

The background is a dark, muted purple. It features several 3D cubes of varying sizes and orientations, some appearing to float or move. A faint, light-colored wireframe network of lines and dots is visible, particularly on the right side, suggesting a digital or network theme. The main title is enclosed in a white, hand-drawn rectangular border with slightly irregular edges.

3D modelling & Animation

By Andrew

What is 3D modelling ?

?

Any guesses

What is it used for ?

- Games
- Movies/C.G.I
- 3D printing
- Architecture

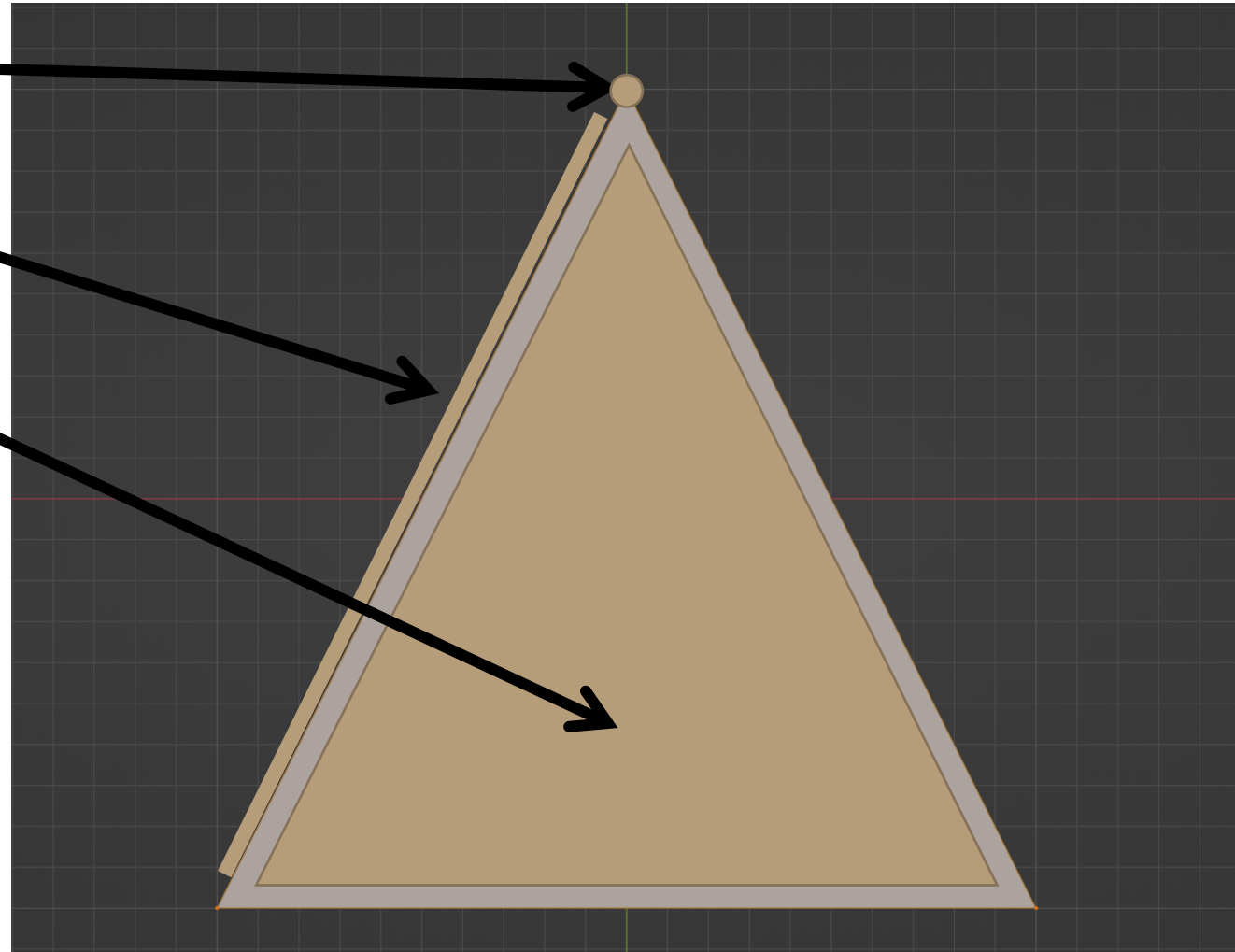
Any other suggestions ?

