Sketchup-ur-space

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A knowledge hub for sketchup communicty

ISSUE

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- Sunlight And Daylight Analysis With Sketchup

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- Introducing The Real World In Sketchup In Few Steps
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John Parker, Graphics And Technologies Teacher





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A letter direct from the editor desk highlighting on July edition

Hello friends!

We are going to publish another fabulous edition of sketchup-ur-space. We work diligently to make sure that our publication is produced according to your standards and our readers get the best magazine. Our magazine is a publication of the utmost quality that is offering a class by itself.

Read the July issue of our magazine which includes an exclusive cover story presented by Daniel Tal focusing the brief insight on <u>Sketch and Lumion</u>.

Lumion is a real-time 3D visualization tool useful for architects, urban planners and designers. Lumion is a best fit for sketchup user to import a 3d model from sketchup for stunning visualization. The users can also create a real time video with Lumion. Lumion comes up with a extensive package of environmental rendering and animation tools with several useful options in comparison with other 3D rendering and animation software. Recently Lumion 3.2 version has been launched with huge advanced features.

In this article Daniel Tal shows how Lumion with its supreme rendering capabilities can produce amazing images and animations.

In our current issue there will be an interesting <u>interview with Mr. John Parker</u>, the renowned Graphics and Digital Technologies Teacher and eLearning enthusiast. In this interview John shares his experience with sketchup as a teacher.

In tutorial section, Claudio Feldman, an architect and artist, has provided an exclusive tutorial on <u>sketchup and autodesk 123 Catch to make a model of a boat</u>. Mr. Feldman transfers the group photos of the boats in autodesk 123 Catch to create the 3d model and then import the model into sketchup to give it a finishing touch. In another tutorial, Mr. Feldman shows how to create a real world in sketchup.

In article section Árpád Varga, Software developer at CASON Engineering Plc, has presented an article showing how to perform three dimensional data visualization and analysis with Sketchup.

Julian Brooks, in another article, focuses on <u>how LightUp-Analytics plugin provides Sunlight and Daylight analysis within sketchup.</u>

Besides our blog and news sections also cover some interesting topic on sketchup.

Hope our readers will find this issue useful to read and gather some good knowledge for utilizing SketchUp in their work successfully.



Best wishes **Rajib Dey** Editor

For any feedback and query please mail us at rajib@sketchup-ur-space.com



Interview John Parker - Graphics and Digital Technologies Teacher and eLearning enthusiastp

Tell our readers a little bit about your background?

I trained in architecture prior to entering teaching around 15 years ago. I have been a keen enthusiast in incorporating the use of technology, and have used CAD as the primary method of delivering the learning experiences for my students. I trained in Autocad whilst studying architecture, and have used a range of CAD programs in my teaching.

When did you first discover SketchUp and start to use it in your professional life?

I have been using SketchUp as part of my teaching about almost years ago. I was able to fully integrate the use of SketchUp when the College was able to access the SketchUp Pro / Layout offer through the Queensland Catholic Education agreement with Trimble.

I have presented a number of workshops on the use of SketchUp across the curriculum, highlighting its application in the social sciences, maths, science and the arts.

Had you done any 3d modeling project in which you applied SketchUp successfully?

I have modelled my own home with SketchUp, and uploaded it to Google Earth for a time. I also modelled our staff room to show staff the proposed changes and to allow us to easily manipulate furniture and colour schemes. I also modelled a proposed technology education centre for the College as a project for my Masters of Education that I completed a few years ago.

You perform as the Graphics and Digital Technologies Teacher. How do you evaluate SketchUp as a teacher?

SketchUp provides my students the opportunity to quickly model objects and to refine their ideas. The use of plugins like SU Podium, Windowizer and Roofmaker, as well as being able to access the warehouse mean that students can produce high quality work with minimal experience. Incorporating the use of Layout and other plugins allows even moderately experienced users to produce industry standard architectural drawings, photo realistic rendering, animations and rapid prototyping (3D printing).

Students are encouraged by SketchUp's simplicity and ease of use, and the ability to produce work of a high standard makes it easier to get students engaged.

What and/or who inspires you in your work?

Seeing my students engage with their learning and watching them develop their ideas into completed designs keeps me inspired.

You have expertise in various types of CAD program. How the capabilities of SketchUp and CAD compliment each other?

SketchUp allows students the opportunity to develop knowledge and skills in design. The simplicity of the program, coupled with its power mean that SketchUp stacks up well against the other CAD programs on the market.

You are a great devotee of technology and always try to incorporate it with your teaching profession. Please share your experience with our readers.

It is important that we meet students on their terms, and I always seek to incorporate technology to make the learning experiences more relevant and engaging. It is also important that I expose students to state of the art and cutting edge technologies that the students will be using as they pass beyond school. Exploring new technologies and either adapting them to what we do, or changing what we do to make the most of the potential of the technology means that students will develop that skills needed to use technology in the future.

How SketchUp can be useful for augmented reality, 3D printing and animation?



Recently, we have begun exploring the potential that augmented reality (AR) as a means of presenting student work. Using Inglobe's ARMedia plugin allows students to 'see' their products in a real environment.

We are also experimenting with 3D printing (rapid prototyping), as a means of facilitating students developing their spatial understanding and link to physical models.

Please share your most memorable experience working with SketchUp.

One of my most memorable experiences working with SketchUp is seeing the houses that my students design, and the pride that they have in producing their models.

Recently Trimble had launched SketchUp Pro 2013. How do you compare this most updated version of SketchUp with other versions?

At this stage, we are yet to make the move to SketchUp Pro, as we are still waiting on new licensing arrangements. We hope to be able to transition to SketchUp Pro 2013 at the start of next year.

What major upgradations should be included in SketchUp in near future?

I would like to see SketchUp absorb some of the plugins to make the program more powerful as a stand alone program.

What suggestions do you want to convey for budding 3d modelers?

I encourage budding 3D modellers to embrace the possibilities that SketchUp (and SketchUp Pro) offer. Don't be afraid to explore and play. There are plenty of resources available and some very helpful and knowledgeable people who are only too willing to help. SketchUp (and the range of plugins) offers unlimited potential to model just about anything you could wish.

What suggestions do you want to provide for SketchUp-ur-space team?

I think it would be great if SketchUp-ur-space was availble via iTunes (or other ebook format).



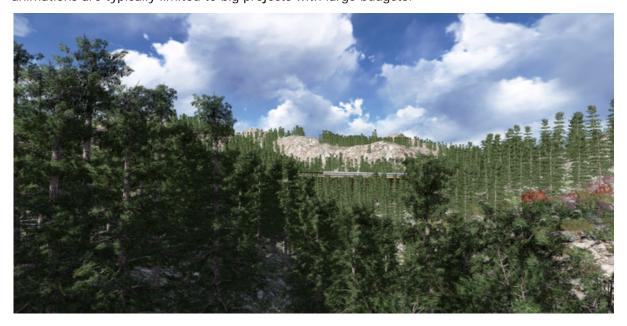
SketchUp and Lumions - compliment to each other

Advanced Motion Within Reach

Designers will drool over Lumion's professional-looking animation.

(Portions of this article appeared in the June 2013 issue of Landscape Architecture Magazine.)

3D animations are one of the most effective means to convey a design to a client, but producing high quality animations can be time consuming and expensive. Trimble SketchUp has tools for stringing scenes together to make movies, but it lacks the tools needed to create sophisticated, rendered fly-throughs. And other programs I've worked with can take days to create an animation. If there is a crash or error in the process, it can cause havoc. You could hire an expert to create the animation for you, but that would cost thousands of dollars for a 30-second clip. So, fancy animations are typically limited to big projects with large budgets.



Lumion allows you to place hundreds if not thousands of vegetation objects into your models.

Lumion, by Act3D, could change that. It offers the designers and modelers a complete package of environmental rendering and animation tools with an array of options not available in other 3D rendering and animation software. The software is not cheap, but it is remarkably fast and easy to use.





Interior renders are easy to complete. Lumion uses real time lighting: place a light and watch it illuminate the scene instantly.

Lumion supports many file types: SketchUp, 3Ds Max, Revit, and more. I find that exporting your model as a Collida format from SketchUp will insure a seamless import into Lumion. Once your model is in Lumion you can do all sorts of things with it. You can play with different skies, clouds, and environmental effects such as fog. You can add real-time shadows, sun rays, and people and cars that actually move. The options are easy to implement, thanks to Lumion's simple menus. You will not be faced with a bazillion options. I LOVE BAZILLION

A detailed texture menu comes preloaded with photorealistic effects. You can add realistic water that flows and glass that looks like glass. But what will really make you drool are the hundreds of objects optimized for the program. Using the object library, you can place different types of trees, shrubs, perennials, and evergreens. And you can add as many of these objects as you want. It seems to have no impact on performance.

Check out this animations created by Lumion Users:

Fazenda Dona Carolina's animation, 50,000 trees: I have not counted every tree in the animation, but I would not be surprised if there were 50,000 in it. I can't imagine doing that in many other programs:

http://www.youtube.com/watch?feature=player_embedded&v=QX8xj12d-UQ

The Water Street Animation by Vincent Hunter is detailed. Right down to the cats and pigeons:

http://vimeo.com/46782543

Water Street 8-1-12 from Vincent Hunter on Vimeo.

And Lumion can be used and is ideal for small scale models like those create for **residential** design.

http://www.youtube.com/watch?feature=player_embedded&v=m1wreoGIXDg

Part of the reason this is possible is the way the Lumion's objects are optimized. When I'm planning to animate a model, I no longer put in any vegetation before I move the model to Lumion. It's quicker to add these objects in Lumion, and vegetation imported from other programs will not be optimized in the same way.



When you add objects, Lumion will often randomize these objects for you. Every time you place a car, it changes the color automatically, allowing for greater variety. Vegetation habit and rotation can be further randomized for greater realism. Lumion also lets you model terrain. While you can't grade your imported site with precision, you can edit, adjust, and sculpt surfaces in a variety of ways.

Lumion work flow is simple. Typically, it won't take you more than an hour to add all the objects and adjust the textures, depending on the size of your site. A small residential plan can be completed in less than an hour, although a large master plan might take more time.

Once you have everything set and ready, you can produce snapshot images and animations. Select the Photo button at the right of screen. This opens a new menu that allows you to move the camera around the model and set your view. Click the snapshot button, and usually in less than a minute Lumion will export a smooth, crisp image. You can export your image in multiple resolution sizes and formats. There is no rendering time nor waiting. It's that quick.

Select the Movie button at the right of the screen (below Photo) and Lumion transforms into an almost fully functional animation and effects studio. You will see a timeline filled with individual frames. Above the first frame are three options: Record, Image, and Movie from File. Record allows you to create a fly- through of the model; Image and Movie from File allow you to insert still images or other movies into the timeline. You can combine as many different animations, images, and other movie files into the timeline as you wish. The beauty of this system is that you can do quick, short recordings of specific parts of your model and Lumion will process the entire set into a single animation. You can also add a custom intro, sketches, project information, credits, and logos to your movie.

Hit Record to start making your fly-through, and Lumion will take you into a camera view of the model. Every time you take a photo, Lumion will add that scene to the Record sequence at the bottom of the screen. This establishes the path your fly-through will take. Hitting Play will animate the scenes in a smooth, seamless reel. In fact, it will seem as if a professional camera operator is controlling the camera progression, giving the animation a gentle acceleration and smooth movement like you see in an IMAX documentary. You can also speed or slow down the entire sequence. Clicking the up or down arrows above the Play button adjusts the speed of the animation. Based on this input, a little counter tells you how long the animation will be.

Lumion allows you to add a variety of different effects to your animations. You can show the landscape during different types of weather conditions. The snow will actually accumulate on your model surfaces and a light breeze will cause your vegetation to sway back and forth.

You can also have people, cars, and birds moving through the scene. These animation effects do take some time to master, but they're not too difficult. Generally, you set the starting and end path for the selected objects and Lumion will do the rest. Lumion even lets you add sound effects, like a car engine or birds in flight. The program is not sophisticated enough to show people moving along a slope or descending a staircase, but a representative of ACT3D says the company plans to add these features in future editions.

Lumion will not take long to generate the animation (which is an mp4 document). A typical HD animation (1280 x 720 resolution) can be produced in **2 to 10 hours**, depending on the length of the animation and the graphics card used. This is incredibly fast in comparison to some other programs which take 20 to 30 hours if not days to process animations (not to mention the need for a render farm—sometimes 10 or more computers to help with the processing).

Once you prepare all the visual effects and sequences in Lumion, you can still return to your original model and make edits. For example, you can open your SketchUp model, make adjustments then re-export the model over the original exported version imported into Lumion. Lumion provides an option to update the model by re-sampling the exported file. All the objects, effects, animation sequences, and texture settings you already established are preserved. You do not have to redo all your work in Lumion.





Lumion's real time lighting is amazing. This draft scene took minutes to set up and render

Lumion is not a low-cost software. Its price is \$1,960 for the basic version or \$3,922 for Lumion Pro. The main difference between versions has to do with the types of objects available. The standard version has fewer objects than the Pro version, which comes with a complete library of vegetation, people, and objects. Furthermore, Lumion Pro gets frequent updates that include new materials and objects. If you would like to try Lumion, there is a free version you can download; educational versions of the standard version are available for free; the Pro version is available through universities at a deep discount.

Before you invest in Lumion, it's important to understand its hardware needs. Lumion requires a really good graphics card, as it relies on your graphics card for much of its processing. You will want a card with at least 1 gigabyte of memory (which is pretty standard on new computers these days). The more memory, the better. ACT 3D recommends at minimum the Nvidia GeForce GTX 460 or ATI 5850. It is worth obtaining the best possible card to work with Lumion. My system uses the Nvidia GeForce GTX 580, which makes a big difference.

Also, insure the graphics card is compatible with your computer if you plan on swapping it out. Some of these cards require more power than your computer may provide, so you'll need to research it. You also need a minimum of 3 GB of RAM (6 GB is recommended). Don't let any of this intimidate you, though. The animations you will be able to create are well worth it. Suddenly, you'll find yourself doing animations for even small projects that don't have gigantic fees.

A special thank you to Bill Brassch at Mundus Bishop and Rashad Al-ahamdi for sharing their experiences with USING Lumion.

Daniel Tal, ASLA, is a landscape architect and the author of two books on SketchUp: <u>Google SketchUp for Site Design</u> (August 2009) and <u>Rendering In SketchUp</u> (March 2013). Daniel is a partner at BrightmanTal (www.brightmantal.com)



Three dimensional data visualization and analysis with Sketchup

One of todays greatest global problems is energy efficiency. In our daily life, we are energy efficient when we use low energy light bulbs, when we buy a more efficient fridge, or when we are using motion detection in public illumination. In the industry the solution of this problem is not only to replace old equipments with new more efficient ones, but to plan the energy production and transportation as well. For example, if we can plan the gas consumption of a given city, we can report our gas need for the gas production entities, therefore we can buy gas on lower price, and finally the domestic consumers will get gas on lower price as well. OK, but how do we plan gas consumption?

