



Panoramas and Photography

What is a Panorama ?

A **panorama** is any wide-angle view or representation of a physical space, whether in painting, drawing, photography, film, seismic images or a three-dimensional model.

The word was originally coined in the 18th century by the English painter Robert Barker to describe his panoramic paintings of Edinburgh and London



What is a Panorama ?

The motion-picture term *panning* is derived from the word *panorama*.



Robert Barker's Panoramic view of Edinburgh from Calton Hill, Painted in 1791

The earliest that the word "panorama" appeared in print was on June 11, 1791 in the British newspaper *The Morning Chronicle*, referring to a visual spectacle by Robert Barker, who created a painting of the view from the summit of Calton Hill in Edinburgh.

The large, panoramic painting was hung on the inside of a specially built circular building, or rotunda, and was viewed from the inside.

It had a distinctive, unprecedented, and utterly magical effect, giving viewers a vantage point encompassing the entire circle of the horizon, making it feel like they were really there.

Some later paintings measured more than 14 metres high and upto 40 meters in diameter, 120 metres in circumference.



Robert Barker's Panoramic view of London, Painted in 1792

A Panorama of Constantinople created 1801-1802.
Formed from a series of eight etchings.

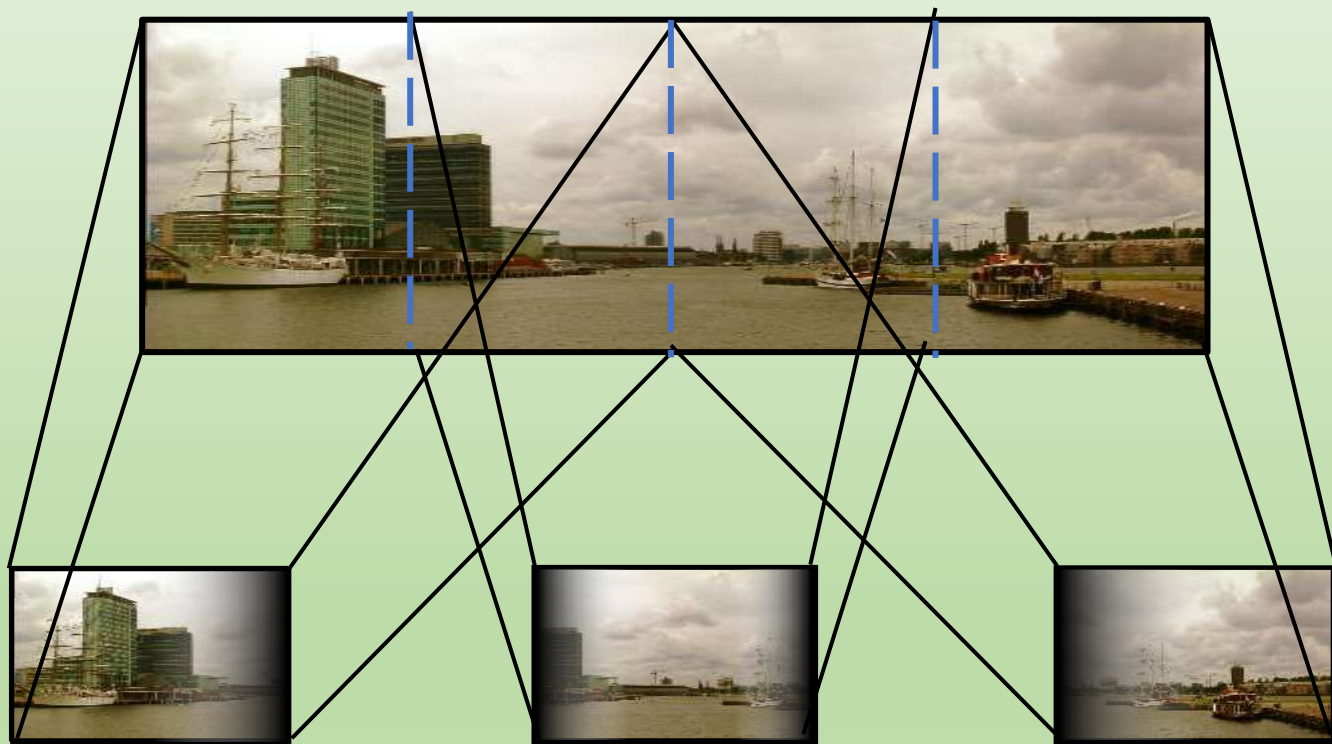


These eight, brilliantly coloured and fully detailed, etchings form a wide-angled view of Constantinople, were reproduced and then adapted from an enormous 360 degree painting called a 'panorama', installed in London's Leicester Square between 1801 and 1802.

Panoramic photography soon came to displace painting as the most common method for creating wide views.

Popular in the 1970s and 1980s, but now superseded by digital presentation software, 'multi-image' slides were projected onto one or more screens, characteristically lending themselves to the '**wide screen panorama**'.

Screen



Slides with soft-edge masks



Digital photography of the late 20th century greatly simplified this assembly process, to what is now known as '*image stitching*'.

-:-

This picture is a 360 degree panoramic picture of the centre courtyard, in the 'Sony Centre at the Potsdamer Platz' in Berlin, and was created from 126 photos using an *auto-stitch* procedure, similar to the processes we use today.