What can we use to make 3D models ?

- Blender (Free & Easy to learn)
- Tinkercad (Web based & Easy to prototype)
- Autodesk Maya / 3DS max (Very expensive & difficult to learn)
- Sketchup (Web based)

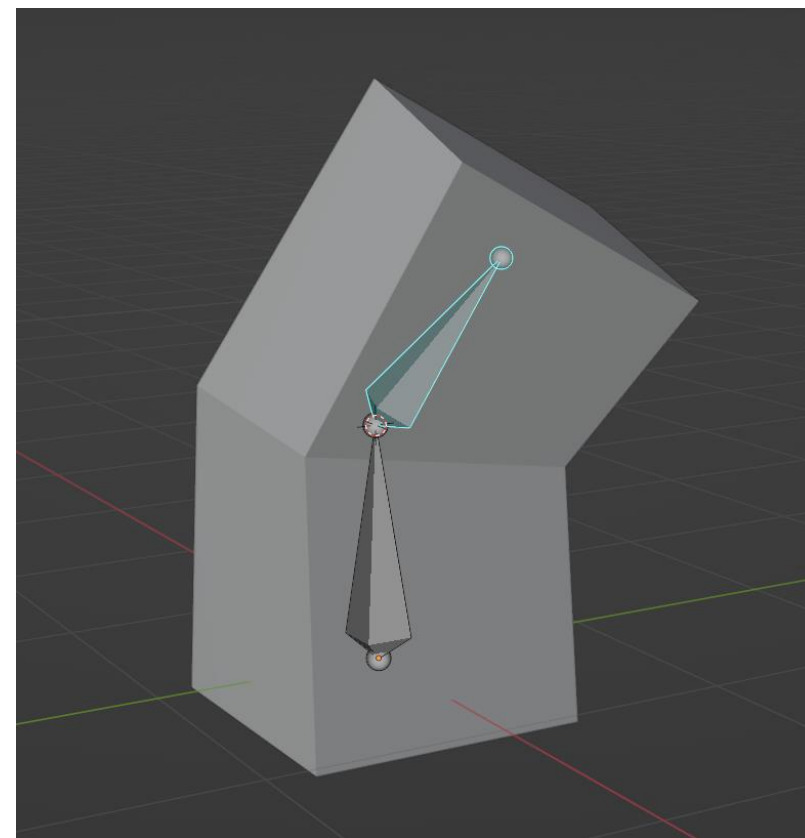
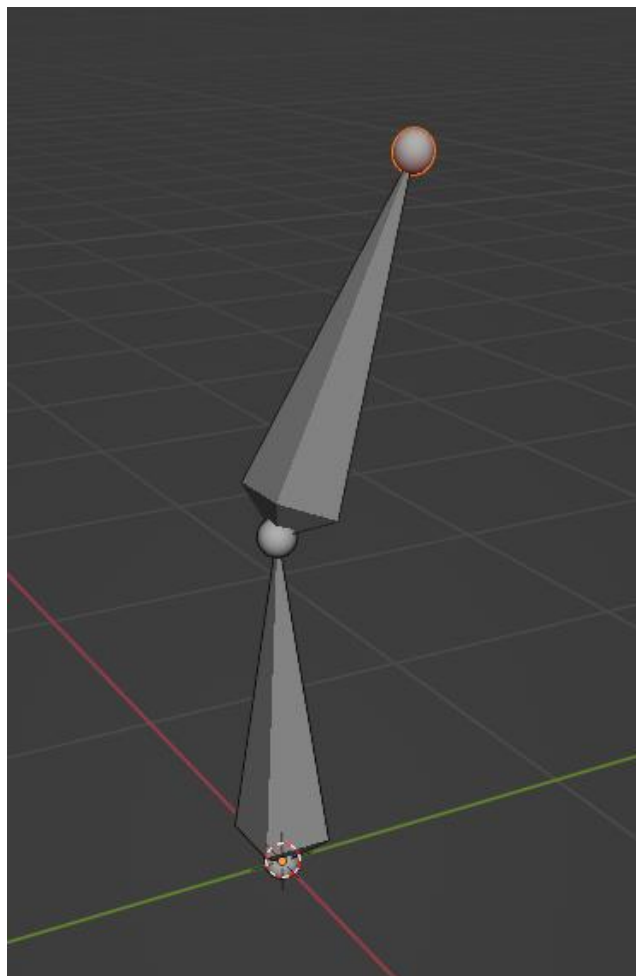
What makes up a 3D model

