Interesting Stories

Computational Photography (CSCI 3240U)

Faisal Z. Qureshi http://vclab.science.ontariotechu.ca





Computational Photography in Action



Computational Photography in Action



Trung Phan 🤣 @TrungTPhan

The iPhone camera uses computational photography, applying software to every snap.

This wild photo is an eery example: the subject tries on a wedding dress and each mirror shows her in a different pose.

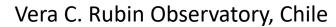
Why? Apple insider says it's a "mistake" in the computational photography pipeline:

The iPhone camera doesn't realize it was taking a photo of a mirror, so it treated the three versions of [UK actress Tessa Coates] as different people. Coates was moving when the photo was taken, so when the shutter was pressed, many differing images were captured in that instant. Apple's algorithm stitches the photos together, choosing the best versions for saturation, contrast, detail, and lack of blur."



Largest Digital Camera in the World

• Eye on the Universe. Wired Magazine.







Largest Digital Camera in the World

• Eye on the Universe. Wired Magazine.

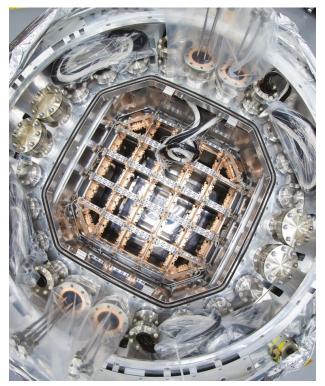


Image sensors that are chilled to -90 degrees Celsius by cryostate to eliminate noise.

Vera C. Rubin Observatory, Chile





Largest Digital Camera in the World

• Eye on the Universe. Wired Magazine.

Nearly 200 image sensors 3.2 gigapixel image Takes up to 700 pictures each night That is roughly 20 terabytes

Vera C. Rubin Observatory, Chile

Faisal Qureshi - CSCI 3240U