Many modern Digital Cameras and Smart Phone cameras can now, using built-in software, automatically stitch a sequence of images, shot while the camera is moved across the scene.

-:-

Here we have a 270 degree panorama “stitched in-camera”.





Let the Memories Begin!

Since in 1955, Disney has created 360° panoramic theatres for its theme parks

Deliberately taking a series of Photographs with the sole intent of creating a wide-angle view or Panorama is enormously satisfying and the final results are somehow well worth the effort.



360 degree Panorama of the circular 'Cannova Memorial', which was created from a video of the inside walls.



Following is a demonstration of the process used to create a panorama image from your photographs, uses the 'Microsoft Image Composite Editor'

(How to download the software is explained at the end of this presentation)

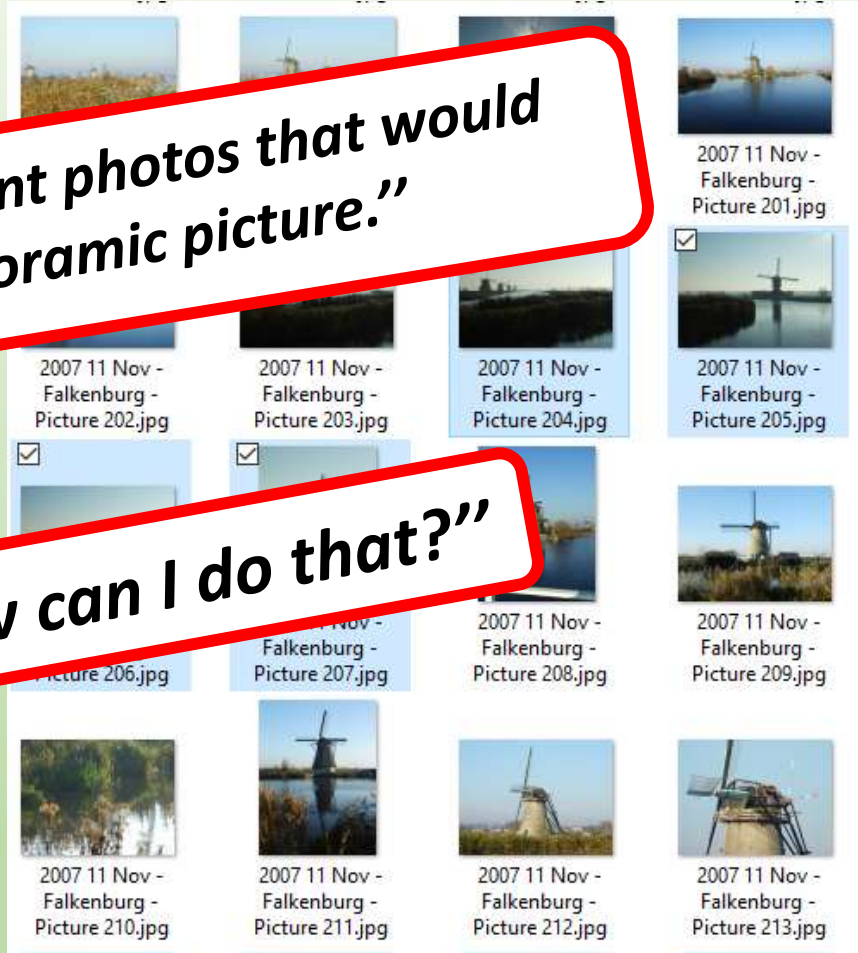
Using the software



An image created
from both horizontal
and vertical photos.

“I have some decent photos that would make a great panoramic picture.”

“How can I do that?”