- Vertices (3D points)
- Edges (2 Vertices)
- Faces (3 Edges)



How do I animate 3D models

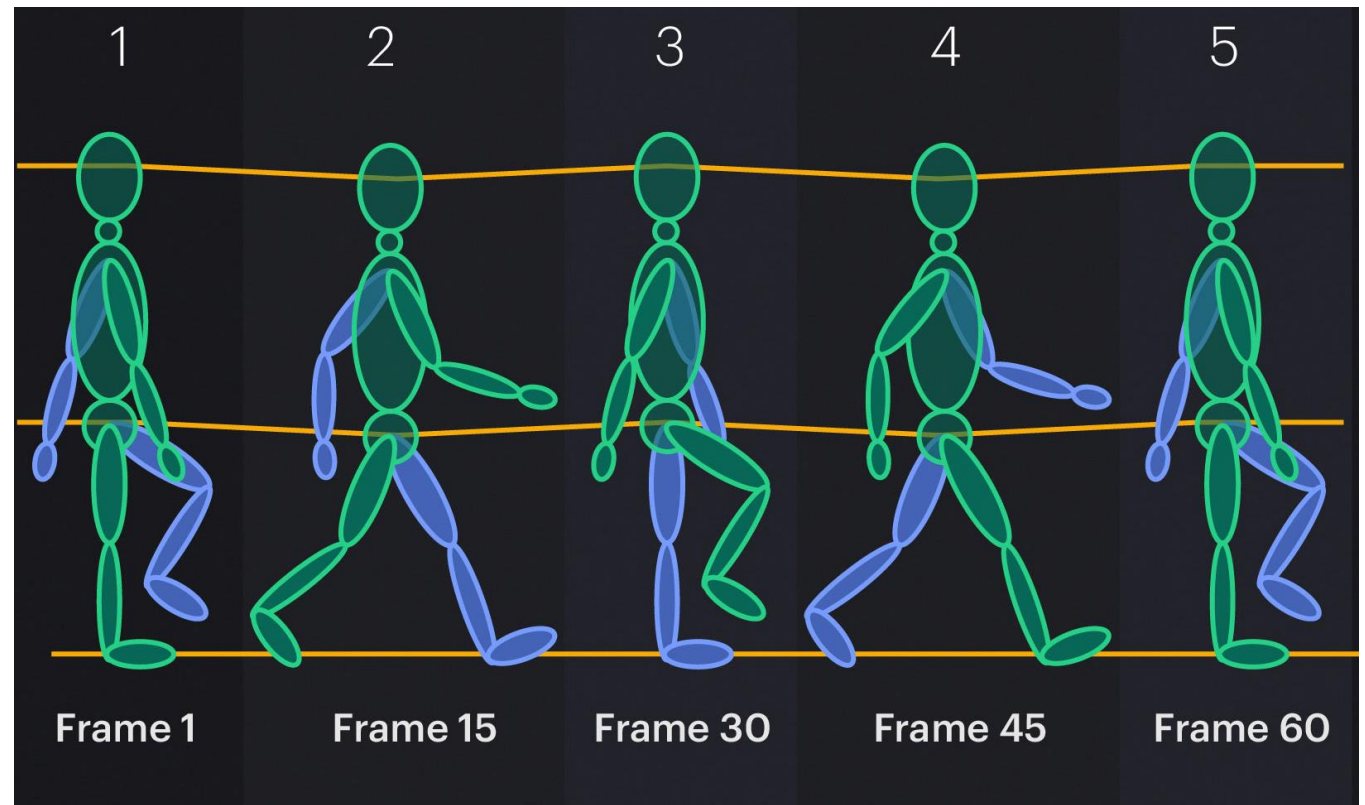
- Mainly I use 'Armature' to model objects, think of bones and a skeleton.
- You can pair models with armature



Do I have to animate each frame?

