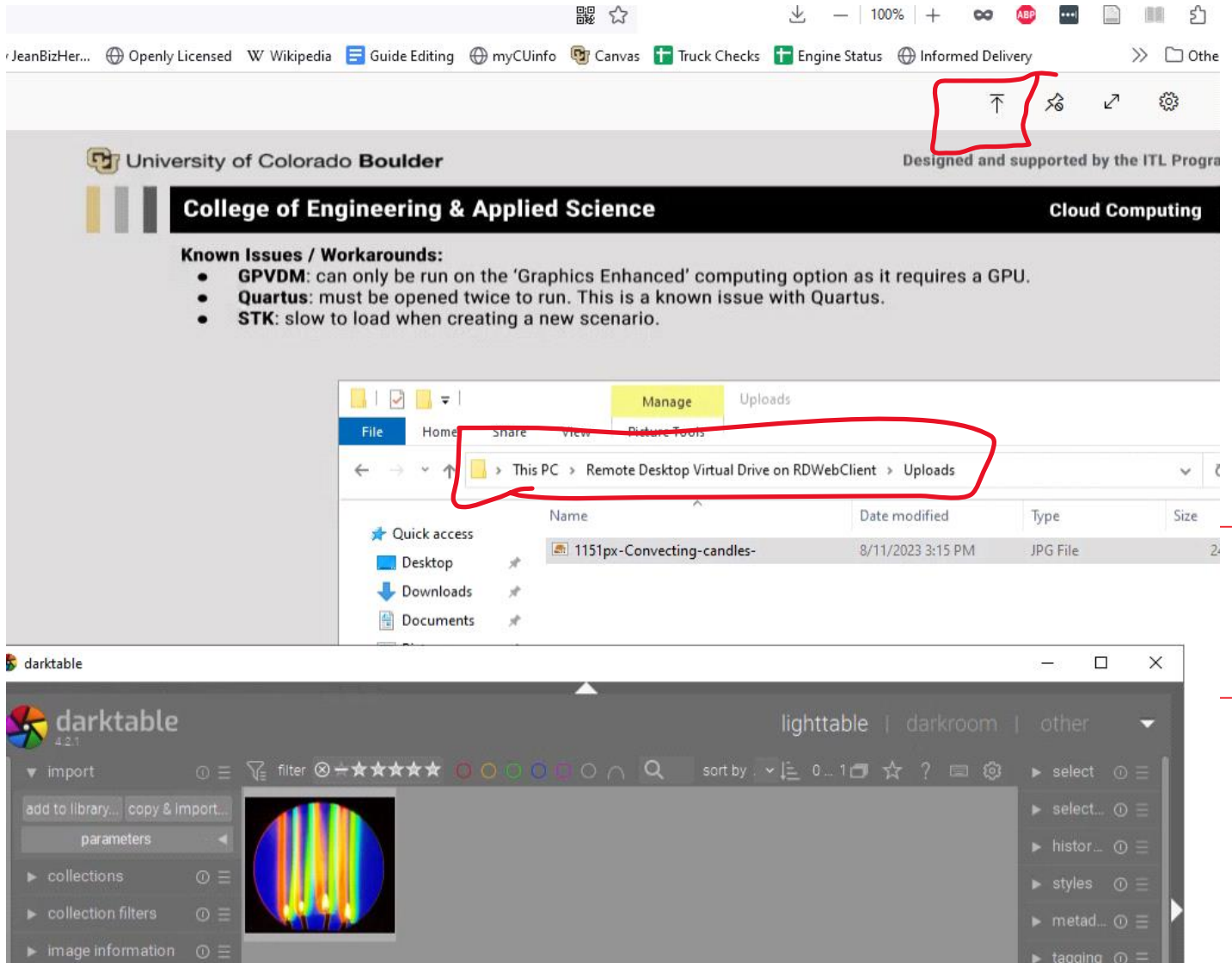


Topics in Darktable that we'll cover today:

1. CU Cloud computing
2. File formats
3. Desktop nav
4. Contrast
5. Crop tool
6. Retouch/Clone stamp
7. Filters, sharpen



<https://ceas.link/cloudcomputing>

1. File Formats

	Still images, 3 files			Video		
	1) Original = straight from the camera. Do not edit or	2) Edited Archival	3) Edited for posting	1) Original clips	2) Edited Archival	3) Edited for posting

	change file type					
Submit to	Canvas	Canvas	Flowvis.org	None	Canvas	Youtube or Vimeo
File type	As shot, preferably in camera raw format: NEF, CR2, HEIC etc.	PNG. Choose zero compression.	.jpg, with at least 90% quality	none	Mpeg/mp4 Must include title clip	mpeg. Must include title clip
Resolution	As shot, as high as your camera is capable of	As shot, minus cropping	Max 1300 px wide	none	Maximum, as shot	Max is recommended

Required in Title clip:
 Your name
 Date
 Collaborators
 Music credit
 Optional: video title, course name etc.

If assembling a video from multiple still images, upload a representative raw image along with edited final video.

Why does archival version have to be non-lossy?

Jpg loss example:

http://cscie12.dce.harvard.edu/lecture_notes/2011/20110309/slide42.html

Shows effect of low 'quality' settings. Similar artifacts to repeated compression cycles.

Most DSLRs and mirrorless offer a camera 'raw' or native format: NEF, CR2 etc. These contain the maximum information. Use this if available!

Most other cameras store images as jpg only. Every time you edit and then save a .jpg, it compresses the image again, and you lose information because jpg compression is *lossy*. Open in whatever, then edit and **do not store as jpg again until posting!**

Instead, store as a non-lossy format: png, PSD, Photoshop's native format or .XCF, in Gimp. Darktable doesn't affect original images, and only stores your edit information until you export at the end.

DON'T use *Photoshop* RAW. Metadata is lost; images can't be opened.

Camera raw formats, like NEF, CR2 etc, are good for original images.

HEIC is maybe lossy. Maybe not.

For uploading to flowvis.org & Wordpress: YES save as jpg, max width 1300 px for landscape image. For portrait orientation image, make into a landscape format: save as 1100 wide by 900 high, with extra space on sides in a dark neutral gray. Our Wordpress theme, Impreza is 'responsive', resizes image for each device, but makes portrait orientation images too large and low res when selected as featured image for a post.

Gimp and older Photoshop cannot open camera raw formats. You will need a conversion program of some sort.

Darktable can open camera raw formats, even new ones. Exception: HEIC, found on cameraphones. You'll need a conversion program to prep for an editor. Try Irfanview.

Do not import from camera directly into a photo program; it will convert files automatically, and you could lose the original metadata.

Instead, download, i.e. save to a file first. Try plugging your camera or SD card from the camera into the computer, then drag files from camera to hard drive.

Darktable

Get a mouse!

Most decent editors are designed for them; not styluses, not trackpads.

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Darktable live demo. See video recording.

C:\Users\hertzber\Documents\01Classes\FlowVis\StudentWork\StudentWork22Fall\CloudsFirstC:\Users\hertzber\Documents\01Classes\FlowVis\StudentWork\StudentWork22Fall\CloudsFirst