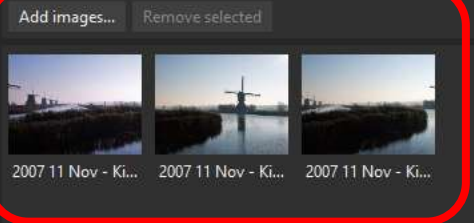
Popular Photosynth.net panoramas

Also from Microsoft

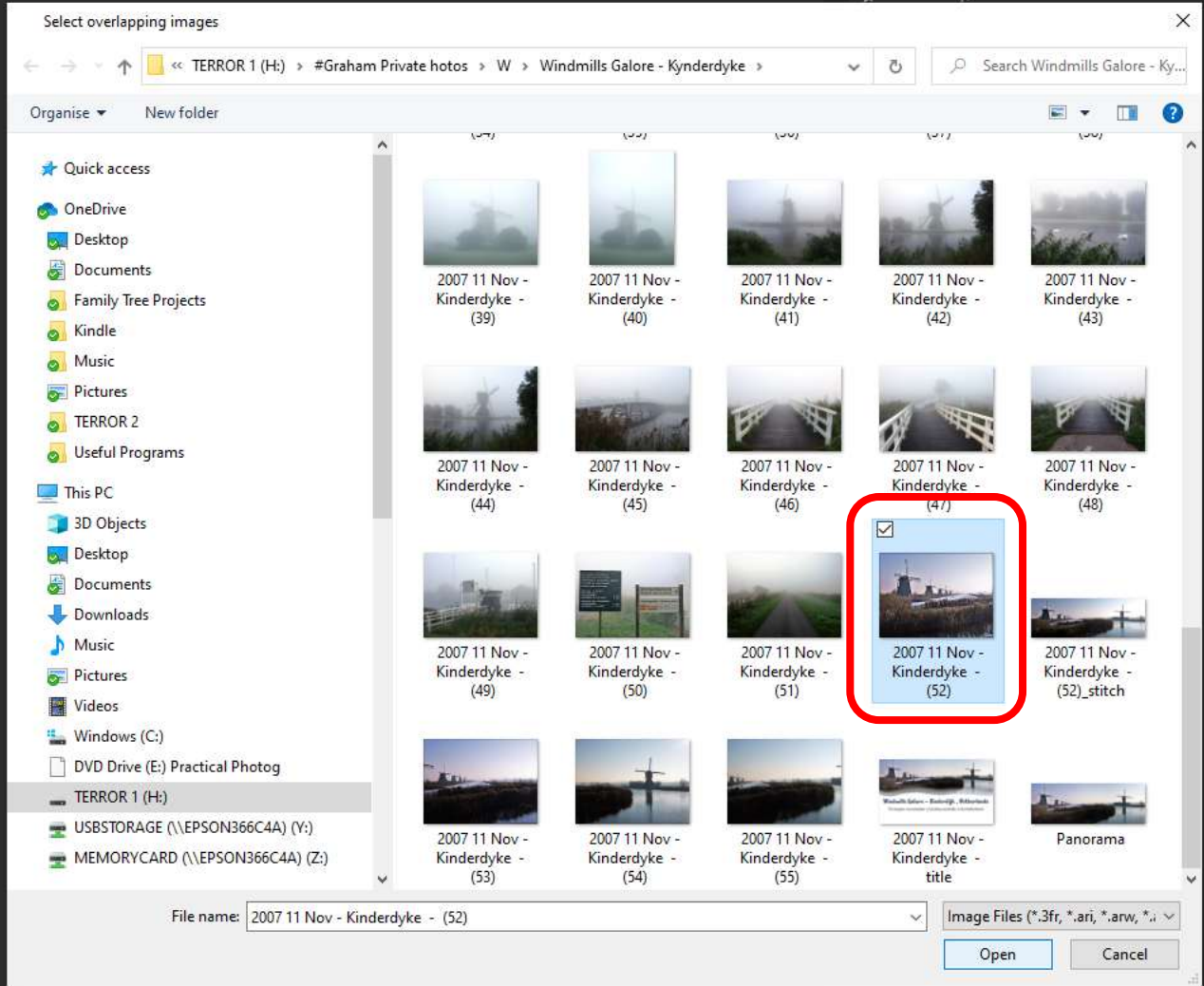
Loading...

An advertisement for Microsoft Translator. It features the Microsoft Translator logo (a cloud with 'a', 'あ', and 'a' characters) and the text "Microsoft Translator". Below the logo, it says "The power of real-time translation on your PC." and includes the Windows Store logo.

Start by selecting New Panorama



If you forget an image, just select and open it from the folder. It will be added to your prior selection.





The selected photos must overlap with each other, allowing them to be easily combined into a single image.

BACK

1 IMPORT 2 STITCH 3 CROP 4 EXPORT

NEXT

Add images... Remove selected

Sort by File name

Drag & drop photos here



Click on Auto-detect to allow the software to arrange the images for stitching together. Note that the original photos are not in a specific order.