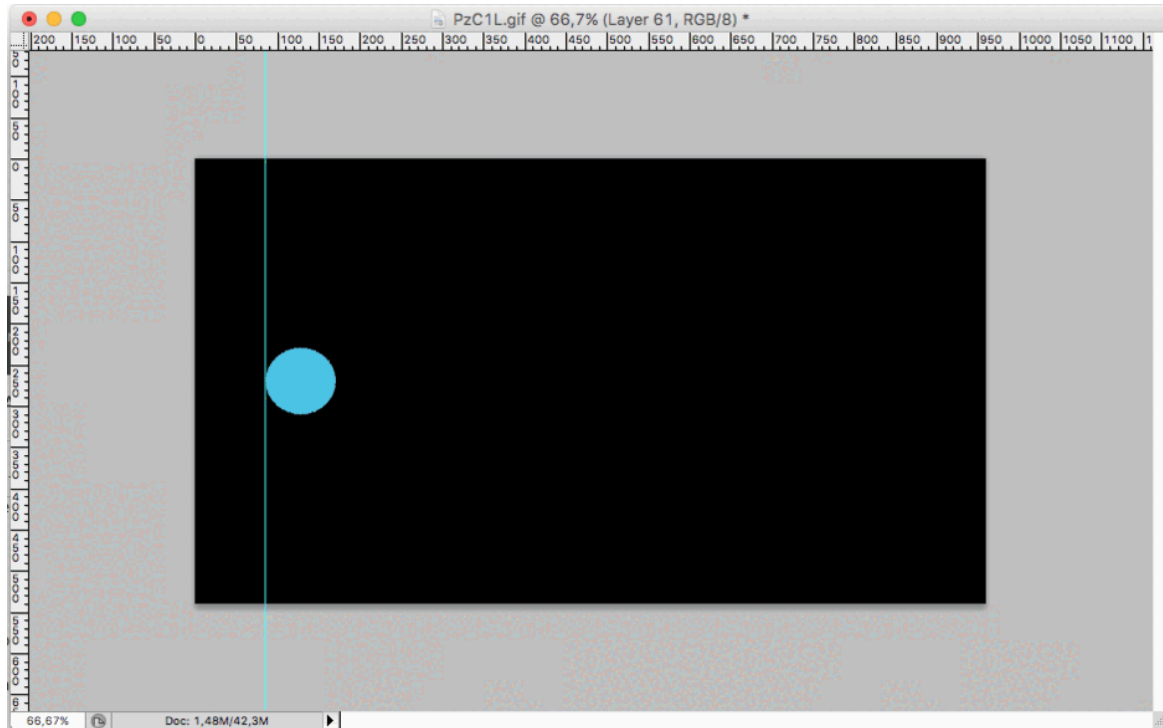
NO you don't have to!

Each **KEY FRAME** is all you have to animate, the software will usually fill in the blanks for you!



