatment recycled construction waste mixed with cement, which not exclusively cut prices might however even be far improved for the atmosphere.

Recycled waste product used:-

At the end, he has exhausted twenty million Yuan ($3.1m, £1.9m) and twelve years to expand 3D printer vi.6 metres tall, ten metres wide and one hundred fifty metres long that option a twignozzle Associate in Nursingd an automatic material feeding system.

WinSun at present holds ninety eight national patents for its 3D printing building technology and construction resources. Last year, Ma used AutoCAD software package to system the structure of the homes, that every livetwo hundred sq. metres, whereas conjointly conniving tracing ways so plumbing, electrical lining, insulation materials and windows might be extra later.

The houses came out thus well that he then made associate in Nursing structure for his company covering a neighborhood of 10,000 sq m, that took simply a month to construct, victimisation Associate in Nursing mechanical system of 4 3D printers.

Eco-Friendly:-

The group press conversation listened by three hundred construction consultants, experts and investment bankers in Jiangsu; the corporate affirmed that the villa was designed for a Taiwanese assets company referred to as Tomson cluster.

The sum of price of printing the villa is over one million Yuan and Tomson cluster has pre-ordered ten of the villas, whereas the Egyptian government has pre-ordered multi story homes supported the first style from last Apr.

Ma will get what he wants. He has formed the WinSun world business enterprise with associate yankee investment firm, with the aim of transferral low cost and economical housing to low and middle class families in twenty countries together with Morocco, Tunisia, Saudi Arabia, Qatar, and also the UAE.

Image Courtesy: blogs.dlt.com

The company has signed contracts with peninsula KDC Corporation to bear its 3D printing construction technology to peninsula, and with the KIP International College, a global organization seeking solutions to world problem for an assets future.

WinSun has in addition signed a variety of partnerships with Chinese firms and analysis establishments, together with China Railway twenty fourth Bureau cluster.

WinSun and China Railway can build 5 factories along in Shanghai's Zhangjiang high-tech Park,within the regions of Hopei and Heilongjiang, in addition as in North American nation and Russia.

Ma additionally declared that he's developing a replacement style of construction material for his 3D printer, mistreatment desert sand, because the material offers environmental protection and nice edges in energy and material savings.

WinSun can work together with Nile Sand Material Technology Co to develop twelve "Dream Factories"within the desert employing a sand 3D printer over subsequent 2 years.

Image Courtesy: ibtimes.co.uk

Reference:- www.ibtimes.co.uk

Magazine Details – The Creative team of Sketchup-ur-Space

Started in September 2010, Sketchup ur Space (SuS) was the first online magazine devoted to SketchUp, that unique, innovative 3D design tool from Google. It holistically covers features, events, news, updates, reviews and many tips and tricks.

Rajib Dey: rajib@sketchup-ur-space.com

Rajib, the editor-in-chief of SketchUp ur Space magazine is the main writer. He is responsible to write the cover story, blog and many other columns. Along with it, He is creating a liaison between the writers and the readers.

Manoj Kumar Singh: manoj@jobs2india.com

Manoj is enthusiastic helps to put the content of the SketchUp up Space magazine in the html version. Manoj is the html developer who beautifully creates each and every edition with care along with the PDF version.

Abhishek Mondal: abhishek@jobs2india.com

Abhishek is the designer-in-chief of this magazine with the help of his creativity Sketchup ur Space has gotten a classy as well as trendy look...

Debamoy Ghosh: debamoy@jobs2india.com

Pouring the confidence to budding 3D modelers is a challenge, which makes them believe that they can create a universe. I try to bring exciting stories that not only riveting read but put them the right technical path. After all, every right action needs believe and determination for fulfillment.