Prediction of gas consumption is a complex problem, we have to consider multiple factors, to produce the most accurate results. In case of such complex mathematical problems not the solution is the only difficulty. We have to represent our data in a way, which is easy understandable for others as well. CASON Engineering PLC, where I'm working as well, is a pioneer in gas industrial solutions. We developed many solutions never existing before. Such an innovation is my method of consumption profiling, where data visualization and analysis is part of the process.

Until now, gas consumption data were always stored and shown in tabular format and simple graphs. All we have to know is on the invoice we receive from the local gas provider: consumption period, location, amount, and of course the price. Such data can be easily illustrated on usual descartian graphs, but from such graphs it's pretty hard to read the trend of consumption when we are talking about long periods, and it's even harder to recognize any correlation in the consumption parameters, because all we represent on a XY graph is the correlation of two things, flat 2D. Domestic gas consumption for example more likely has a period of one week, and consumption is dependent on weather. So we have at least three different things: time, weather and consumption we would like to represent on the same graph. Sure, we can draw multiple lines in the same graph, but it's hard to analyze the correlations. This is where 3D representation comes into picture, let's see how we do this with Sketchup.

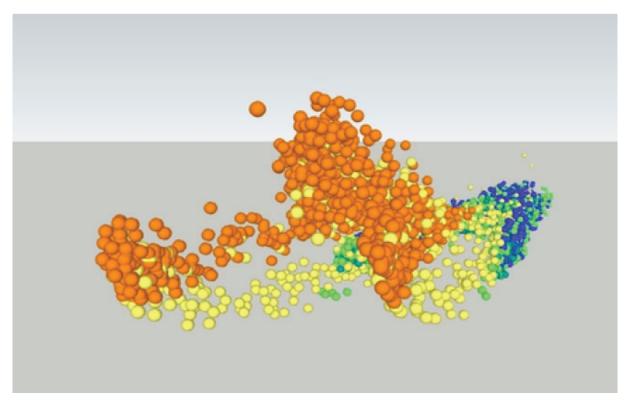
Tabular data is converted to three dimensional Sketchup surfaces (meshes) or group of objects with Ruby scripts. This process allows us to join meta data to each of our Sketchup object, giving us the possibility to create tools for data analysis. Still inside Sketchup. Object attributes for example can hold information about all the parameters of the given gas consumption data, and using this meta data we can create tools, to filter the objects in the scene based on any of the attributes. For example, we could decide to look for all data where environmental the temperature was over 10 degrees. If we get these points, all we have to do is to look at our scene, and we immediately get the impression of how our consumer behaves at springtime. Or we can use attribute filtering to group consumption points by consumption time, we can color the objects based the time, and immediately we get the fourth dimension in our visualization. Let's look to some examples, how we do this.

Gas consumption in four dimensions.

Shown parameters are: consumed gas in cubic meters, consumption timestamp, environmental temperature and consumption period (month).

Consumption data was loaded from CSV file with the help of some Ruby scripts.



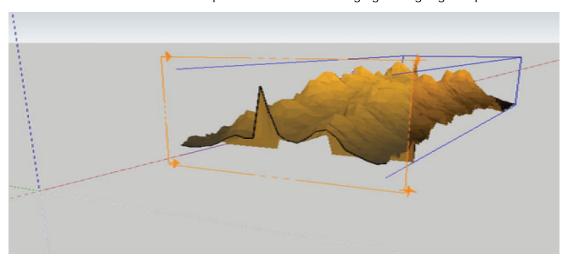


Using Sketchup we have the ability to rotate our scene and observe any of it's aspects, and with the help of meta data, we can deep-analyze the scene. The picture above shows coloring technique used for consumption period visualization. On the three axis we got temperature, consumption and consumption timestamp, and we got the month of consumption in the colors. We see, how different seasons are changing the behaviour of our consumer.

Simple gas consumption mesh.

Shown parameters are: consumed gas in cubic meters, hour of consumption timestamp, day of consumption timestamp.

To help the analysis, we used consumption dependent coloring (black means lower while orange means higher consumption) and section panes available in Sketchup. The fraction highlighted by the section pane shows a peak in the consumption trend. When we move or section pane along the consumption mesh, we will see an animation of the gas consumption trends in time, which can help us to understand how the consumption behaviour is changing during a given period.



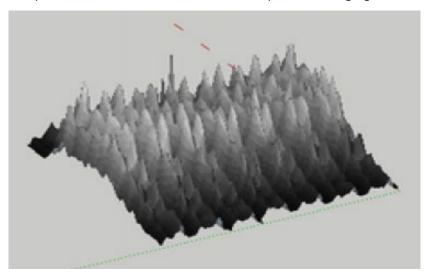


Complex consumption profile visualization on weekly basis.

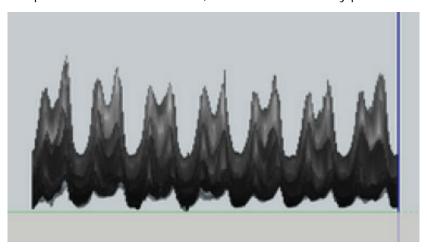
Shown parameters are: consumed gas in cubic meters, time of consumption timestamp, date of consumption timestamp.

This is a totally new method to display such data. The curiosity of this method is that it compresses three different kind of profiles into one, and so gives us the ability to see and recognize correlations and consequences.

Viewpoint: Overview. We see, how consumption is changing in time.

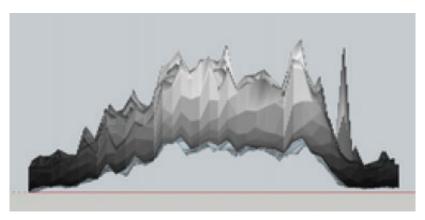


Viewpoint: Front. From this view, we will see the weekly profile of our consumer.



Viewpoint: Side. Side view shows the yearly run of the consumption.





This visualization method combined with my forecasting algorithm can give a very accurate prediction and an easily understandable, comparable and analyzable representation of data in gas industry. Sketchup makes it easy to put two or more meshes side by side and compare them. How we use it is upon our creativity. There are so many other scenarios we can use three dimensional visualization of our data, and Sketchup gives us a very flexible and extensible solution to do this in minutes. Did you ever have the need to represent something for the board, which is dense enough to be understood in minutes, yet holding every aspects it's related to? Three dimensional scenes are something your boss will always love to see in a presentation, I think.

In my next article, I will deep-dive into the scripting part of importing tabular data into Sketchup meshes.



LightUp-Analytics plugin offers Sunlight and Daylight Analysis within SketchUp

LightUp-Analytics is a plug-in that provides Sunlight and Daylight Analysis within SketchUp. It is based on the well-known Lightup for SketchUp rendering engine, with added analytical features.

It bears repeating, SketchUp is exceptionally good at two things - producing simple geometric models and applying textures to those models for visualisation purposes. Indeed, there is quite a market for SketchUp plug-ins that enhance this presentation quality; Lightup for SketchUp is one of them.

However and increasingly, designers are being asked to provide further and better evidence of good design; including analysis of their SketchUp models. Often, this is provided by third party software and requires exporting the original geometry. In terms of traditional daylight and sunlight analysis, the emergent design follows a given 'valid envelope' for daylighting, rights of light, and solar access provided by such third-party software. Alternatively, rules of thumb are used to assess the scheme. - rules that provide analysis from fixed viewpoints (eg. in section only).

Lightup-Analytics provides the ability to navigate in 3-D around your analysis model and puts the science of daylight and sunlight design at the fingertips of the designer (as the design evolves) – avoiding trying to design with one hand behind your back!

This is not, necessarily, going to avoid further work by specialist surveyors but does allow the designer to control the process and most significantly can potentially reduce the areas that need specialist input therefore reducing consultancy, abortive work and re-design costs.

Using Lightup-Analytics as both a visualisation and analysis engine seemed an obvious work-flow - a designers work-flow! Pushing and pulling the geometry within SketchUp - responding to context, the emerging design - concurrently with any analysis.

Lightup-Analytics can do a number of assessments, based around a UK guidance document called BR209 "Site Layout Planning for Daylight and Sunlight: A guide to good practice", written by Dr Paul Littlefair of the UK Building Research Establishment and recognised as a world leading expert in this field. When LightUp-Analytics was being developed Dr. Littlefair was extensively consulted to ensure compliance with his work.

LightUp-Analytics is also very grateful to its sponsor Rationel Windows (UK) Ltd and to the UK Technology Strategy Board for an Innovation Voucher grant.

For this article, we will, focus on two of the functions of LightUp-Analytics - VSC (Vertical Sky Component) and Shadow Studies (Possible-Sunlight Assessment).

VERTICAL SKY COMPONENT

Traditionally urban designers have analysed streets using cross-sections (i.e. a cross-section of between 2:1 and $2\frac{1}{2}$:1 is generally considered reasonable for a residential street) this is based on measuring streets that have been deemed perceptually acceptable. BR209 moves this debate on with its 25° rule of thumb (which actually works out to be a 2.14:1 street cross-section). Not all spaces can be designed as generic streets, for example, where a development has to be integrated within an existing urban context of narrow streets and larger squares. Doing this requires evidence that is both practical and based in recognised science.

Calculating the proportion of light that falls on any given surface in comparison with the light available, above any and all obstructions, is one such method. This is called the Vertical Sky Component and is recognised in UK town planning negotiations.

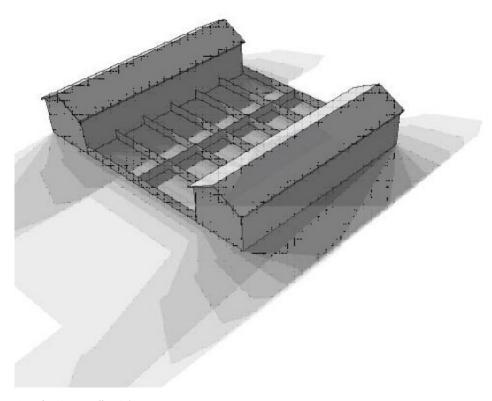
Below is a link to a video that explains how a Vertical Sky Component can influence design.

SHADOW STUDIES

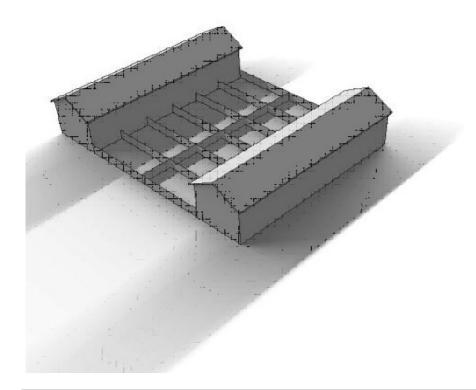
In any climate worldwide, life is orientated around good daylight access; it is often, additionally, orientated around the spaces where there is good sunlight access. For a number of years, we have



utilised 'butterfly diagrams' to illustrate this, these diagrams show how shadows move through a space by analysing the shadow patterns at fixed intervals on certain days (e.g., hourly on 21st March)



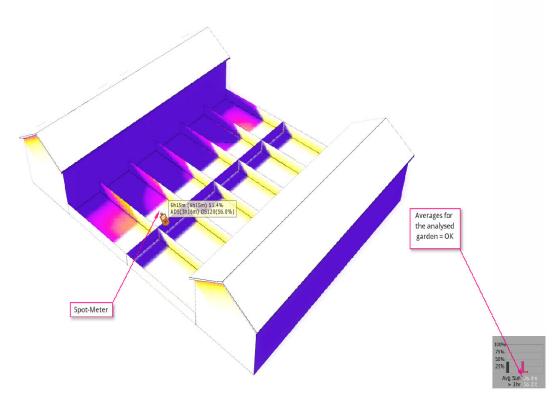
Hourly 'Butterfly' Diagram





5 Minute Butterfly Diagram

However, this information is relatively useless. A particular point on the ground may be in shadow at 10 o'clock in the morning, yet be fully exposed to sunshine for the rest of the day. Making a decision based on the shadows cast at 10am would, in essence, be a fundamental mistake. LightUp-Analytics assesses the shadows cast by the sunshine throughout the day and identifies the amount of sunshine at a point as a proportion of the possible day sunshine (Note: 50% of the space receiving more than two hours possible daily sunshine on 21st March is considered a good space)



Sunlight Analysis Output from LightUp-Analytics

SUMMARY SketchUp is an essential design tool. It also has the potential to be an outstanding analysis tool, Lightup-Analytics, transforms SketchUp into just that, and provides design-led, evidence-backed information as part of our continued progress towards designing better places for people to live and work in.

Further information: Demo software can be downloaded from www.lightup-analytics.com (this plugin includes the current version of LightUp for SketchUp and is compatible with SketchUP v8 and 2013). This software provides numerous additional analysis methods including, direct lighting under CIE skies, daylighting under CIE Overcast sky, Skyfactors, Rights of Light analysis, View of Sky analysis and others; as well as providing a fully functioning rendering/presentation engine which can output stills and videos (even export light-mapped models to the Unity game engine).

By Gary Jackson and Julian Brooks



SketchUp Exporter

Big news for our SketchUp users: thanks to Alex Schreyer, we now have a plugin to export 3D models directly form SketchUp to Sketchfab.

The plugin adds a menu item "Upload to Sketchfab" to the File menu in SketchUp. All you need to do before you can upload your models is register on Sketchfab.com and get your private API key. You can find it on your dashboard, once you have filed in your email address. Once the plugin is installed, it just takes 1 click to publish from SketchUp to Sketchfab! Here is a little video demo:

http://vimeo.com/45902727

For current SketchUp version: download the SketchUp-to-Sketchfab exporter v 1.5 (.rbz)

Download the RBZ file. Then open SketchUp (v.8 M2 and above) and go to the Preferences dialog. On the Extensions tab, select "Install Extension..." and browse to the file.

For older SketchUp version: download the SketchUp-to-Sketchfab exporter v 1.5 (.zip)

Download the ZIP file and unzip it into the SketchUp plugin directory (usually at C:\Program Files\Google\SketchUp\Plugins\ in Windows or /Library/Application Support/Google SketchUp/Plugins/ on the mac). Keep the folder structure as it is in the ZIP file. Then restart SketchUp and look for the new menu item in the File menu. If you are updating, just overwrite the old version of this plugin.

You can also download our SketchUp exporter from the <u>SketchUp extension warehouse</u>. Don't forget to leave a review!

Credit: many thanks again to <u>Alex Schreyer</u> for making this possible. You can also find great advices in his book: <u>Architectural design with SketchUp</u>.