Simple panorama

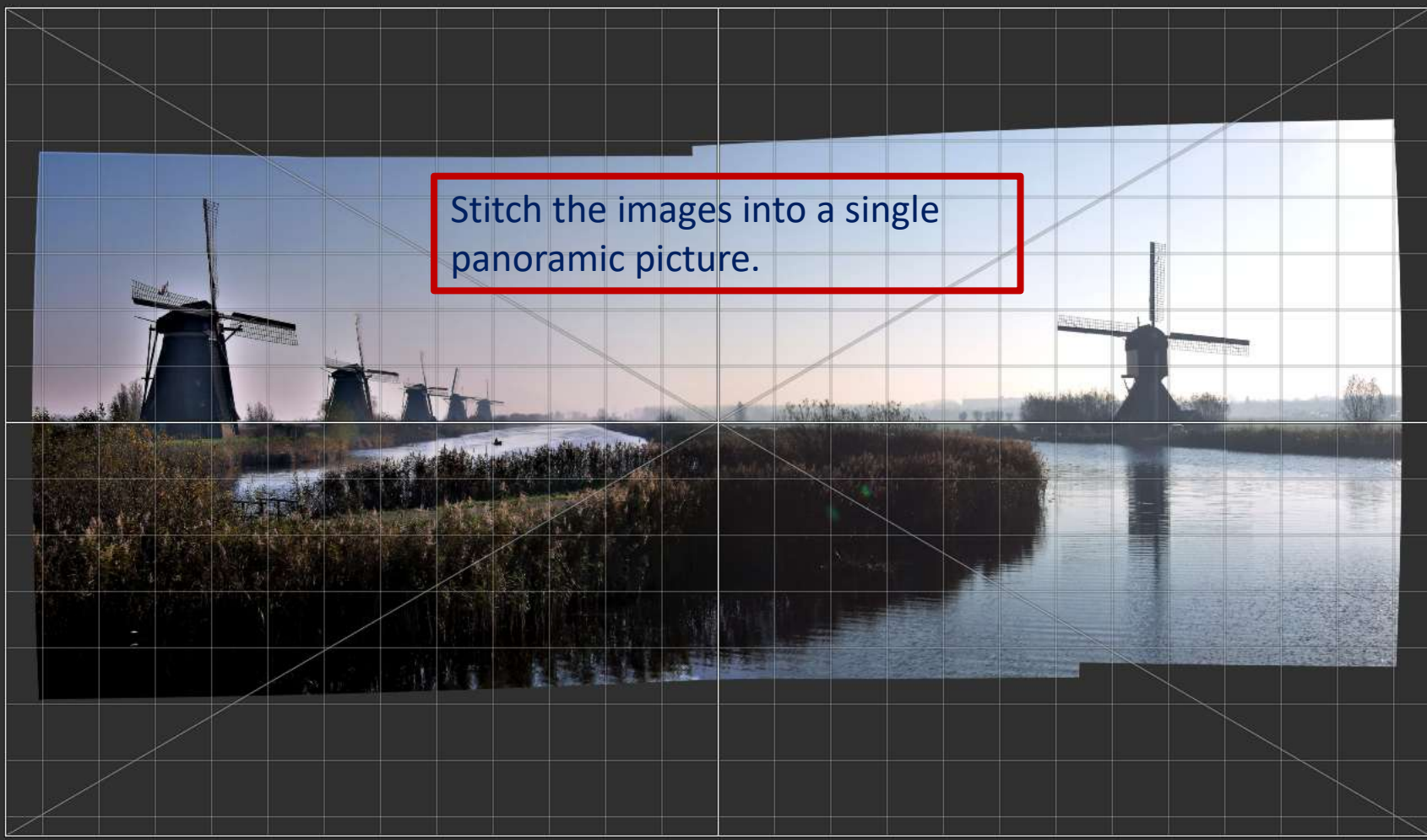
Camera motion

- Auto-detect
- Auto-detect
- Planar motion
- Planar motion with skew
- Planar motion with perspective
- Rotating motion

BACK

1 IMPORT 2 STITCH 3 CROP 4 EXPORT

NEXT



Stitch the images into a single panoramic picture.



Projection

- Cylindrical
- Transverse Cylindrical
- Mercator
- Transverse Mercator
- Spherical
- Transverse Spherical
- Orthographic
- Fisheye
- Stereographic**
- Perspective

Orientation

Auto orientation
Roll -0.01 degrees
Pitch 0.388 degrees
Yaw -1.473 degrees

There are several ways to project your panorama. It's all about experimenting.

BACK

1 IMPORT 2 STITCH 3 CROP 4 EXPORT

NEXT



Crop your panorama to get a reasonable final picture.

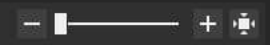


Image completion

Auto complete

Use auto completion

Crop

Auto crop No crop

Left 0 pixels Top 0 pixels
Width 4366 pixels Height 1850 pixels
Right 0 pixels Bottom 0 pixels

BACK

1 IMPORT 2 STITCH 3 CROP 4 EXPORT

NEXT

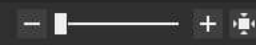
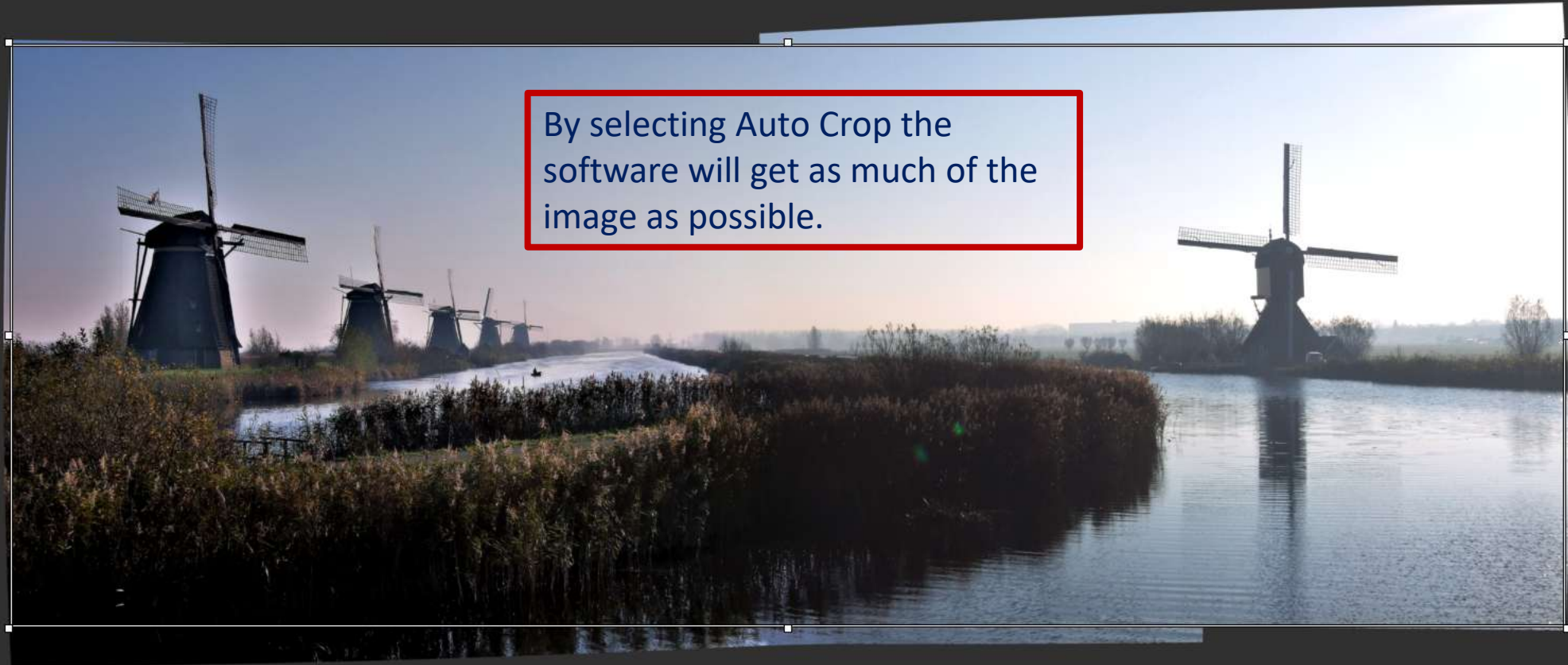


