



**TAKE  
YOUR  
PLACE**

# Visual coding and generative modelling with Blender

with Henry Driver

Artist and Game Designer, Henry Driver specialises in creating thought provoking artworks which explore pressing issues, for the last three years he has focussed on the environment and climate change. He utilises a variety of mediums and technologies including interactive media, games design, artificial intelligence, projection, photography, video, sound and sculpture.


Henry has showcased his work across the world including exhibitions in Australia, Europe, North America and Asia. In the UK, his work has featured in galleries such as Tate Liverpool, Tate Britain, The Barbican & Whitechapel Gallery.

## Objective

This workshop will help you to use blender as a conceptual sculpting tool. Henry will guide you through each step to help you create a unique animated digital sculpture and empower you to use the tool in a playful way to explore new possibilities.

Due to the technical nature of this activity, the worksheet refers to the workshop recording for specific directions to achieve each task. Please click on the relevant time stamps to watch each step.

## YouTube workshop link

 [Youtube workshop video](#)

## Workshop duration

This activity should take approximately 1-1.5 hours to complete. Please adapt to your circumstances. Please remember to save your project in Blender at regular intervals.



## What materials do I need?

Access to a computer and blender 3.2.2 or a more recent version. Click [here](#) for a free download (Please note the layout and tools within the software may vary in different versions)

It may be easier to work on two screens if you have access to a second monitor or can watch the recording on a different device.

A mouse is recommended but not necessary.

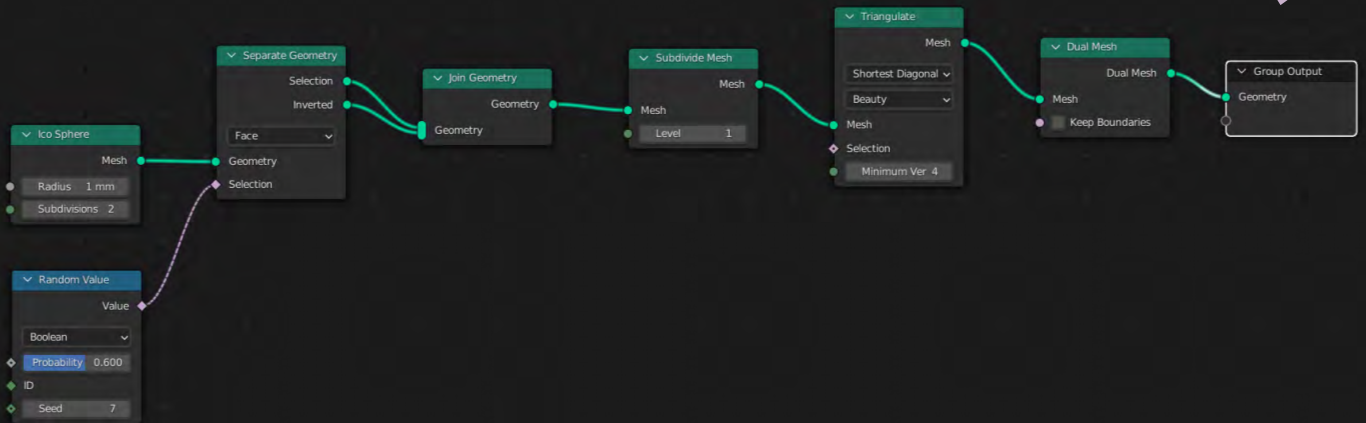
## Task one: 3D modelling - sphere one

The purpose of this task is to get to grips with some visual coding and geometry nodes. These are the building blocks of the 3D model, each node changes the model, a bit like adding ingredients into a recipe. Within this section you will be creating a distorted sphere through interlinking a series of node actions.

This is a series of nodes in a node plane.

### Catch up on the recording:

▶ [Timestamp: 17:58](#)



## Task two: 3D modelling - sphere two

Here is the beauty of nodes, rather than having to rebuild a second sphere you can simply copy and paste it! Remember, although the building principle needs to be followed for a similar outcome you can use alternative data inputs to make your design more unique.