And if you feel like crafting a plugin for your own favorit software to publish on Sketchfab, We would love to get in touch! Please contact us at support@sketchfab.com, we will provide all necesary technical support.



Quirky, making invention accessible with Sketchfab

Sketchfab is very happy to announce that we our now integrated with our friends over at Quirky!



Beginning today, users will be able to browse some of their very best inventions (like the Pivot Power below) in real-time 3D. You can see the 3D previews on their own site, or head over to<u>sketchfab.com</u> and check out the beginning of the collection on <u>Quirky's brand page</u>.

Quirky is all about making invention accessible, and we believe Sketchfab is a pretty sweet addition and a step further towards this vision. We are also both pioneers in our field: Quirky has revolutionized the invention to production process, and Sketchfab has democratised interactive 3D display online. We think we make a pretty great match:).

https://vimeo.com/69495816?share

We've met with the Quirky team on many occasions, including during some of their famous product evals, and share many of their core values and wishes for the future of invention.

This is just the beginning. We are now working on adding Sketchfab support to Quirky's amazing invention process. Soon, inventors will be able to submit their ideas to Quirky in 3D, the way they are meant to be seen! There is a 3D design at the beginning of each product story, and now it's available all along the creation process up to final use.



Brightman Tal a new company from by Danial Tal and Michael Brightman

Brightman Tal has partnered with Daniel Tal to form a new company, Brightman Tal. It offers design, drafting, modeling, rendering and training services.

As Published, Practicing, Professional we understand what you need to get your projects modeled and ready for presentation and construction.

Check out what you can Learn and our Services.

We are a full service modeling, rendering and animation firm. With a combined 25 years of professional practice, we know what you need when it comes to 3D services.

Our services include:

- Rendering & Graphics
- Drafting
- 3D visualization for Architecture, Interiors, Planning, Landscape Architecture & Urban Design industries
- Animations
- <u>Training</u>

http://www.youtube.com/watch?feature=player_embedded&v=Y_ZbSss2hd4

http://www.youtube.com/watch?feature=player_embedded&v=YHAFR9_YTOY

http://www.youtube.com/watch?feature=player_embedded&v=drjxp6LgJgI

http://www.youtube.com/watch?feature=player_embedded&v=EgCmJ78DfsU

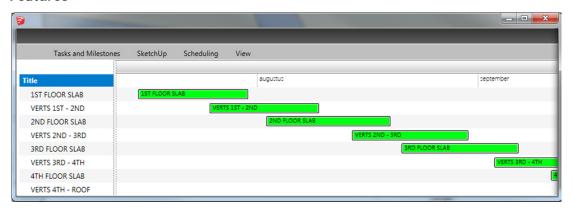


4D Virtual Builder 3.2

Last year @ D-studio, we have been very busy developing a number of applications built around Sketchup. Next months, we will release them gradually.

To start, we announce the 4D Virtual Builder release 3.2. Built with a new xd-technology, this release will be better, faster and focusing on future developments, like 4D web applications, a Lean Last Planner System, 5D quantities take off and the embedding in automation processes.

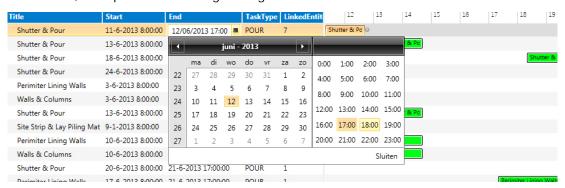
Features



Improved Gantt Chart: All 4D and planning activity will be steered from a central Gantt Chart visualization. It's the heart of the new release. Just like it is for planning, management and monitoring. See the new Gantt Chart in action.



TimeLine: To get an overall view, to view changes over a period of time, or to visualize what has been changed since previous dates, we have introduced the notion of a timeline. Simpler than the Gantt chart, it is guite a fascinating management tool.





Days, Hours, Minutes, ...: Sometimes it's necessary to apply a lower time scale like minutes, or seconds.... Fi. to schedule the mounting and disassembly of a concert stage or podium.



FastMode: 4D Visualization is always faster in this release 3.2. But to solve the problem of rather disorganized models responding very slow, we introduce several speed options for 4D visualization. The fast mode is really instantly. <u>See FastMode in action.</u>



Many more: Of course we have implemented even more features and upgrades. On our <u>YouTube</u>channel we've added a new <u>playlist</u> dedicated to 4D Virtual Builder 3.2. In this playlist we are (and will be) uploading video tutorials about every new or upcoming feature.



Introducing the real world in SketchUp in few days

(Possibilities with others Aplications+ others Steps).

3D Models, and study of Layers and Levels from a Natural Form. ("Beirut Raouche").



The "Raouche" is the most famous artifact of Beirut. Upon the many names that those rocks were dubbed with, "the pigeons rock" and "the pigeons grotto" remain the most famous ones. This natural masterpiece rizes as high as 70 meters above the sea level, and has existed since forever. (Although some theories say it was only created in the 13th century, due to very violent earthquakes that hit the eastern shores of the Mediterranean sea). It's one of the most beautiful natural monuments of the world, standing in a bay at the center of the city, and surrounded by water, like a marvelous statue carved by the sea.

I have find the model in Sketchup Warehouse, and I have download the Model, I was interested to study that form and work with for an Idea.



user(The original work made for user""ZIPPO"" ""ZIPPO"" in warehouse sketchup models). in warehouse sketchup models). After soms easy steps I have maked a 3d model.

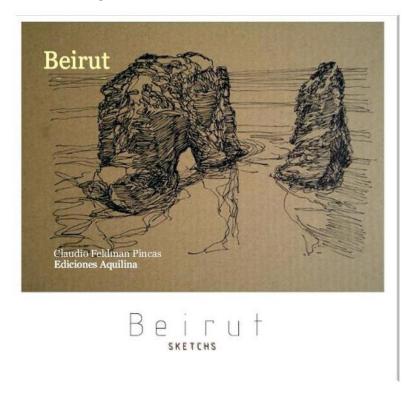
That is the end 3d Model, Test. (not bigger than 6 cm).





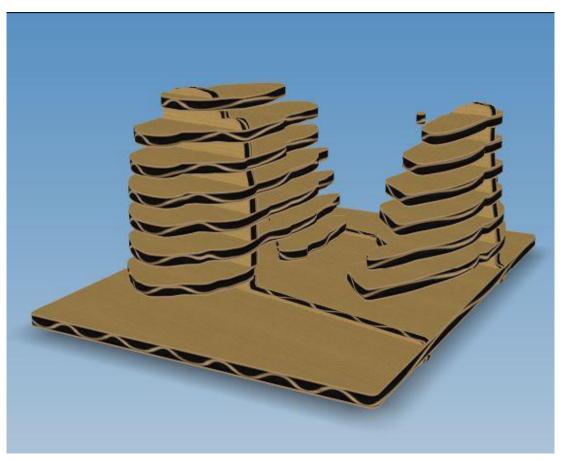
One group of Drawings direct-sketchS in the natural place help me a lot to understand the forms!!.

(Hand drawings !!)

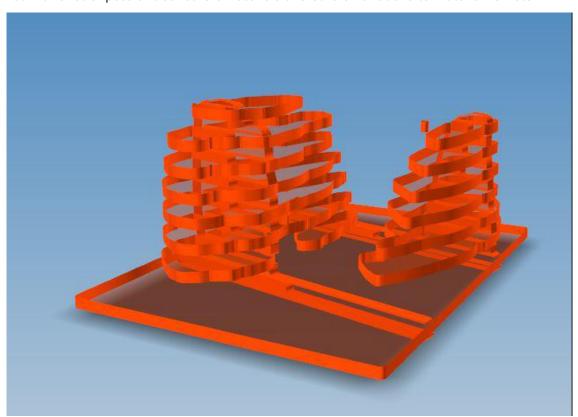


Here I have send the 3d model to Autodesk 123make, to make a first simple maquette in Carton.



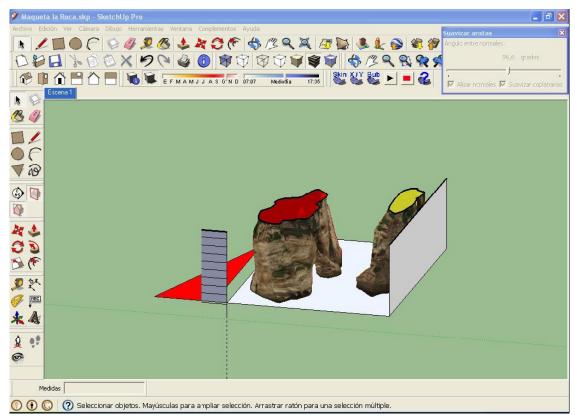


But with a lot of possibilities !others Materials and others Variations to materialize...etc.

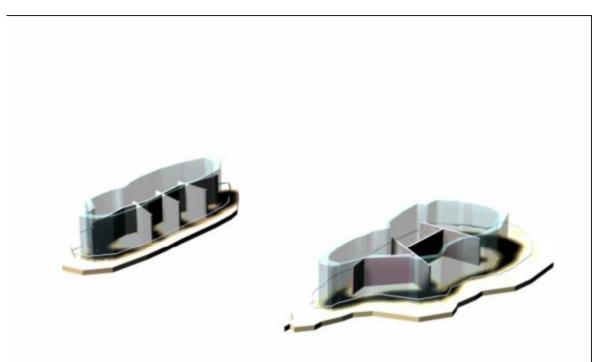


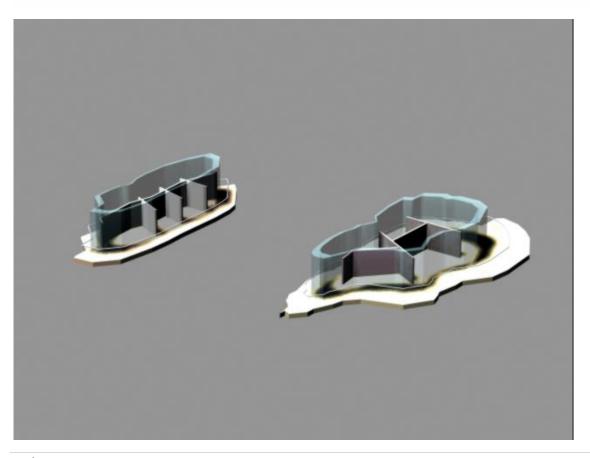


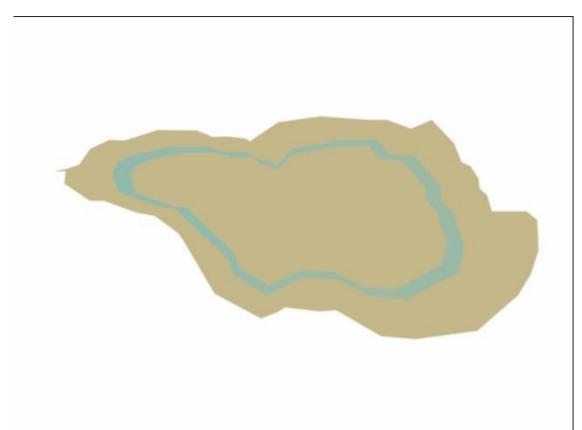
Now I have all the info over each level ,in Sketchup Warehouse I have find the Beirut model maked, so a great help to me !... and I can drawing and find each... plane-level and layers forms ! (I using the plane cut in sketchup).

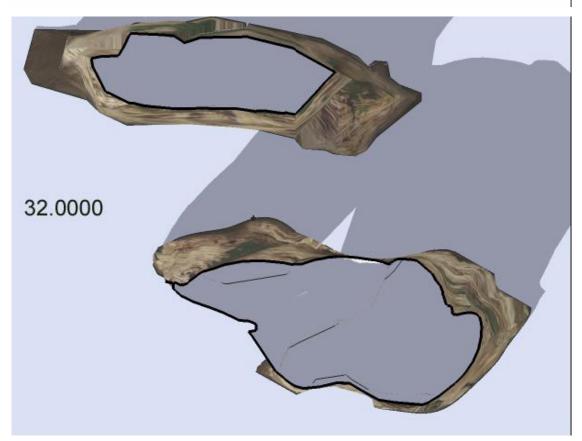


That is a level plane with a primary architecture into...(in old 3D Studio Max)

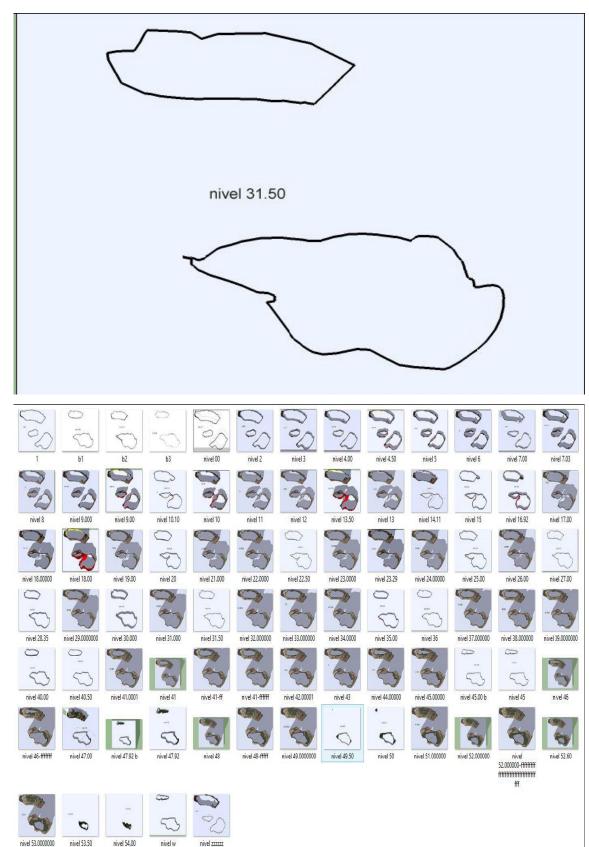












With these lines I can drawing each level and give a height, for example 30 cm for concrete/beton. (planes). Others lines to glass transparent.etc.