Image completion

Auto complete
 Use auto completion

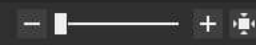
Crop

Auto crop No crop

Left 27 pixels Top 124 pixels
Width 4313 pixels Height 1602 pixels
Right 26 pixels Bottom 124 pixels

BACK

1 IMPORT > 2 STITCH > 3 CROP > 4 EXPORT



Here we have the finished image, and now we want to save it. This is achieved by Exporting the image to disk

Image size

Scale 100 %

Width 6003 pixels

Height 2076 pixels

Area 12.46 megapixels

Image file

File format JPEG Image

Quality 90 Superb

Export to disk...

- Deep Zoom
- Photosynth



Export Panorama

<< TERROR 1 (H:) > #Graham Private fotos > W > Windmills Galore - Kynderdyke >

Organise New folder

- Quick access
- OneDrive
- Desktop
- Documents
- Family Tree Projects
- Kindle
- Music
- Pictures
- TERROR 2
- Useful Programs
- This PC
- 3D Objects
- Desktop
- Documents
- Downloads
- Music
- Pictures
- Videos
- Windows (C:)
- DVD Drive (E:) Practical Photog
- TERROR 1 (H:)
- USBSTORAGE (\\EPSON366C4A) (F:)

2007 11 Nov - Kinderdyke - (35)	2007 11 Nov - Kinderdyke - (36)	2007 11 Nov - Kinderdyke - (37)	2007 11 Nov - Kinderdyke - (38)	2007 11 Nov - Kinderdyke - (39)	2007 11 Nov - Kinderdyke - (40)
2007 11 Nov - Kinderdyke - (41)	2007 11 Nov - Kinderdyke - (42)	2007 11 Nov - Kinderdyke - (43)	2007 11 Nov - Kinderdyke - (44)	2007 11 Nov - Kinderdyke - (45)	2007 11 Nov - Kinderdyke - (46)
2007 11 Nov - Kinderdyke - (47)	2007 11 Nov - Kinderdyke - (48)	2007 11 Nov - Kinderdyke - (49)	2007 11 Nov - Kinderdyke - (50)	2007 11 Nov - Kinderdyke - (51)	2007 11 Nov - Kinderdyke - (52)
2007 11 Nov - Kinderdyke - (52)_stitch	2007 11 Nov - Kinderdyke - (53)	2007 11 Nov - Kinderdyke - (54)	2007 11 Nov - Kinderdyke - (55)	2007 11 Nov - Kinderdyke - title	Panorama

File name: 2007 11 Nov - Kinderdyke - (52)_stitch

Save as type: JPEG File (*.jpg, *.jpeg)

Save Cancel

Select Folder, give it a name, and save it.