### Catch up on the recording:

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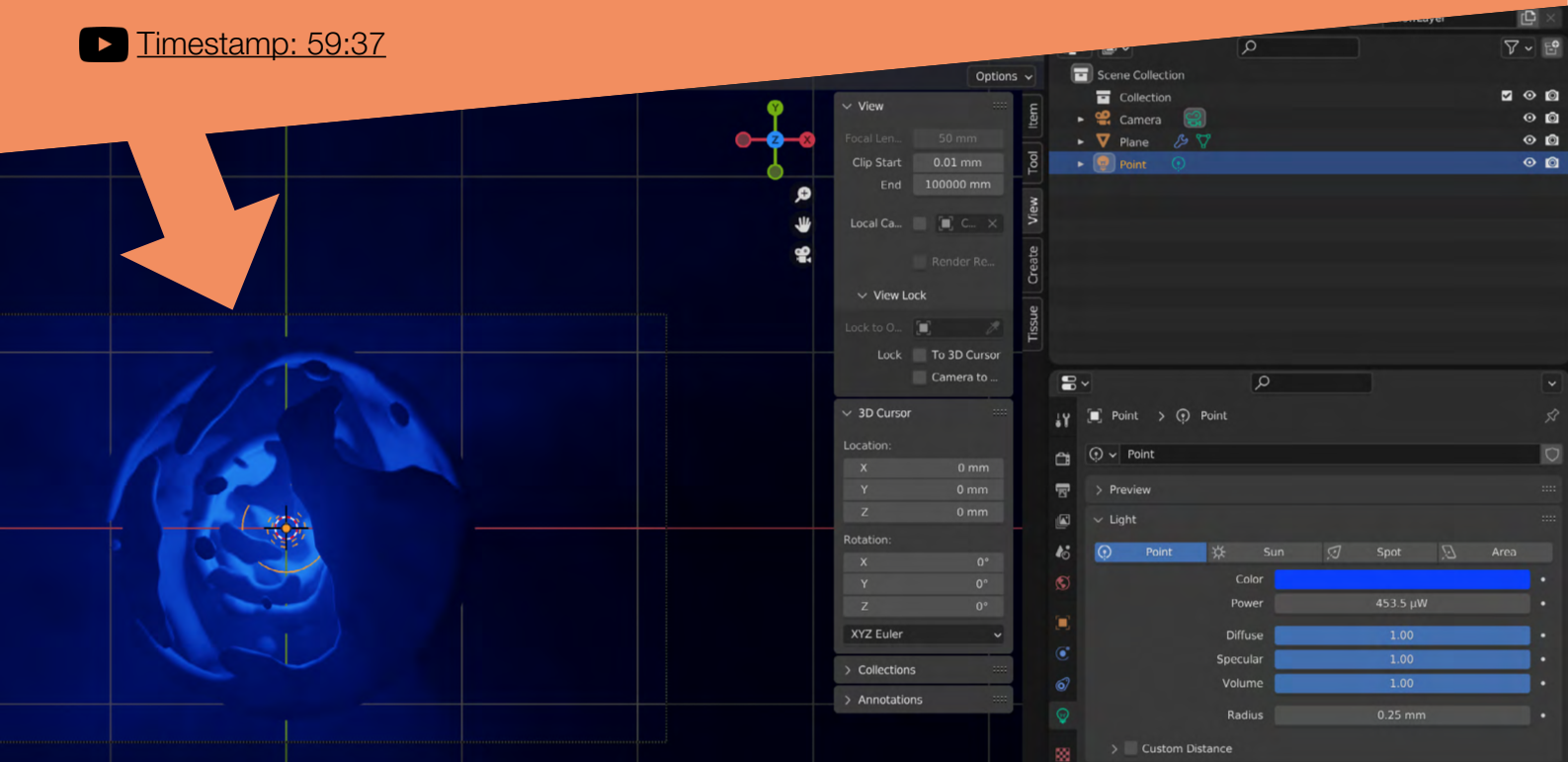


## Task three: adding the lighting

Lighting adds atmosphere! Through accessing your layout view and camera settings you can adjust your preferences to change the location and colour of your light source and even fade the background lighting.