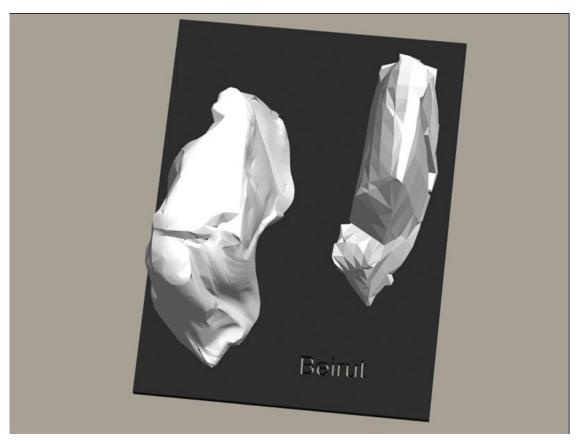


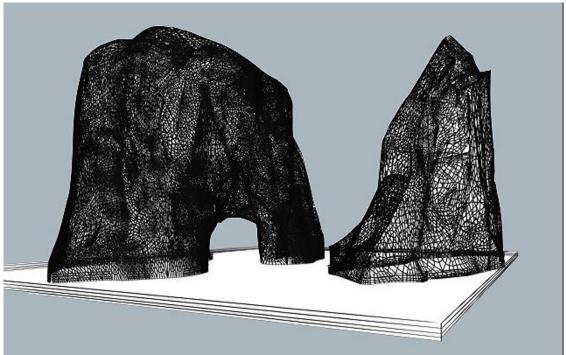
Finally I can play with others programs for make landscapes (""Lumion""in these case), And try to see a first Renderings and others Projects images. The first images here...







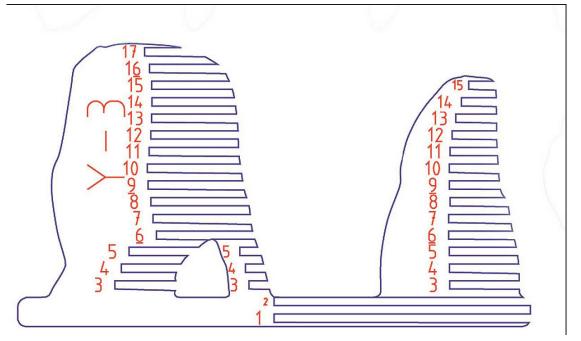




The maquette and the real photo too here...





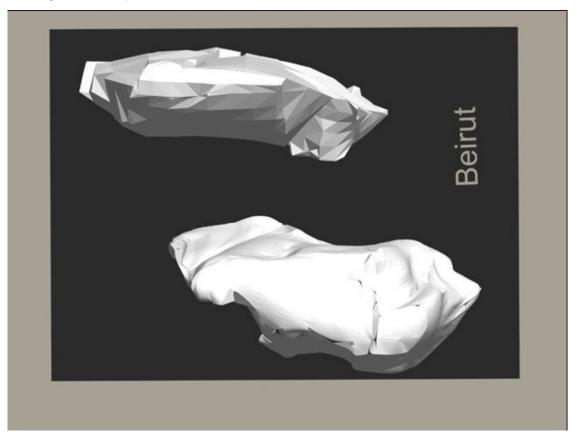


Another maquette with Autodesk 123 make...

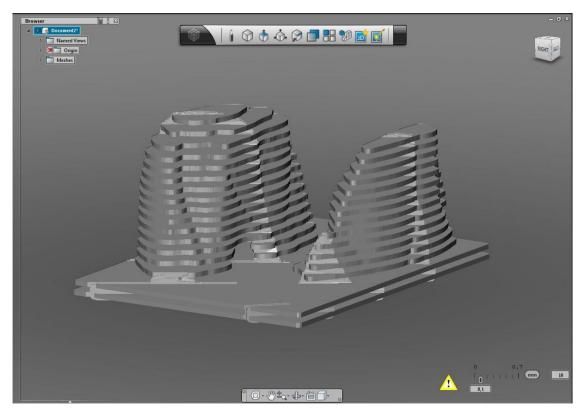




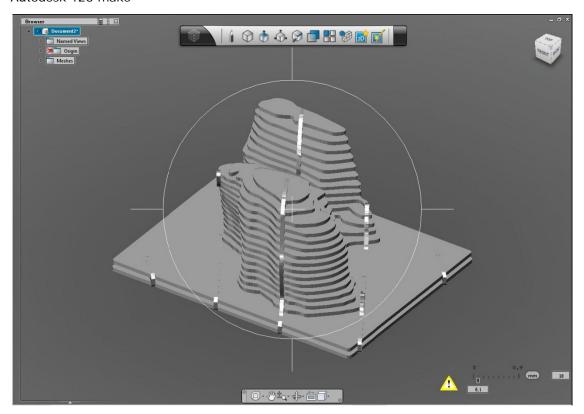
Drawing with black pen... or 3d studio max model...



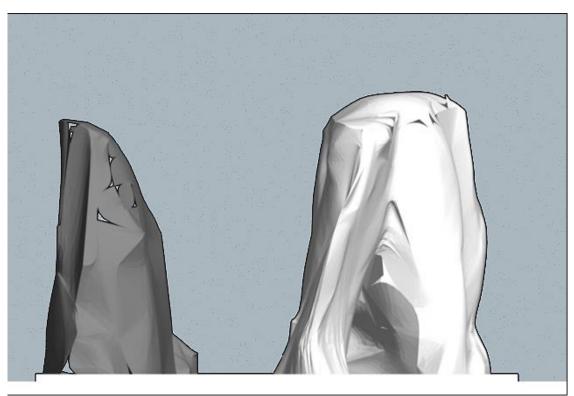




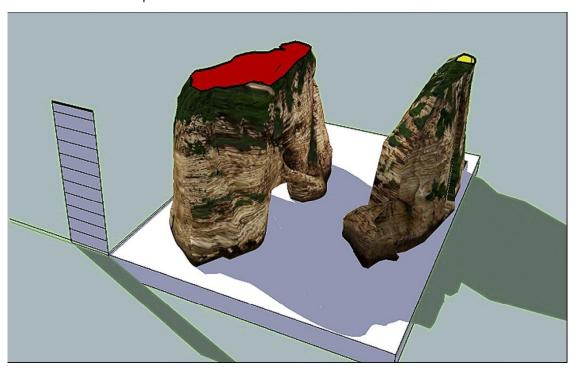
Autodesk 123 make



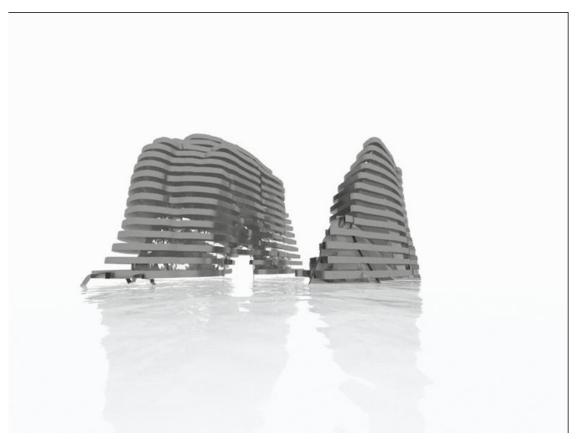


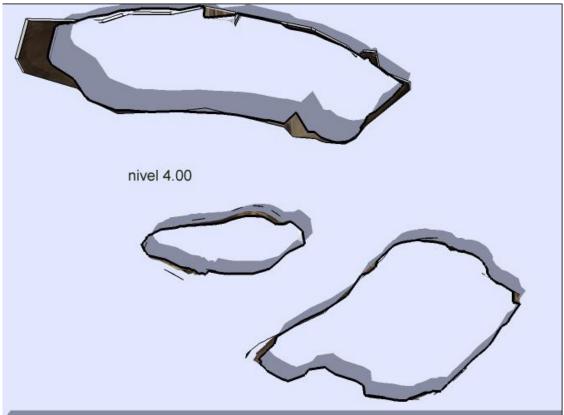


3DStudio Max Sketchup Plane cuts...



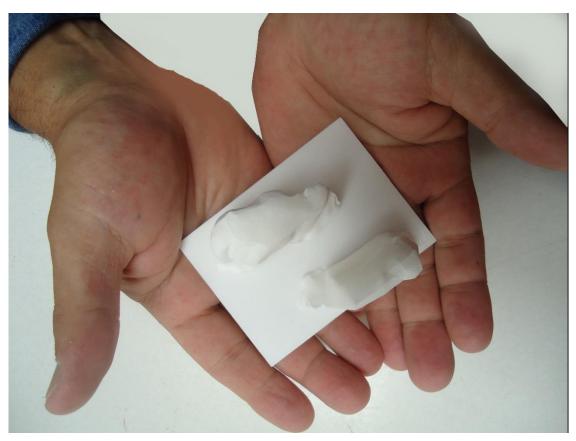






Sketchup level and 3d print model...





Maquette carton corrugated (I was intereste to make one, for to see the natural form again...)







Maquette corrugated







Drawing with pencil,...black marker over papier.





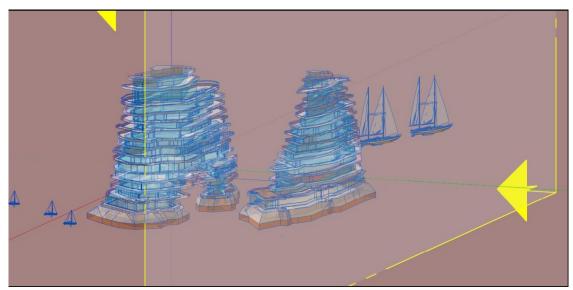


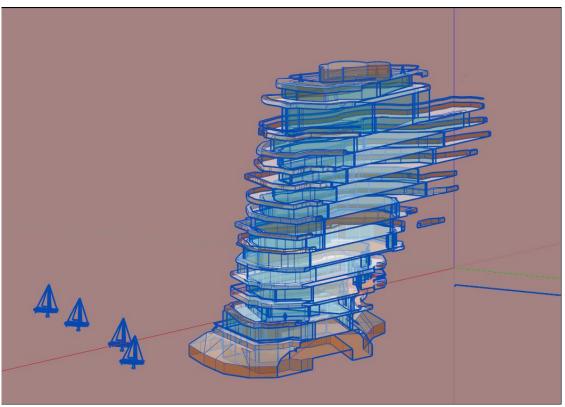


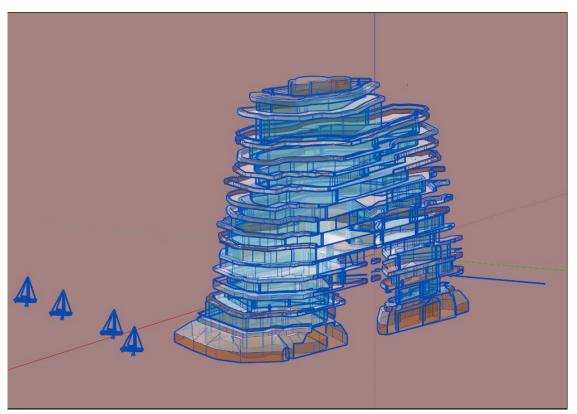
The begin from these Study-Drawings, was the 3d Sketchup Model, after I have continue in others Programmas.

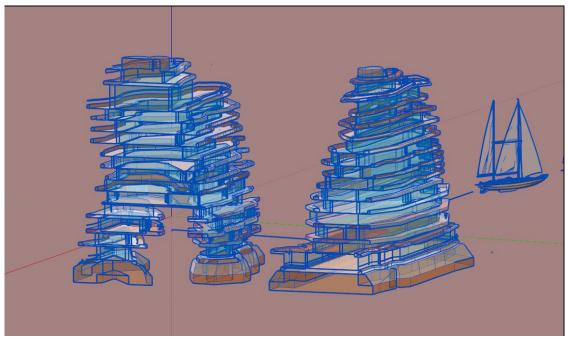
But Sketchup was the beginen to understand that original form.

After that, was different steps of drawings.

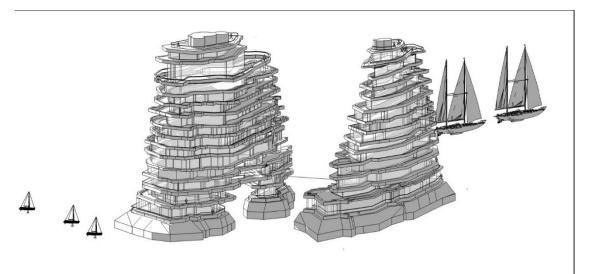


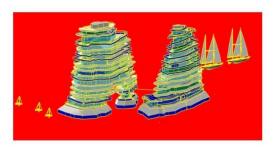


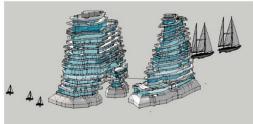


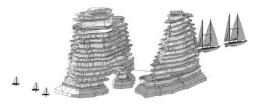


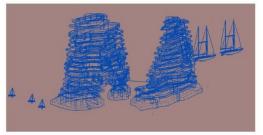


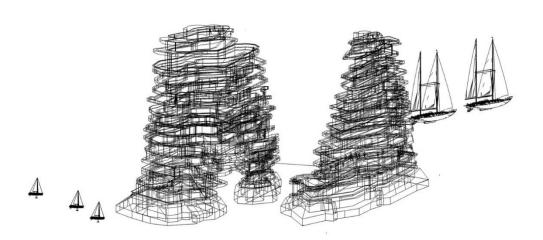


















I WAS INTERESTED TO CONTACT THE AUTHOR "ZIPPO" IN THE WAREHOUSE SKETCHUP SITE (BUT THAT WAS NOT SIMPLE TO FIND HIM).

I don't understand these step in sketchup warehouse (can you help me ?), Obviously I have made a design, from these model, but I was visiting these City, in 2010.

(In the beginen I thought to make myself one 3d Model, but I have found one in these site and that was a great help to me in these Process).

Sure that is not a Classic Tutorial, Step for Step, but maybe a "Process of Drawings".

Since Sketchup!.

Greetings

Claudio J.Feldman (Argentine architect)



How to apply SketchUp and Autodesk 123 catch for creating a 3D boat model

(From a Group Photos to the Sketchup Program) Sketchup + Autodesk 123 catch

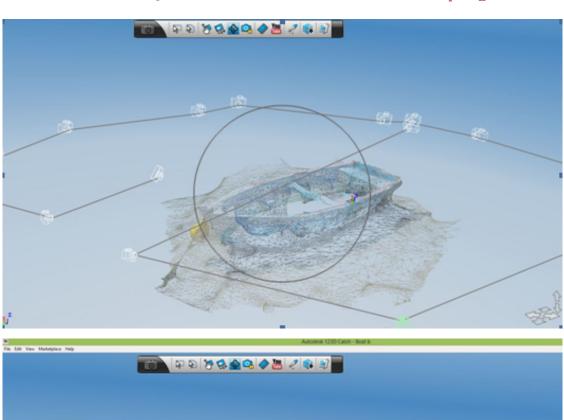




1/A Group Photos over a Boat, in the sand. (10 of ...20).

2/I can place these group Photos... in Autodesk 123 catch...in a few seconds, Ican have the 3d Model Mesh !!...