Close Software

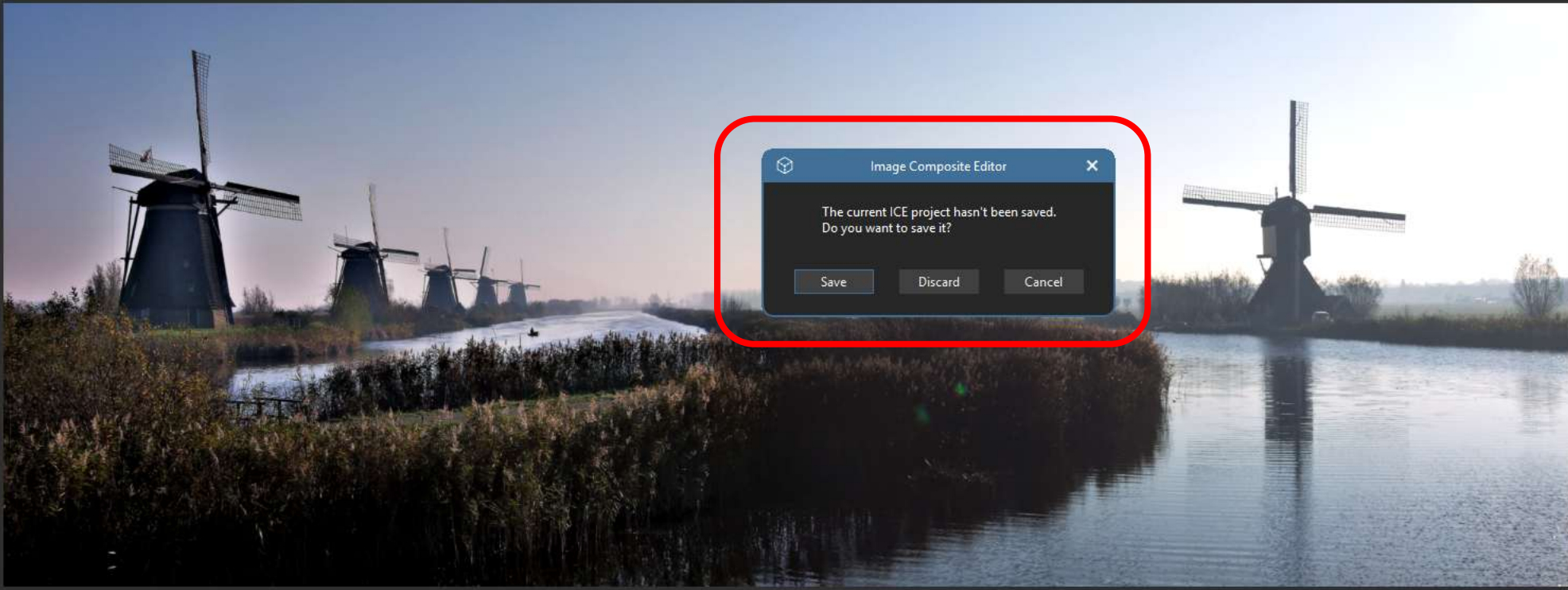


Image size

Scale: 100 %

Width: 4313 pixels

Height: 1602 pixels

Area: 6.91 megapixels

Image file

File format: JPEG Image

Quality: 90 Superb

Export to disk...

Deep Zoom

Photosynth

Decide whether to keep the project or discard it.

From source to final panorama





Rad City

NINA

301

JEFF

RAD CITY

Cool of

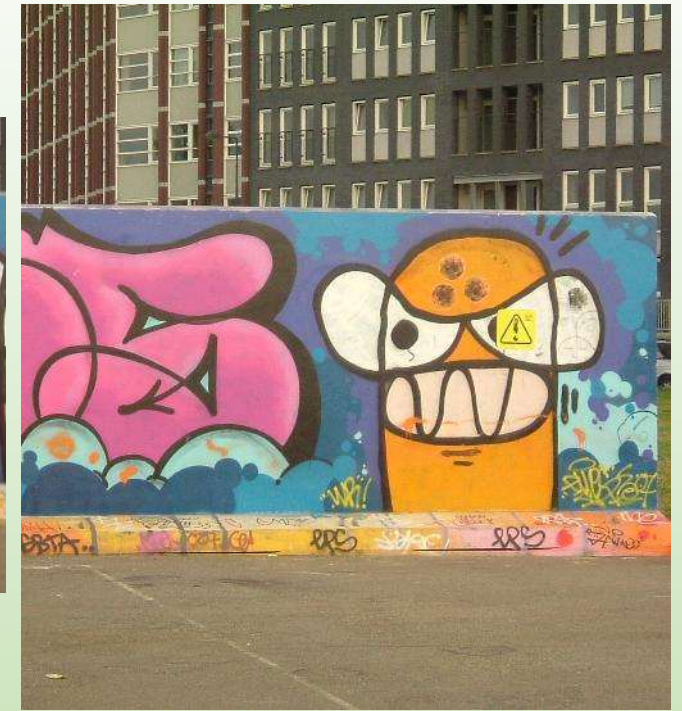
Harrison

Example Panoramas

Using two images of different sizes.



Using three images of different sizes.