### Catch up on the recording:

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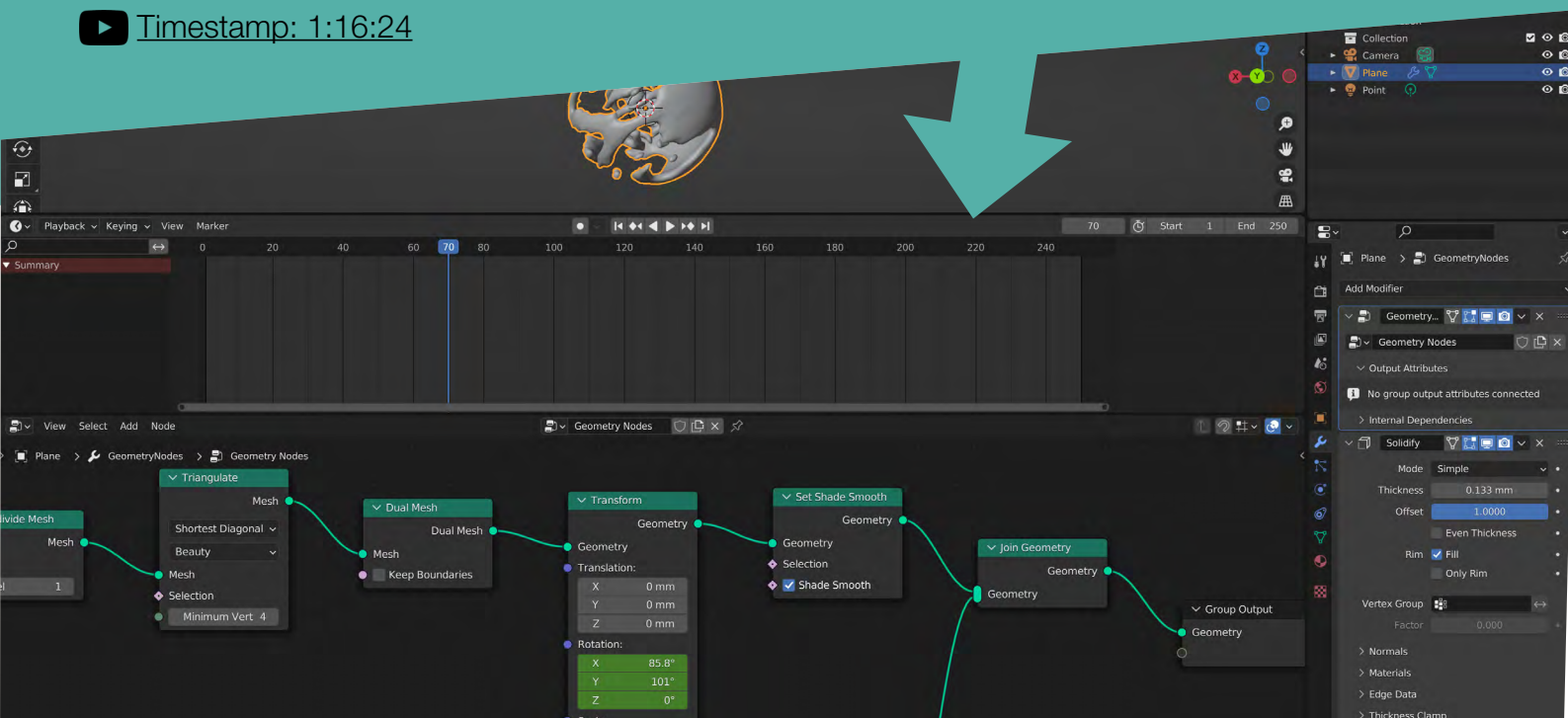
## Task four: animating

Now its time to bring it to life! This will require opening an additional window to see the timeline of your animation alongside your sculpture.

Through adding Rotation (XYZ) values to your transform node you will be able to animate the spheres so they independently rotate at different angles. Thanks to the Simple Deform modifier we applied this will also make the sphere morph as they rotate.

### Catch up on the recording:

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## Task five: rendering

To generate a still image of your outcome, go to the rendering tab and click “Render Image”. Click on Image, then Save As to save it onto your computer.

Ta daah! You have made a unique 3D moving sculpture!

## Catch up on the recording:

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## Next steps:

Step back from your work and consider:

- What does this 3D digital sculpture remind me of?
- Where would this type of work be located and displayed?
- Is there a way I could improve my design?



## Conclusion

This workshop is designed to help you explore how digital sculpting can be as playful and thought provoking as working with physical materials. We hope you will consider using these skills in some of your future projects whether it's in a modelling, animation, graphics or a fine art context. Blender is a great tool for a range of creative projects.

“What I love about Blender is it's free, regularly updated, incredibly powerful but most of all there are tons of guides, tutorials and videos available to help you learn. You can use these to develop your own unique style and way of working.” - Henry Driver

## Find out more about Hendry Driver

 [@HenryDriver\\_](https://www.instagram.com/HenryDriver_)


 [Henry Driver's website](#)

We would love to see your work! Share it with us on Instagram:

 [@NUAoutreach](https://www.instagram.com/NUAoutreach)

 [@takeyourplace\\_he](https://www.instagram.com/takeyourplace_he)

## Further resources

 [BBC iPlayer - Secrets of Soil](#)

 [Blender Basics YouTube playlist](#)

Then just web search away and learn how to build whatever you like, and then use those skills to make your own unique creations.

## Useful links

 [@norwichuniarts](https://www.instagram.com/norwichuniarts)  [Creative Careers](#)

 [Take Your Place](#)  [NUA website](#)