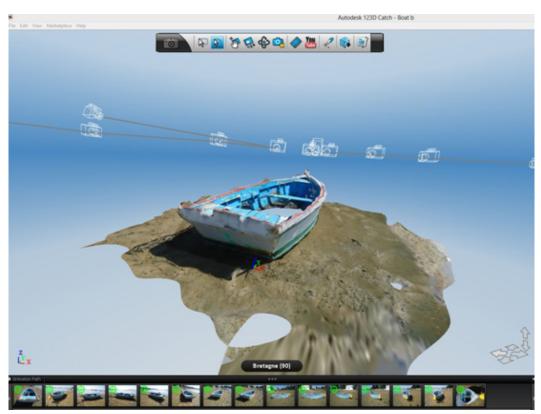




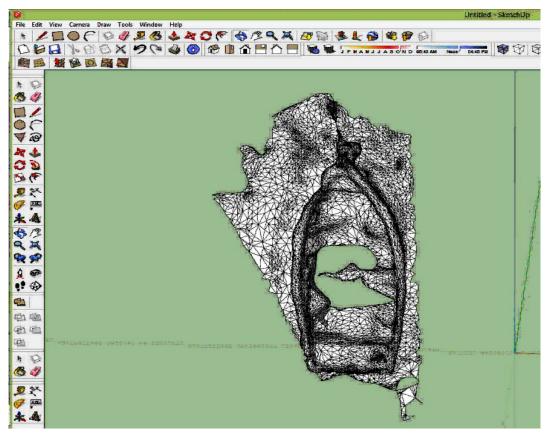


3/ Autodesk 123 catch, with the boat there !!!....



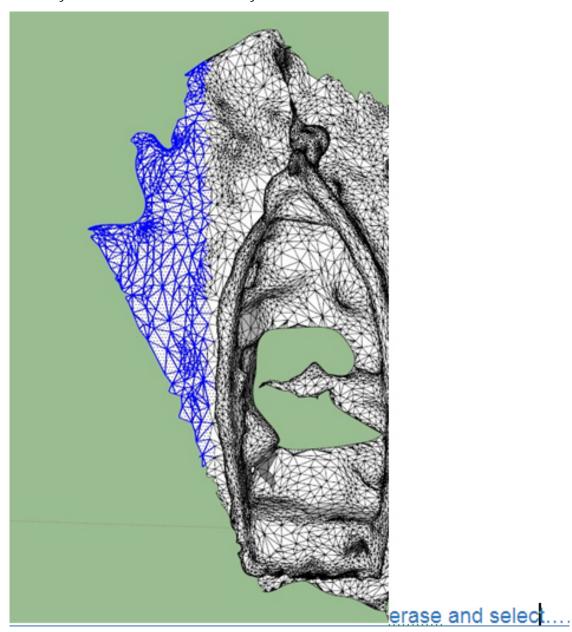


 $4/So\ I\ can\ after\ that, saveit,\ and\ import\ these\ model\ into\ Sketchup, AndI\ have\ now\ these\ Boat\ in\ these\ Program\ too\ !!.$ (So easy).



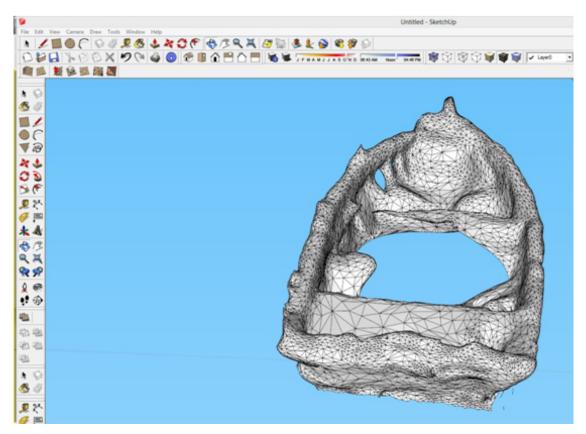


Obviously I need to clean and re-definely the mesh model...

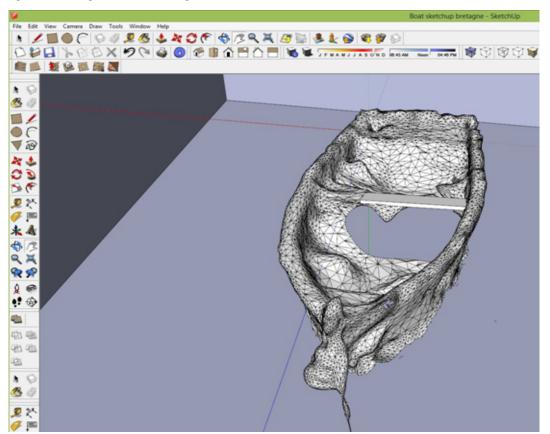


That is not a problem for a designer...





Again cleaning and re-drawing the form, but not difficult!.

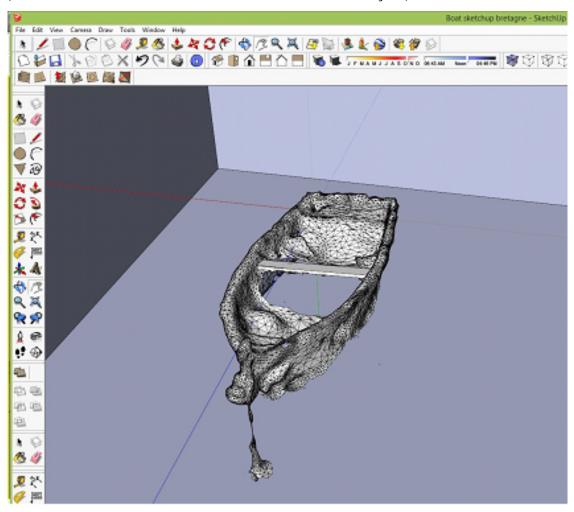




After a few steps, I can have again the Boat complete.

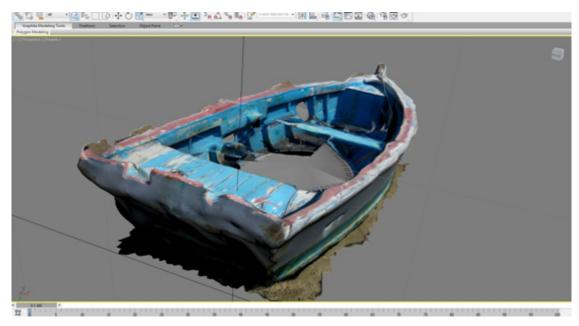
But now in Sketchupals 3D-Model!.

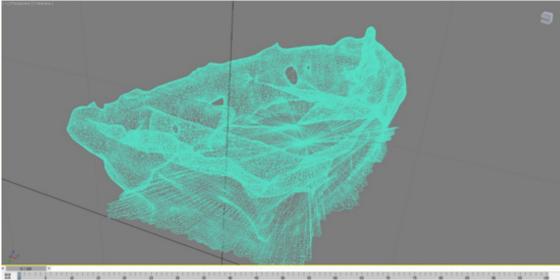
(He was in the Beach, in the sun and in the sand, ...now in my PC).





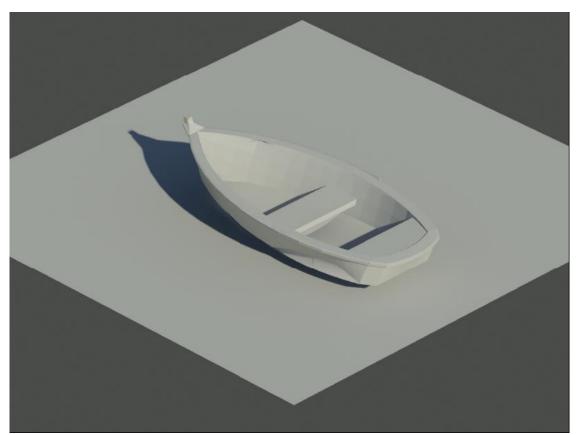


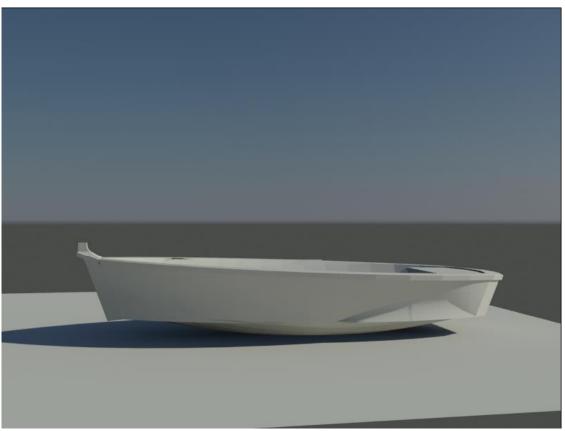




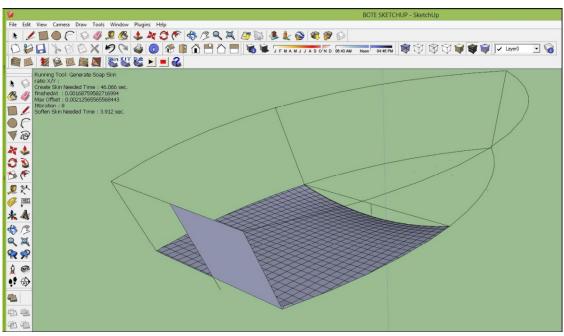
With a few more steps; I can modeling and finish a good boat, That come from these group photos, and open in Sketchup!. (I can too export the sketchup model to a 3dstudio of another 3d program to perfect modellling more the boat).