Building a Panorama from multiple images – The Market Square, Harlem, Holland





Same Image but slightly edited



Quayside Apartments



Walberswick From Southwold Harbour

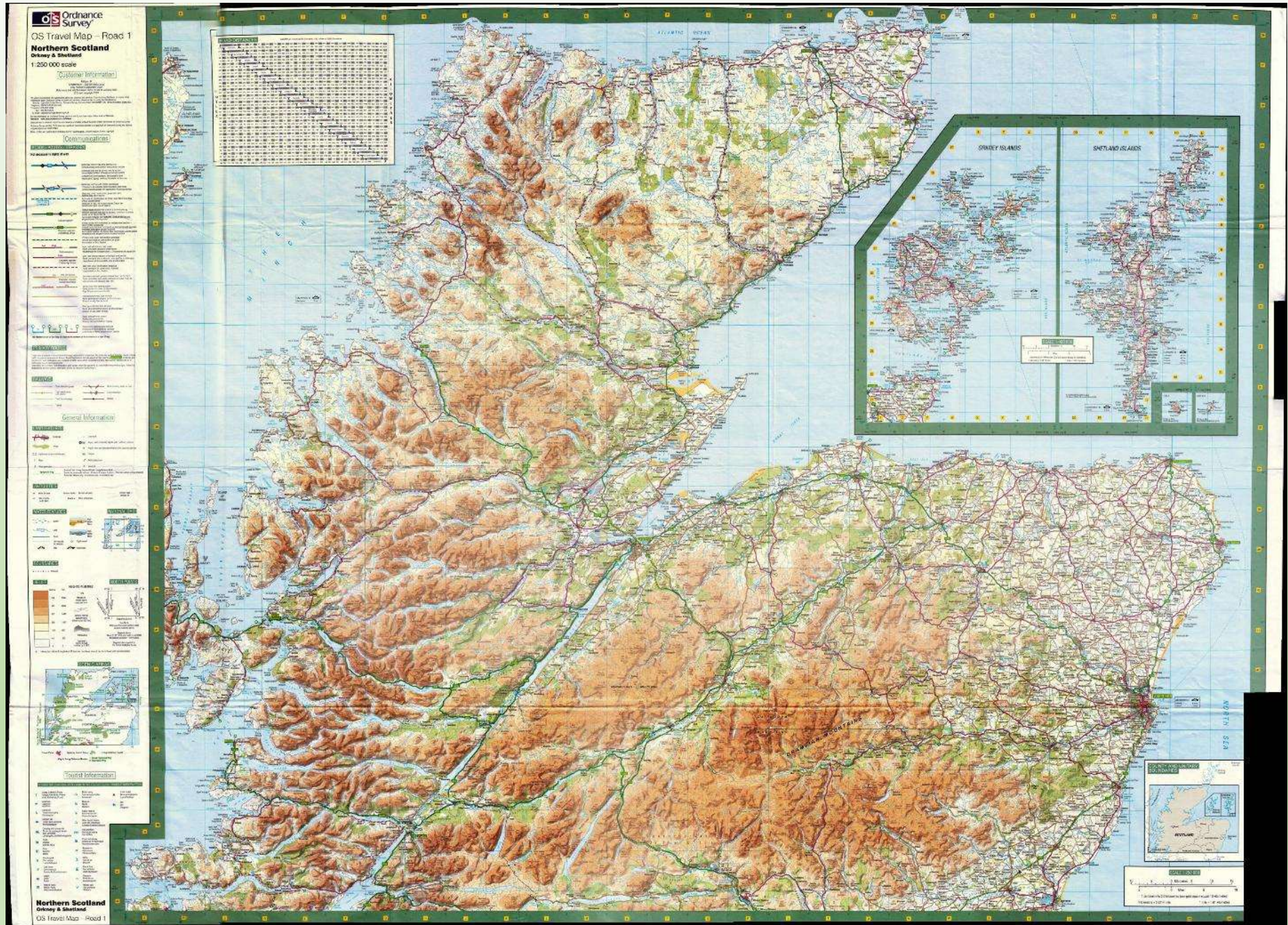


**A Young Couple Walking By
using 7 portrait images**

An additional use for
panorama software



After scanning multiple
sections of the map on the
right into roughly A4 size
chunks, the scanned images
were fed into panorama
software to reproduce the
map in digital format



**Any Collection of Related Images
Can Be Used to Make a Panorama**



**Be Innovative, Use Your Imagination,
And Experiment**

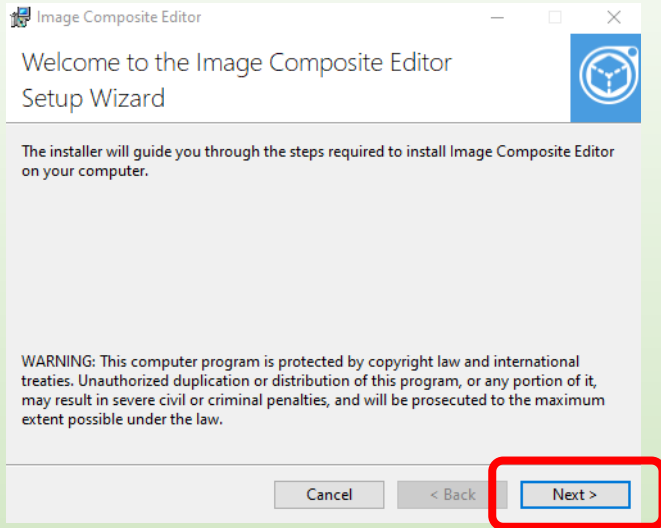
If you haven't got any other software, you
can Click on the link to get a free copy:

Microsoft Image Composite Editor 2.0.3 (64-bit)

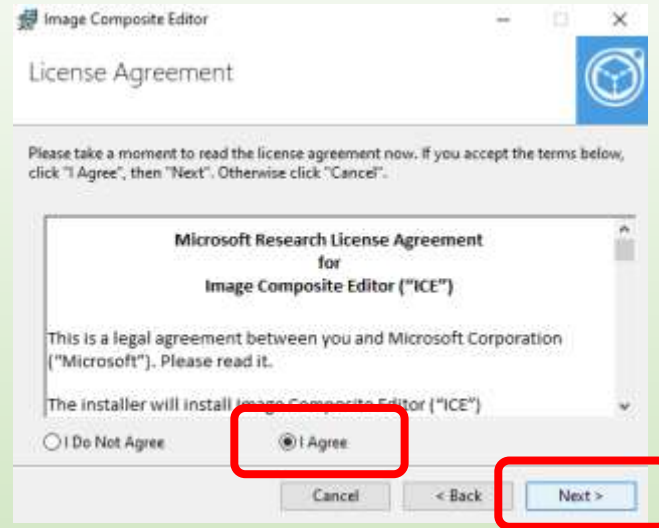
[Download](#)