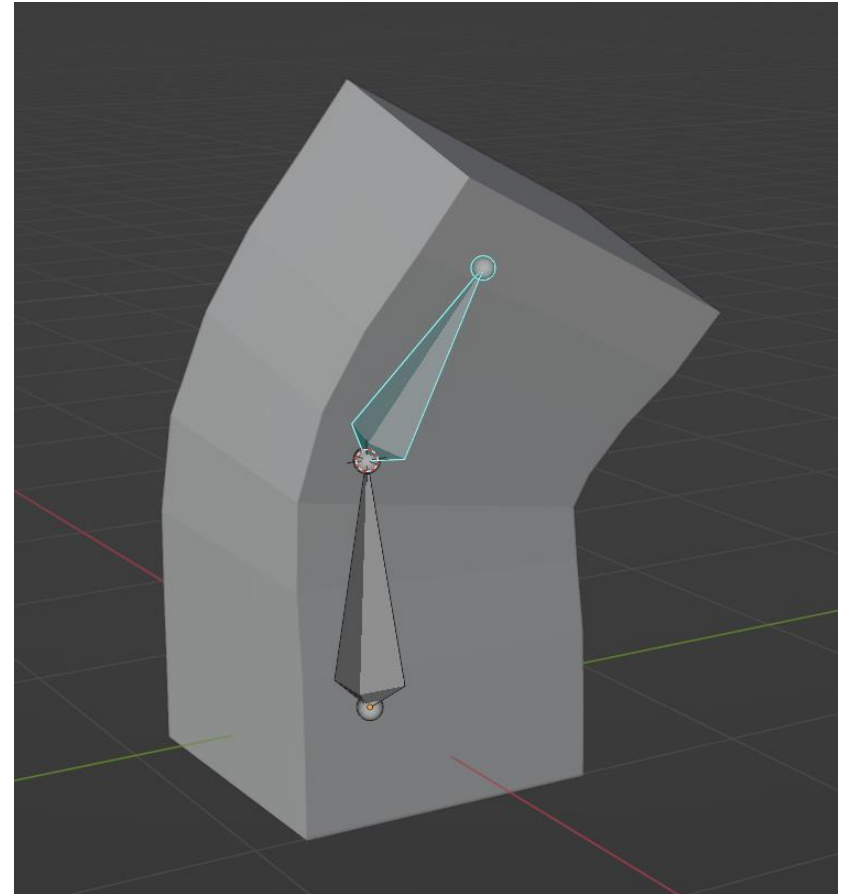
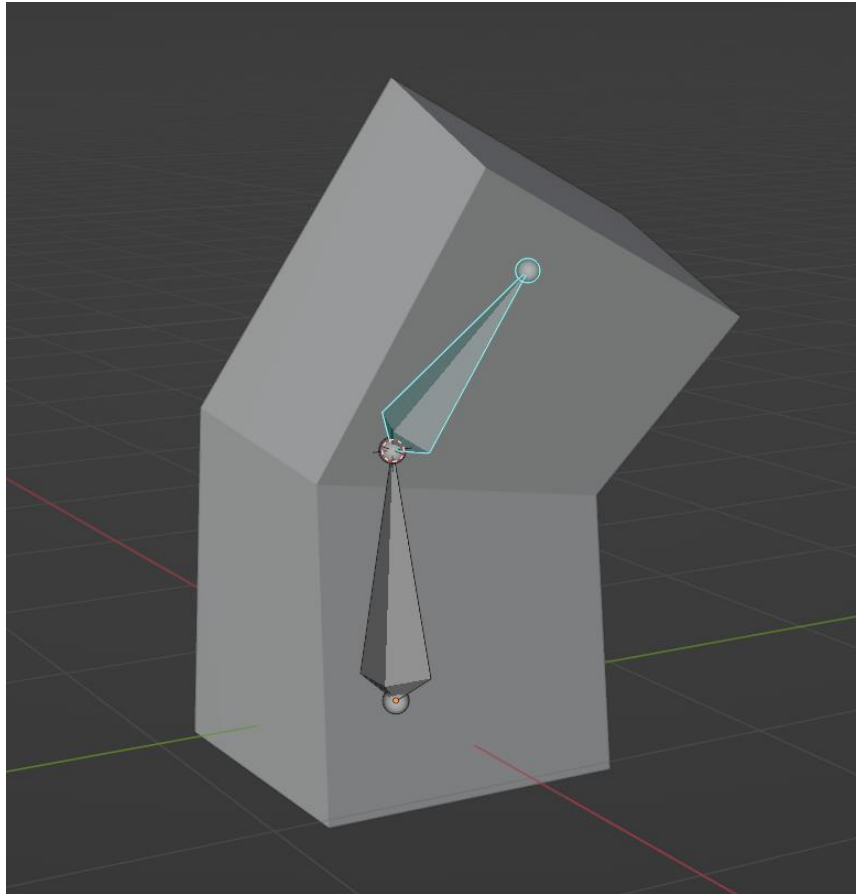
What is a key frame ?

- A frame is a pose that you want your animation to look like in a certain time, a animation is made up of a bunch of frames called **key frames** !



How do I make the object/animation look better ?

- The more mesh there is in the model, usually you get better results when animating



Example animation in blender