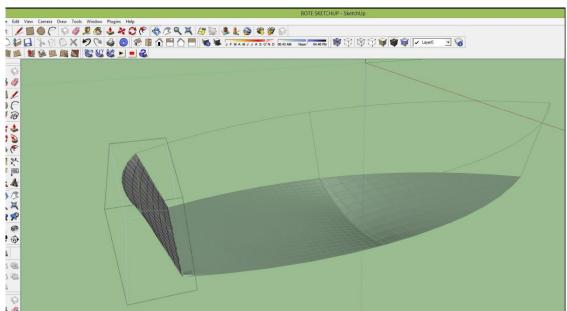




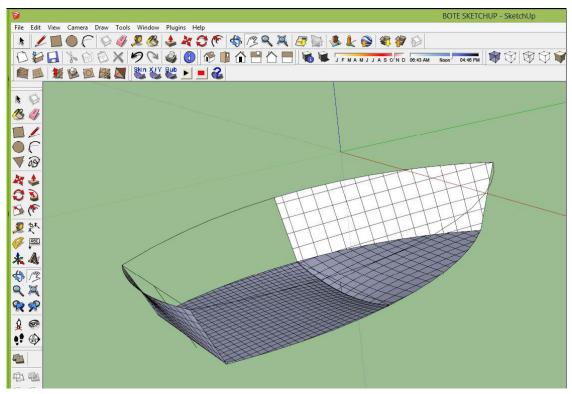


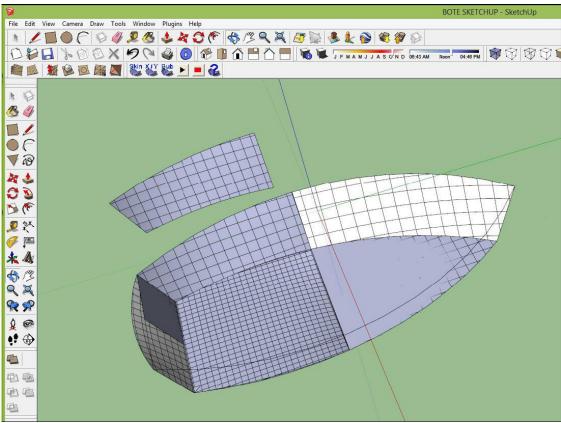




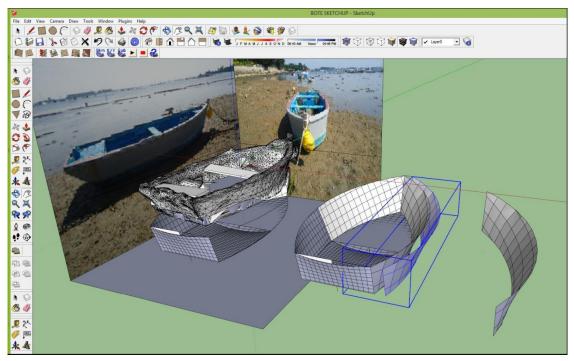


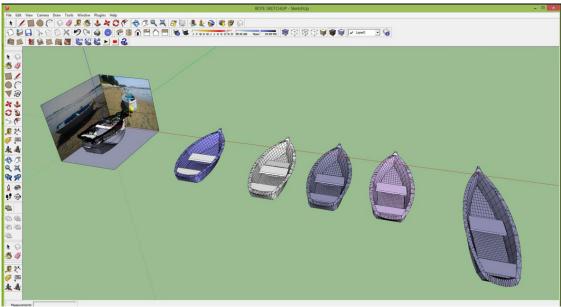




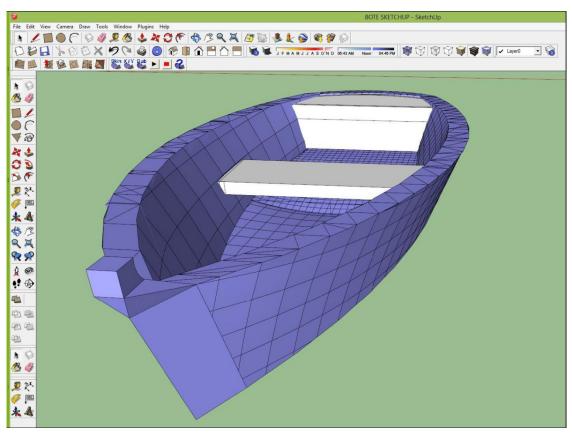


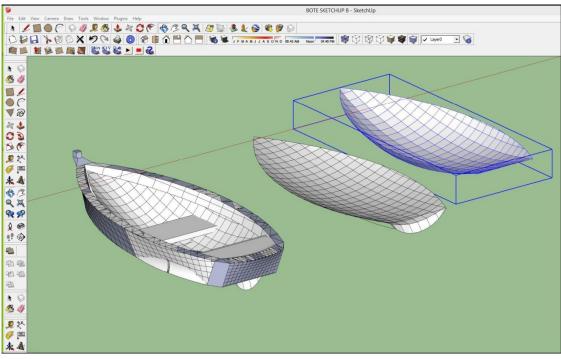




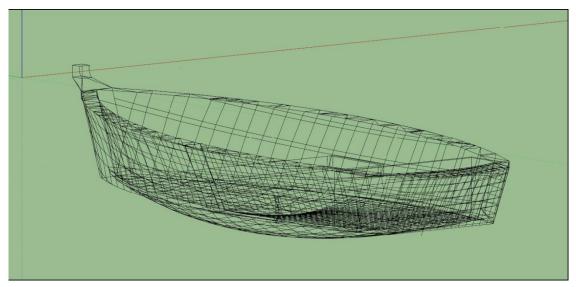


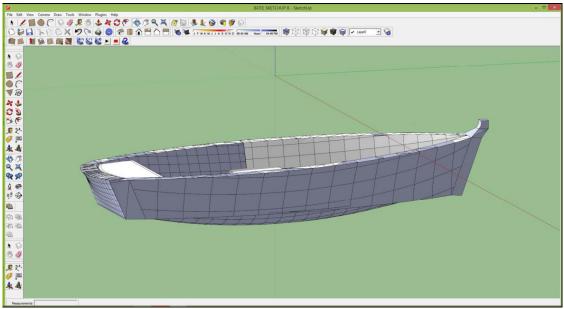




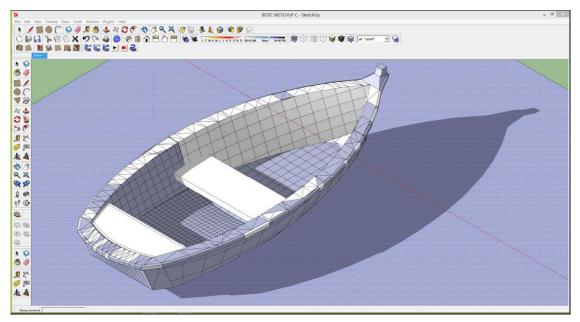






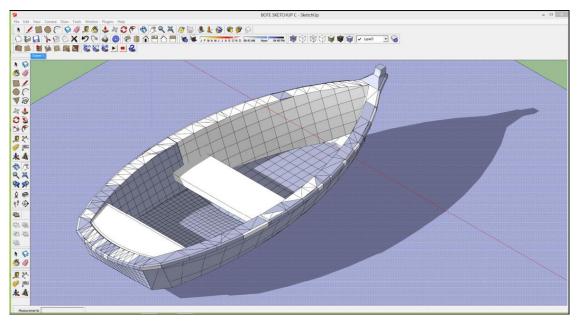


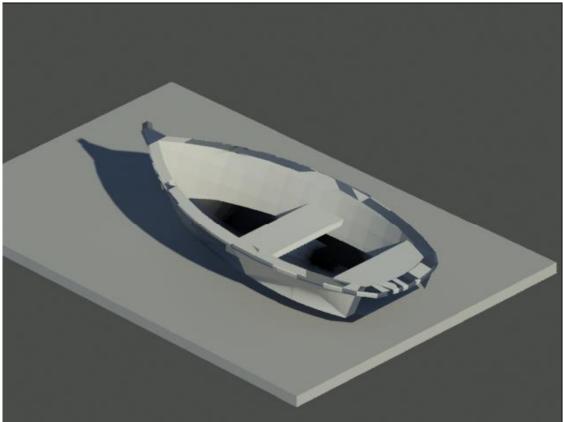




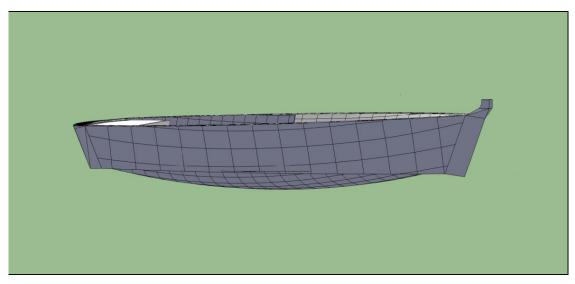












That was a boat in Bretagne, 2013, recent week.

Claudio Feldman, is an architect and artist. I can work with DifferentsMedias, Techniques and 2D/3D-Programs, of course.

If I can help you, contact to me. Always I seach for design-Jobs.

Best Regards and Thanks

Claudiofeldman@gmail.com

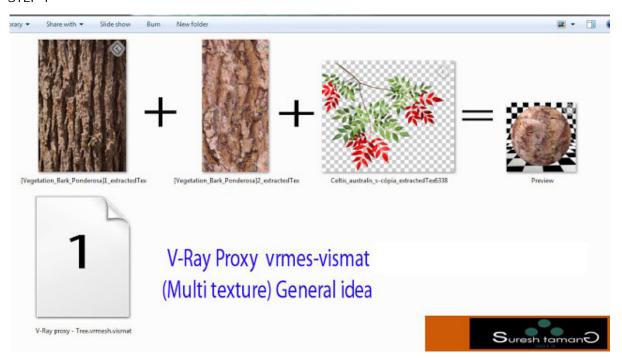


Tutorial Vray1 1.5 for SketchUp Mesh Workflow

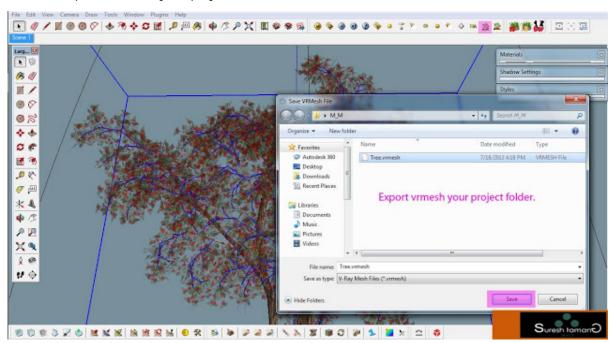
Hello everyone guys!

Suresh Tamang, from Nepal, wanted to share with us this useful tutorial vray mesh workflow that we are sure will be may help many.

STEP 1

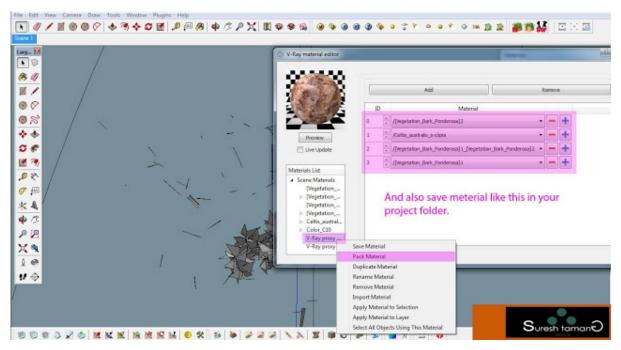


STEP 2 - esport vrmesch your project folder

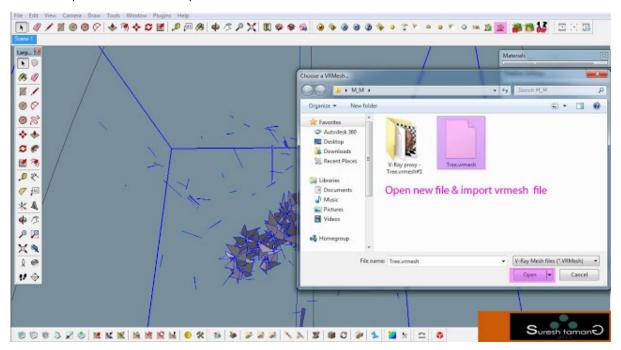


STEP 3 - and also save material like this in your project folder



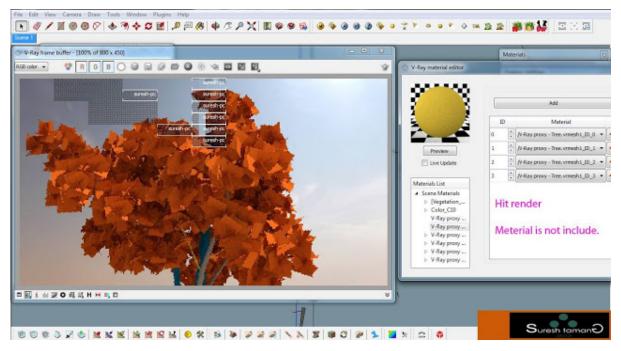


STEP 4 - open new filr and import vrmech file

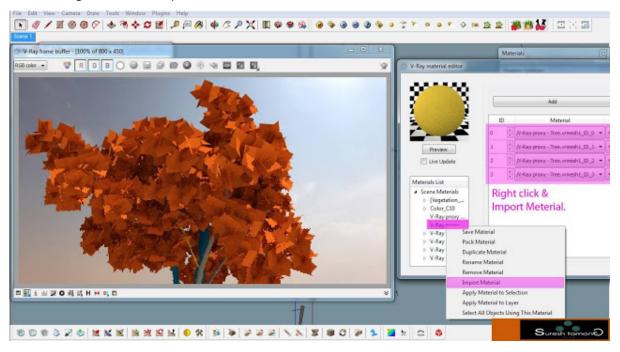


STEP 5 - Hit render render, with materials not included



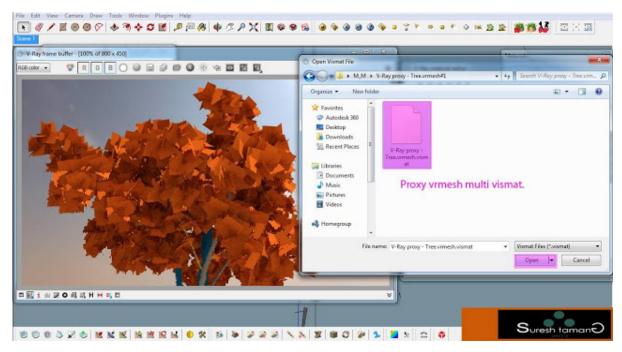


STEP 6 - Right click and import material

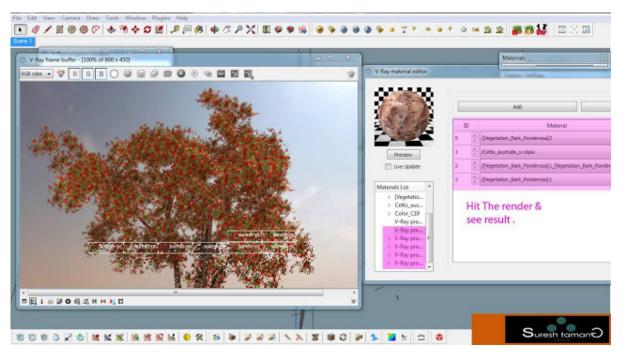


STEP 7 - open proxy vrmesch multi vismat





STEP 8 Final - Hit the render and see the result

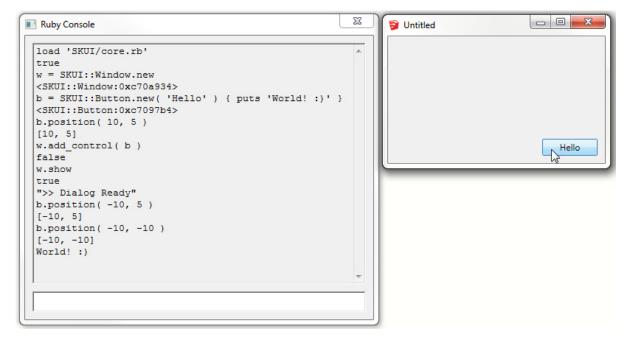




SKUI - A GUI Framework for SketchUp

Introducing <u>SKUI</u>, a GUI framework for SketchUp. It's a library that lets you create and manipulate WebDialog GUI using only Ruby code. It saves you from needing any knowledge of HTML, CSS, JS or browser compatibility issues in order to create a UI for your SketchUp extension.

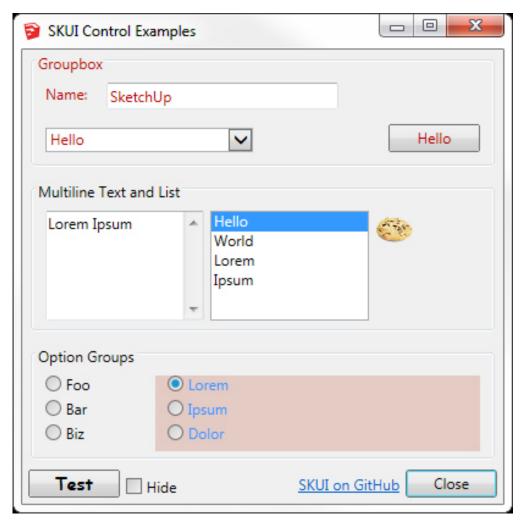
Here is a quick example:



Notice that controls can be added, removed and manipulated after the window has been created. Allowing for quick prototyping of the GUI.

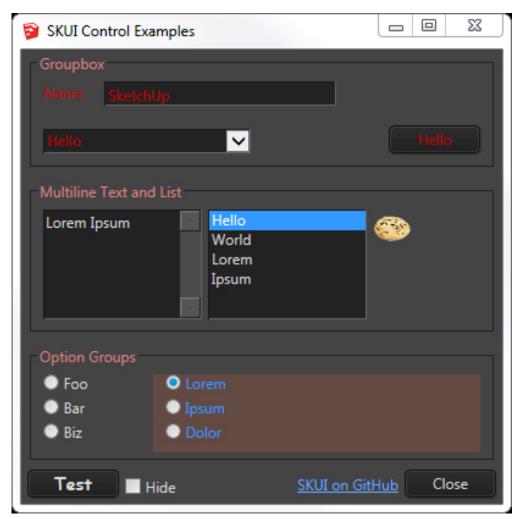
Controls are represented as Ruby classes that describe the properties and events. Here is a slightly larger example of the controls currently available:





Of course, one can use themes – with a single line you can swap theme, even while the window is open: window.theme = $SKUI::Window::THEME_GRAPHITE$





The project is <u>hosted on GitHub</u> and is still under development. There are still a <u>few issues</u> that needs to be resolved before the first release can be announced. For this I invite you, the community, to check it out and help me resolve the last issues, test it and contribute improvements.



SketchUp Tutorial - Creating topo line work and shells from a Google Earth Import

Many landscape architects and other design professionals look to current technologies to help perform everyday activities. Sometimes waiting for or paying for costly surveys and GIS information isn't quickly possible.