**Most Panoramic Software
works in a similar fashion.**

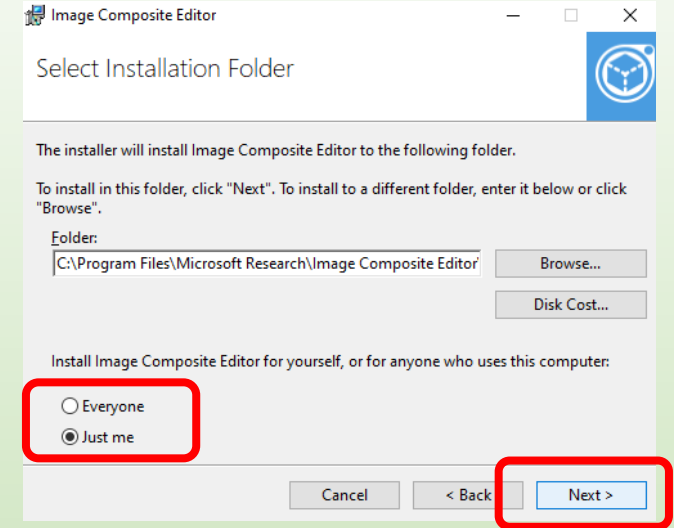
1



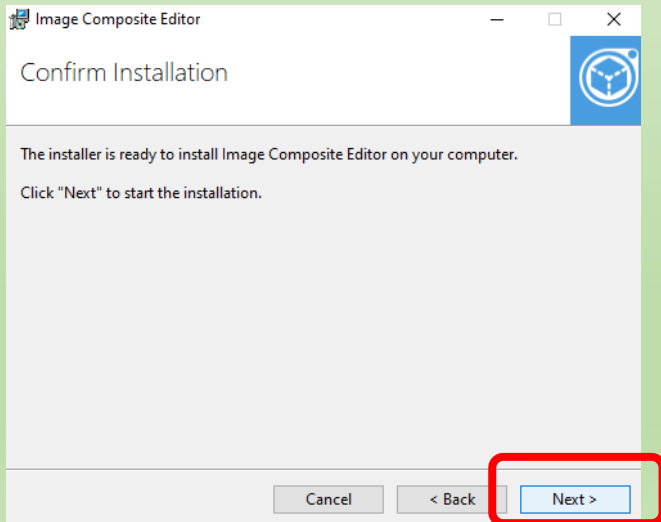
2



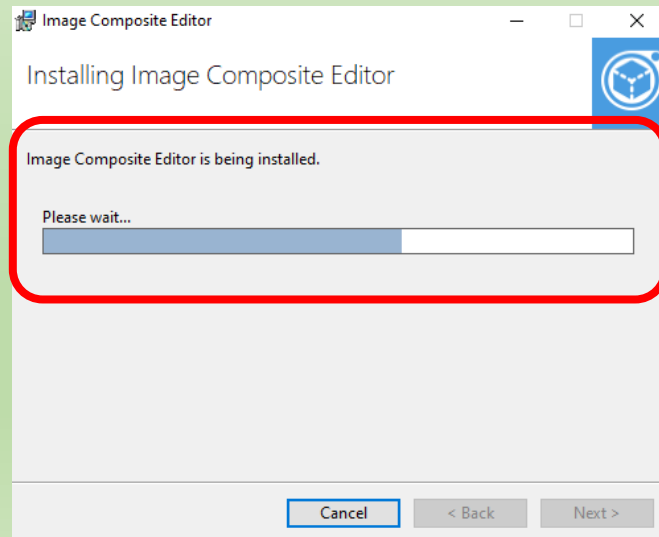
3



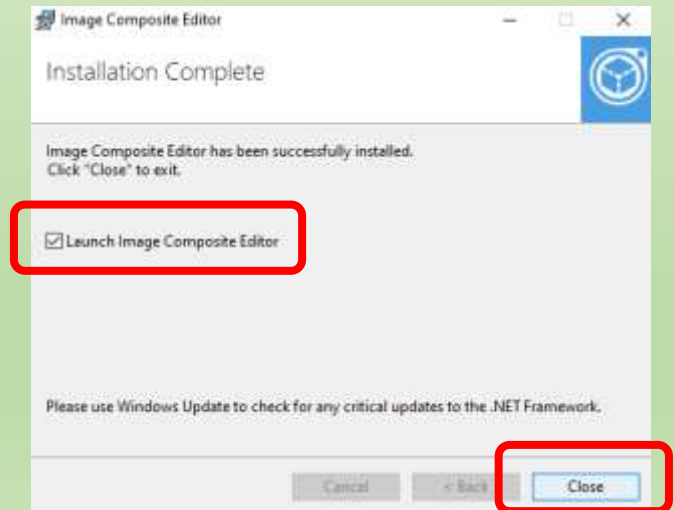
4



5



6



**Time now to practice
and create your own
magical panoramas**

Thanks for watching