This tutorial walks you through how to reference and import a Google Earth terain. You will then be walked though the process for creating topography lines. Next, you will learn how to create a new skin model from these topography lines. Finally you will learn how to apply these lines to the skin and color the model.

http://www.youtube.com/watch?feature=player_embedded&v=xR9aRNbut6Q



Site Modeling in SketchUp

This video describes an architectural workflow for using SketchUp to build a digital site model with context buildings, aerial imagery, and 3D terrain. It covers the following:

- Scouting the site using Google Earth and Google Maps (starting at 00:35)
- Bringing a geo-snapshot of your site into SketchUp (starting at 05:20)
- Importing existing 3D buildings (starting at 07:30)
- Modeling missing buildings from scratch (starting at 10:00)
- Making massing model versions of the photo-textured buildings (starting at 16:30)
- Tracing roads from the aerial photo (starting at 23:47)
- Working with a site that isn't flat (starting at 34:17)
- Creating a new ground plane and street name labels (starting at 42:05)
- Creating utility scenes to show different versions of the model (starting at 50:23)

http://www.youtube.com/watch?feature=player_embedded&v=nVhM3IYMF8o



Sketchup Tutorial 2D to 3D Letters - Part 4

This is the last video in a series of 4 which shows students how to use Google Sketchup to create simple 2D letters and turn them into a solid 3D object which can be printed on a 3D printer. This fourth video explains how to scale a solid 3D object to fit the printing area of a given 3D printer.

http://www.youtube.com/watch?feature=player_embedded&v=z0aHAKCnfRk



Free Lighting Plugin For Sketchup 8

Free Lighting Plugin For Sketchup 8 is a software selection with 58 downloads. The most lightweight of them are LORVis (sized at 178,482) and EditInPlace (sized at 324,535), while the largest one is KeyShot Rhino Plugin with 544,870,058 bytes. It includes 27 freeware products like Plugin Commander Light and Light Alloy as well as commercial software like Maxwell for SketchUp 8 (\$95) and LEDAS Driving Dimensions Plugin for SketchUp7 (\$145)

OmniGrid - Cadalog Inc.: Omni Grid is a plug-in for SU Podium V2 or for SU Walk that allows you to create a grid of point lights or omni lights above or below a planar surface (SketchUp face).

<u>Plugin Commander Light</u> - The Plugin Site: Plugin Commander is a useful application for selecting, downloading and previewing plugins for image handling programs.

<u>Light Alloy</u> - Vortex Group, LLC: Light Alloy is a compact media player designed to help you play most of the popular multimedia formats.

<u>Maxwell for SketchUp 8</u> - Next Limit Technologies: Maxwell for Google SketchUp offers users the benefits of advanced rendering.

<u>LEDAS Driving Dimensions Plugin for SketchUp7</u> - LEDAS Ltd.: Driving Dimensions is a plug-in for Google SketchUp that allows you to make parametric changes of any 3D model in very simple and intuitive way.

<u>NewBlue Light Effects for Windows</u> - NewBlue: NewBlue Light Effects delivers stylized lighting tools for an electrifying mood or specialized look.

4D VB Light for SketchUp - D-STUDIO: Create 4D models entirely in SketchUp (with the use of 4D functions) in no time

<u>Vividas Player Plugin</u> - Vividas: Vividas Player Plugin offers fully hardware accelerated video playback on PCs.With the vivPlayer generator, webcasters can create a stand alone vivPlayer page that they can download and host in iust...

<u>Veetle Broadcaster Plugin</u> - Veetle, Inc: Veetle is a browser's add-on needed to be able to watch Veetle's streaming media.

LTplus SketchUP Plugin - ArchitektenInitiative e.V.: This plug-in lets you import DXF files into Google Sketch-up.

<u>eDrawings for SketchUp</u> - Geometric Ltd.: Publish, share and collaborate with read-only representations of your Google SketchUp models with eDrawings.

NVIDIA Maya plugin - NVIDIA: The Maya Cg Plug-in allows artists to author and visualize content in Maya 4.5 and Maya 5.0 using advanced hardware rendering and the Cg high level language.

EA SPORTS Gameface Browser Plugin - Electronic Arts: Ea SPORTS Gameface Browser Plugin is a small application that gives you access to the Game Face creation centre.

<u>Southern Lights</u> - WinMXUnlimited: An easy to use tool that allows you to display the songs you are listening to in your favorite WinMX chat rooms.

KeyShot Rhino Plugin - Luxion.inc: The KeyShot user interface makes the 3D rendering and animation process simple and fast.

<u>MaxMedia Light</u> - ML Software & Services: MaxMedia is an easy-to-use professional multimedia authoring tool, for inexperienced and advanced users.



<u>Dolet Light for Finale</u> - Recordare LLC: Dolet for Finale is a smart and handy Finale plug-in that reads and writes MusicXML 2.0 files for the highest accuracy available.

<u>Curves</u> - Curvemeister: Curvemeister is a plugin for Photoshop that allows to edit images by controlling curves, which is a very popular and effective method of improving image quality, compensating color and fixing...

SU Walk - Cadalog, Inc.: SU Walk is a stand alone walk thru/ fly thru animation program for SketchUp.

Renditioner Express - IMSI/Design, LLC: Renditioner Express is a photorealistic rendering plug-in to Trimble SketchUp 8.

<u>LightUp Player</u> - Billyard Enterprises: LightUp can add lighting to your SketchUp model and view the results all inside Google SketchUp.

<u>ModelFunction</u> - Sector A.f.s: This is a Sketchup plugin which provides the easy creation of sketchup models while: Maintaining the design intent of 3D models.

<u>IDX Renditioner</u> - IMSI/Design: IDX Renditioner works directly inside SketchUp™. Setup is as easy as it gets.

<u>SkunkVisionVVS</u> - VirindiPlugins: SkunkVision VVS Edition is a VVS port of the Decal plugin Skunkvision for making visible in game some things you ordinarily can't see.

<u>StarFilter Pro</u> - ProDigital Software: StarFilter Pro is a plug-in for Photoshop, Paint Shop Pro, and compatible image editors that you can use to add strikingly beautiful star filter effects to your images digitally, without the use of...

<u>SkunkVision</u> - Greg Kusnick: SkunkVision is a Decal plugin for making visible in game some things you ordinarily can't see.

LORVis - Merit Wilkinson: A Windows Media Player visualization plug-in for your Light-O-Rama controller.

AKVIS LightShop - AKVIS: AKVIS LightShop is a program that allows you to create amazing light effects.

SoundGraffiti - SoundGraffiti: Visualization plugin for WinAmp. Laser effect It is possible to look at it as look at fire.

<u>Filter Forge Freepack 2 - Photo Effects</u> - Filter Forge, Inc.: On the surface, Filter Forge is just a Photoshop plugin, a pack of filters that generate textures, create visual effects, enhance photos, process images.

<u>SketchUpBIM</u> - PixelTech: SketchUpBIM is a free plugin for Google SketchUp. It provides simple tools that make it easier to model buildings and engineering structures.

<u>PlayUp Tools</u> - PlayUp Tools: PlayUp is a plugin for SketchUp that allows people to create and export content to a 3D game engine. This software application supports master material files in CryEngine 3 and you must enable this...

MAX2AE - Boomer Labs: MAX2AE is a full featured plugin for 3ds MAX (9, 2008, 2009, 2010, 2011,2012) and higher that bridges the gap between MAX and After Effects.

<u>Magic Bullet QuickLooks</u> - Red Giant Software: With this plugin you can give your footage just the right look in seconds, whether it is an urban grunge, a desert sunrise, or the film stocks used in classic movies.

<u>Sapphire Plug-ins for Adobe After Effects</u> - GenArts: Sapphire Plugins is a package of image processing and synthesis effects for use with Adobe After Effects and compatible products.

NewBlue ColorFast for Windows - NewBlue: NewBlue ColorFast is an integrated plugin that streamlines both color correction and color grading.



Photo Toolkit - VicMan Software: Photo Toolkit is a photo editing tool that will help you to optimize, retouch and even add funny effects to your photos.

OmniGrid - Cadalog Inc.: Omni Grid is a plug-in for SU Podium V2 or for SU Walk that allows you to create a grid of point lights or omni lights above or below a planar surface (SketchUp face).

Zortam Mp3 Player - Zortam Corporation: Zortam MP3 Player is a small application that allows you to reproduce mp3 audio files, and play m3u playlists while visualizing lyrics, album covers, and background pictures.

<u>Doctor Aquarium</u> - SeaApple Software: Doctor Aquarium is an innovative aquarium automation assistant that monitors the health of your aquarium and takes actions so it will not get sick.

<u>LightMachine</u> - Harald Heim & The Plugin Site: LightMachine is a useful plug-in that you can easily add to your favorite graphic editor.

<u>PowerHome</u> - PowerHome Automation LLC: PowerHome is a home automation software package that allows you to control your home's lighting, appliances, security, and your Home Theater.

<u>Topaz Star Effects</u> - Topaz Labs: Features: -Easily add sparkling, realistic star effects -Enhance or reorient the look of light from source points -Effortlessly add excitement and drama, or even change the entire mood of...

<u>Filter Forge</u> - Filter Forge, Inc.: Filter Forge is just a Photoshop plugin, a pack of filters that generate textures, create visual effects, enhance photos, process images. Filter Forge comes with a visual node-based editor allowing...

<u>Pro Motion</u> - Cosmigo: pro motion is a drawing and animation software for Windows designed similar to the famous Amiga Deluxe Paint (DPaint).

Backdrop Creator Pro - Damon Bell: This script is used to create digital backdrops for your images.

FalNET G19 Display Manager - FalNET: The FalNET G19 Display Manager is a software for the Logitech G19 keyboard.

<u>Texture Maker</u> - Reichert Software Engineering: Texture Maker is a seamless texture generator and designer. The application contains everything needed to create seamless textures for use in 3D rendering packages, game development, web graphics....

Pixelfusion - QO Labs: Pixelfusion is a WMP plug-in which removes the "blurry" effect of a video.

<u>Hackman Suite</u> - TechnoLogismiki: Hackman Suite is a multi-module all purpose debugging tool. It includes a hex editor, a disassembler, a template editor, a hex calculator and other everyday useful tools to assist programmers and...

Bytessence PasswordManager - Bytessence: Bytessence PasswordManager is a free / open source personal information management tool, created from the need of remembering data like logins and passwords for different websites.

Recomposit - Stepok Image Lab.: Recomposit is a masking and composition tool, it support two advanced masking (digital matting) methods: Bluescreen and inside/Outside edge.

PR White Balance (WhiBal only) - PowerRetouche: Extremely versatile white balance and color cast filter. You can set any filter color imaginable and any special behavior on the light.

Zortam Mp3 Media Studio - Zortam Corporation: Zortam Mp3 Media Studio is a powerful all-in-one MP3 utility.

AC3D - Inivis Limited: AC3D creates 3D models for games, virtual reality and flight simulation, scientific, medical and general data visualization, rapid prototypes of 3D designs, high resolution 3D renderings, Google...



TESS Component Libraries - Thermal Energy System Specialists, LLC: Each of the component libraries comes with a TRNSYS Model File (*.tmf) to use in the Simulation Studio interface, source code, and an example TRNSYS Project (*.tpf) that demonstrates typical uses of...

CopyWriter - Laurenz van Gaalen: CopyWriter is a basic text editor very similar to window's note pad.

<u>Tone Mapping Plug-In</u> - HDRsoft: Tone Mapping Plug-In is a Photoshop plug-in designed to reveal details in highlights and shadows occurring in HDR images.



Instant Terrain new feature - SketchUp Plugin

New feature added to Instant Terrain SketchUp plugin by Vali Architects. Plugin at: http://www.valiarchitects.com/sketchup_scripts

 $\underline{http://www.youtube.com/watch?feature=player_embedded\&v=zzJLWXxQdx8}$



The 10 Free Tech Tools Your Class Should Be Using

http://www.youtube.com/watch?feature=player_embedded&v=8zb5X7aBYd0

A student screencast showing how the Alice language teaches programming concepts using simple menus. Both Alice and StoryTelling Alice are freeware programs. (This video is captioned.)

Even the most tech savvy teachers face challenges when it comes to selecting and implementing the right tools to enhance instruction. One of the biggest: Engaging students in rigorous and relevant learning using tools they're already accustomed to amidst the ocean of potential distractions provided by the web. Overcoming this obstacle requires developing fresh and exciting projects that utilize these tools.

Of course the biggest roadblock most of us face is funding. For many teachers, tight budgets don't allow us access to everything on our classroom or computer lab wish list. Simple solutions exist, however, that allow educators to engage students in exciting experiences using technology without breaking the bank. Here we'll explore ten free tech tools that promote student engagement and critical and creative thinking across several subject areas.

- 1. <u>iTalc</u>. A free lab management solution, iTalc allows instructors to monitor what students are viewing on their monitors and limit access to potential distractions. This software also provides the teacher with the ability to access student stations remotely or to share their screen with the class. There are several benefits to using iTalc in a computer lab classroom including the promotion of safe web surfing, directing student focus toward learning goals by eliminating distractions, and enhancing instruction by enabling students to view lessons and demos on their own screen."
- 2. <u>Gimp</u>. One of the most robust freeware graphics and photo editing programs, Gimp includes most of the standard features found in Adobe Photoshop including layers, brushes, filters, and more making it an excellent choice for projects ranging from graphic design and photo-manipulation to animation. This alternative to expensive graphics suites is equally as effective as a platform for teaching valuable technical and design related skills.
- 3. SketchUp. This 3-D modeling program has potential applications in a variety of disciplines and is available both in a full-featured "Pro" version as well as a free "Basic" version. While the SketchUp Pro includes advanced features, the basic version provides all the features needed for most classroom uses. The intuitive interface and simple tools enable basic users to construct complex structures in a matter of minutes. Students no longer need craft supplies and shoe boxes to create dioramas as they can easily reconstruct scenes from a book or historical events right in the program. Besides the built-in tools for creating models, the software also provides access to the 3-D Warehouse, a huge collection of free models ranging from famous landmarks to furniture. SketchUp could also be used to create models of molecules or cells for a science class or to help explain geometric concepts for a math class. What's more? SketchUp offers teachers free licenses for the pro version of their product.
- 4. <u>StoryTelling Alice</u>. Create interactive 3-D animations using simple programming with this free storytelling tool. Students pick a scene and characters from a diverse library and develop an action-packed script along with dialog using speech bubbles. Students can also set characters to perform specific actions when clicked and move the camera's point of view using the cursor keys. Applications of StoryTelling Alice range from creating comic strips to constructing complex interactive games. This program is an instant hit with students and is an excellent tool for teaching students about story elements as well as fundamentals of programming.



The SpaceNavigator remains the best way to use Google Earth

With the <u>LeapMotion</u> finally launching soon (hopefully), I thought it'd be fun to once again take a look at the current king of Google Earth controls — the 3DConnexion SpaceNavigator.

It's been nearly seven years since <u>Frank introduced the SpaceNavigator</u> to all of us, and I thought it was time to give it another look. <u>I mentioned a while ago</u> (in the comments) that the iPhone version of Google Earth (with multi-touch control) was similar to using a SpaceNavigator when compared to the single-touch version on Google Android devices (which has long since incorporated multi-touch as well). I thought I should explain what a SpaceNavigator actually is for those that don't yet know.

In a nutshell, **the SpaceNavigator is a 3D mouse**. Rather than having to pan, then zoom, then pan a little more, then tilt, etc, you can do it all in one motion. You can zoom in, while panning, while tilting a little more, to really feel like you're flying around the world. I've told many people that using the SpaceNavigator made Google Earth feel brand new again.

You can get a pretty good idea of what it can do by watching this video that Frank made a while ago that showed off some of the basic features of it:

http://www.youtube.com/watch?feature=player_embedded&v=TQGes21MRUE

You can also check out his review of Disney World 3D, which was done using the SpaceNavigator:

http://www.youtube.com/watch?feature=player_embedded&v=_wmdCeFUQH4

To be honest, I expected that we'd see some competition to the SpaceNavigator by now, and perhaps the Leap Motion is finally it. A year after the SpaceNavigator came out, Sandio released their "3D O2 mouse", which was supposed to be even better — you could use it as a mouse, but it also had various 3D control sticks on it. However, it was a piece of junk and the SpaceNavigator remained king.

Here we are years later and **I still use mine every day**. It's a wonderful tool, and Google Earth simply wouldn't be the same without it. It works for Windows and Mac, and you can pick one up at the <u>3DConnexion online store</u>, or at a handful of specialty retailers.



Undergrads triumph in Google contest

Undergraduates worked on this 3D rendering of the Dartmouth campus throughout the Spring term. As one of seven winning teams they will travel to the Google headquarters in California.

A team of 13 Dartmouth undergraduates became one of seven winning teams in Google's "Build Your Campus in 3D Competition" earning the students a trip to Google's headquarters in California, where they will interact with digital modeling professionals. The team members -- advised by Lorie Loeb, a professor in the computer science department -- worked on their project in Sudikoff Laboratory throughout Spring term and ultimately triumphed over 350 other applicants in the contest.

Loeb said she learned of the project through an e-mail from a Dartmouth alumnus who currently works for Google and began to contact students from a variety of different academic disciplines.

"[The e-mail] caught my attention and so I said, 'Ok I'll call a group, I'll do it,' and I sent e-mails out to some of the students in computer science, digital arts, and studio art departments," Loeb said. "I also sent it to the architecture program. So that's how it got going; that e-mail spurred it, and then I reached out to lots of programs."

She added that the project was a great opportunity for students involved with the College's recently created Digital Arts minor, as the entrants were required to use SketchUp -- a software program recently acquired by Google -- to digitize their campus.

"The digital arts minor is a new program and it is really exciting that this has happened," Loeb said. "The people who are the judges are really esteemed and every Ivy was in there, but we won. For a new program to be recognized by this group of industry professionals in this way is really such an honor and it speaks to what this means."

Loeb also noted that the Dartmouth team faced several obstacles from the beginning due to the number of buildings on campus, which amounts to over 130. Jessica Glago '08, who stepped up as the student leader of the group, said that the sheer scale of the project was the greatest challenge and proved overwhelming at times. Additionally, at other universities the contest was integrated into a course, while the students from Dartmouth contributed to the project in their spare time.

"There were just so many buildings and we really wanted to take our time on every building and make each one all that it could be but they weren't looking for these amazingly detailed buildings," she said. "We had to manage efficiency with getting really nice buildings, while still having a small file size."

Glago, a digital arts minor, took hundreds of pictures of campus buildings from various angles to make the process easier for the team. She then used Microsoft Excel spreadsheets to organize the students and their respective tasks and to calculate how many buildings they had to complete each week.

She added that when the team finally started on its first building assignments, there were only 40 days left before the deadline.

"It was definitely a time crunch," Jen Huang '09, a computer science major and digital arts minor who worked on the project, said. "We started Spring term and everyone else had been working on it since January. We had two months to model every single building on campus."

Huang added that the best part of the experience was by far the group dynamic and the artistic aspect.

"Definitely learning how to use [SketchUp] was useful, but it was also really fun," she said. "I did it to be part of something like that. It really has nothing to do with programming -- it's just more art than computer science."

Looking back on the experience, Glago said that what she learned extends far beyond the realm of computer science or digital art.



"I learned how to be the project manager," she said. "At first I really didn't know what I was doing but I think I learned how far I can push people and when to be motivational. We all learned a ton about the software and that was great but when it came down to really getting this project done, it was all about timing."

The project was co-sponsored by the Department of Computer Science and the Digital Arts Minor and received financial support from the College's William H. Neukom 1964 Institute for Computational Science and from Borealis Ventures.

The six other winners are Purdue University, Franklin W. Olin College of Engineering, Concordia University, Indiana University--Purdue, University Fort Wayne, University of Minnesota and Stanford University.



Sefaira Concept Release - SketchUp 2013

Sefaira Concept now fully supports SketchUp 2013. You can now upload SketchUp 2013 files directly to Concept, and use the Sefaira SketchUp Plugin with SketchUp 2013. Our customers can download the plugin at https://plugin.sefaira.com. (Note that we'll continue to support the most recent version of SketchUp 8 as well.)

In addition, this release includes some performance enhancements for runs with multiple strategies: they will now run faster than before.

Download Sefaira Concept SketchUp Plugin

Please be sure to uninstall the legacy Sefaira SketchUp Plugin before proceeding.

The Sefaira Concept SketchUp Plugin helps you quickly create Concept-ready SketchUp models. The plugin allows you to:

- Visualize how Concept will interpret your model
- Change entities that Concept has misinterpreted
- Ignore objects that are not intended to be analyzed
- View and correct surface normals



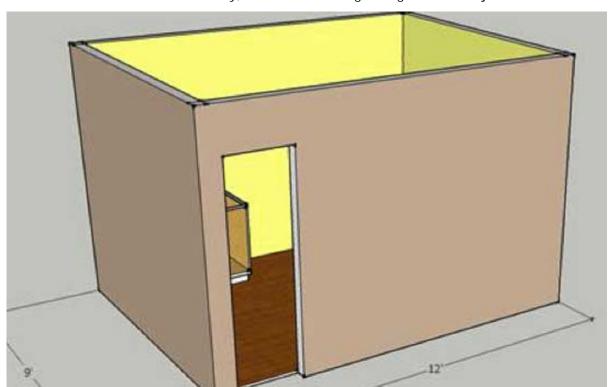
Model Your Renovation in 3D With SketchUp Make

I might have found my next favorite tool. <u>SketchUp Make</u>, released last month, is 3D design software that you've probably heard of. If you're like me, you might have even tried it.

Various versions of SketchUp have been around for more than a decade, and at first glance the new release isn't all that different from the version I tried to use many years ago. Back then, though, I couldn't get it to do diddly squat. Something must have changed, because today I was able to create a to-scale rendering of a 9-foot-by-12-foot bathroom, complete with 8-foot-tall walls at 4 inches thick. I even added the beginnings of a vanity cabinet with a 4-inch toe-kick. I achieved all this in about 20 minutes without any proper experience with SketchUp at all.

What has changed since my first frustrating try years ago? For starters, I watched a 10-minute intro video from SketchUp that helped me get a feel for the basic steps. I also watched a short video of a professional architect in California who used SketchUp to create full working drawings. The first video got me started and the second gave me the vision of what is possible. Inspired and equipped, I just jumped in.

Did I create a work of art? Not exactly, but I was encouraged to get this far in just a few minutes.



Who Can Use SketchUp?: Anyone who would benefit from 3D modeling can use SketchUp. In the home-improvement world, it could be incredibly useful to build a detailed 3D model of your house and property. I can see creating an "as-built" base model and then using it to model dozens of potential projects, from landscaping to buying new furniture to remodeling a room. The most important part—and often the biggest challenge—of a major improvement project is having a realistic vision of the finished work before you start. SketchUp helps you with that.

Free vs. Paid: There are two versions of the software. SketchUp Make is free and available to anyone so long as it's not being used commercially (you're not using it to make money). SketchUp Make is a fully functional program and, as best I can tell, isn't noticeably lacking when compared with the paid product, SketchUp Pro, which retails at \$590.



Pro is licensed for commercial work and comes with a few extras, the most important of which seems to be a LayOut tool that's used for creating large format prints. Another feature allows importing of common CAD file formats.

How Will I Use SketchUp?: I plan to spend more time learning to use SketchUp faster and more accurately. Accuracy is very important: You don't want to make the mistake of drawing an island in your new kitchen only to find out, after the cabinets arrive, that you really don't have the required space for it.

Expect to see more SketchUp illustrations of design ideas throughout my blog posts. I'll use it to provide designs and details for an upcoming kitchen remodel, and also for playing around with some roofline changes I hope to make to my front porch.



Land F/X - A complete landscape architectural add-on to create planting and site plans

Land F/X is the leading landscape architectural add-on for AutoCAD.

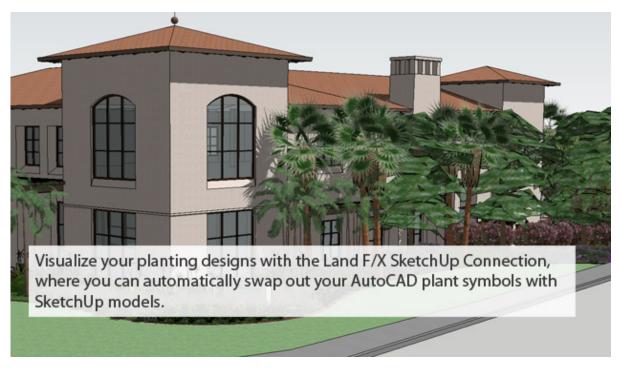
This plug-in allows anyone to create Planting or Site plans within SketchUp, accessing our vast content library.

It also has tools to connect SketchUp with AutoCAD, for users of our AutoCAD add-on.

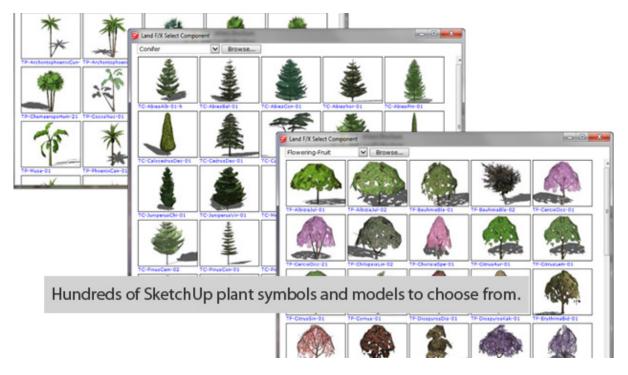
This plug-in requires a free registration, available here.

Users of this plug-in are entitled to the benefits of our outstanding support:

- http://www.landfx.com
- support@landfx.com
- +1 805-541-1003







http://www.youtube.com/watch?feature=player_embedded&v=WeqxV-T-PGA



RIP Google Reader, ignored by many, loved by few

If you have a Google account, and if you're reading this on a computer you most likely do, you'll probably have used it to sign in to Gmail, or maybe YouTube, Google Maps or its burgeoning social network Google+.

Fewer Google users use Google Reader, one of the company's slightly more niche services (like 3D model builder SketchUp, or the social organiser Groups), which is why – to the dismay of those who organised their reading around its RSS feed collection – Google announced it was binning the service on 1 July.

Reader is a service which allows you to select the websites you want to read – say independent.co.uk/football – and it will automatically sync any article published by the site with the your Reader account on your computer or phone. The result is a personalised newswire, a service that's indispensable for many – particularly some journalists – which is perhaps why the outcry at its closure was so loud yesterday. At the time of writing, 50,000 people had signed a petition at change.org to keep it open.

It may well have been the continued rise of Twitter which did for Google Reader. Most news sources will have Twitter feeds putting out their content as soon as it goes live. And, if you're following the right people, the best stories will be recommended to you without having to sift through Reader. The service quickly filled up with stories too, making it difficult to pick out the ones you were most keen to read.

Though some, like CNET's Scott Stein, have rubbished the comparison. Stein tweeted "Google Reader is to Twitter as a well-labelled filing cabinet is to a bag of insane cats."

So if Twitter isn't a direct replacement, then what are people who relied on Google Reader for their news supposed to use? Members of the Reddit community quickly offered a few suggestions on a thread mourning the demise of Reader, including the paid-for Fever, the long-running Netvibes (which offers easy Reader migration) as well as an independent take on Google's product called The Old Reader.

The death of services we rely on is an inevitable consequence of free web services which require large user bases to be profitable to advertisers. For instance, Posterous, the mobile blogging platform acquired by Twitter in 2012 will be shut down at the end of April. Google is particularly brutal when it comes to ending services — mainly because it has launched so many. Anyone remember Google Notebook? Which allowed you to take notes while browsing. Or, did you ever sign up for its fledgling social network Buzz, whose first hit on the search engine reads "Google Buzz has gone away."

Dan Worth, news editor of technology website V3, understands users' annoyance at losing favourite services but suggests that – like when a beloved high street store fails – there's not much they can do: "It's understandably frustrating when a service is discontinued but mostly firm's make these decisions for their own reasons, rather than the users, especially when the service was free to begin with."

If there's a product you can't work without maybe, hints Worth, have a few alternatives ready and back up the information you've got save on them: "The internet makes seems thing very tangible but if the company behind a product goes bust, is bought, changes market or some other reason, there's little that can be done. Backing data up to your own laptop is always a sensible idea and most firms will give you notice and a chance to export content from their service before it disappears."

Which gives Google Reader readers three and a half months to set up their RSS feeds elsewhere. And maybe take some solace in the news that while Google can read your email, know what videos you're watching and what websites you're looking at, it will no longer know which news feeds you use. Take that Sergey!



Discover VJTI on Google Earth

Have you ever tried the ground level view on Google Earth? Google Earth - a virtual globe of stitched together sub-meter high resolution satellite photos of the Earth.

This geographical information program also brings in trillions of scientific information with applications ranging from the measurement of distance between two locations to estimation of forest biomass and carbon.

The <u>Google Earth terrain</u> is becoming increasingly realistic to explore, since Google is adding 3-D models of major buildings.

With the help of Building Maker and street view imagery (available only in some countries) or Google SketchUp 8, you can now <u>create a 3-D model of any structure</u> around you, including your own house and submit it to Google.

Google SketchUp officially encourages people to join the worldwide Geo-modeling community, and help put every village, town, and city on the 3-D map.

If your model qualifies the 3-D layer acceptance criteria, it is accepted by Google and becomes visible on Google Earth.

This is attracting budding architects and modelers worldwide. This can also aid local governments in carrying out their town planning functions.

You can find, share, store, and collaborate 3-D models on the Google 3D Warehouse. The easiest way to share your model with the millions of Google Earth users is to upload it to the Google 3D Warehouse.

Due to the efforts of the incipient engineers in VJTI, you can now explore VJTI too in 3-Dimensions on Google Earth. Fly to <u>VJTI, Mumbai</u> on Google Earth and take a virtual tour of this 16 acre campus.

The huge campus of VJTI, one of the leading engineering colleges in Mumbai, can now be discovered on clicks. So you will no more be lost in the campus during your first visit!



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 column. 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.