

Research Project carried out at Canserrat Residency:

Study on Active role of female imagery in Tech advancements (mainly image processing and image manipulation).



My process as a practitioner usually involves me researching on the internet and seeing where related Google searches might take me around the world wide web until I really find something that catches my eye and I feel the need to comment on it with my work, I like to call this the 'aha' moment.

My research at canserrat started with me trying to trace the internet's roots back to when technology began advancing in the direction which is most relevant in current times such as advancements made in – one the image processing research industry and other the image manipulation industry. 'Advent of the digital age' and 'Pedagogy of the image' are topics that anyway really interest me.

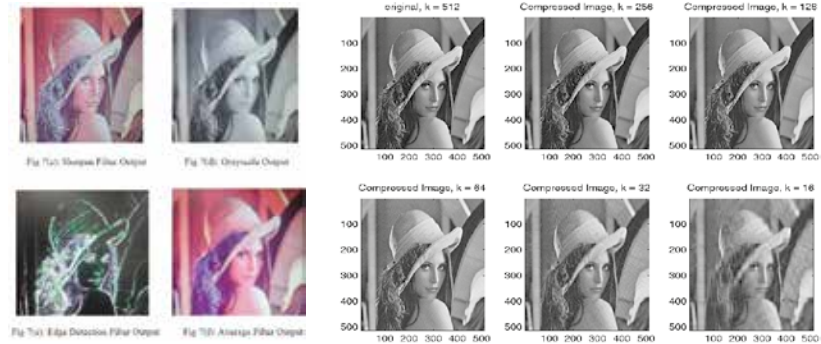
Researching on the Image Processing and Research got me to a very interesting story about a lady called 'Lena Soderberg' who is fondly regarded as the 'first lady of the Internet'. Story goes like : Lena, a Finnish model at the time was featured in the 1972 issue of Playboy magazine (which also happened to be the most sold issue of Playboy). The Lena centerfold was scanned by researcher Dr. William K.Pratt at the USC to be used as a sample image in a paper. The image caught on like jungle fire and very soon became the industry standard for the entire Image Processing and Research community. It has been used for educational purposes for 40 years now and is made available as the standard image by multiple Universities. Its also appeared in multiple textbooks like 'Digital Image Processing', etc. Having graced textbooks, screenshotted by thousands of members of the tech community since 1973, Lena has earned her title as the first lady of the Internet.

When researcher Dr William K. Pratt was asked why he picked Lena's cropped image he said – "It has a nice mixture of detail, flat regions, shading and texture, basically it makes for a good test image."

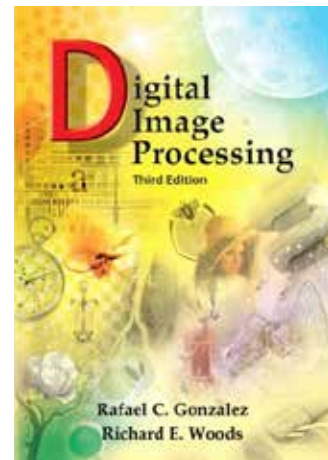
More recently many women from the Image processing research community thought the use of Lena's image is a blatant example of female objectification considering the community was widely male dominated and they wish to counter Lena's image with a picture of Italian-American actor Fabio Lanzoni. But unfortunately Fabio's image obviously couldn't replace Lena.

Lena sits beautifully at the intersection of tech, education, art, pornography and memes.

This got me to look at a similar story in the Image Manipulation industry. Just like Image Processing has Lena, Image Manipulation has another lady called Jennifer. Jennifer's image (fondly called Jennifer in paradise) became the first color image used to demonstrate the software called Photoshop and also the most widely Photoshopped image perhaps in Internet history. The image was captured by John Knoll, who photographed his wife Jennifer at an island in Bora Bora. John was at the time messing around with multiple computer applications to come up with a very young and underdeveloped version of what we today know as Photoshop. He got his hands on a scanner and scanned the only photograph he had on him at the time was Jennifer's. At the time very few digital images were actually available so Jennifer's image automatically became the industry standard.



Lena being used as sample image to demonstrate image processing tools



Lena gracing textbook covers



Figure 4: (a) Original 256×256 Fabio image corrupted with Gaussian noise and its reconstruction from 20% randomly-selected Fourier coefficients using (b) total-variation minimization and (c) l_1 -minimization of its bivariate Haar coefficients

Fabio Lanzoni being used as a test image

When Knoll was asked about it his reply was not very different from the one Dr William K. Pratt gave, Knoll said, “It was a good image to do demos with. It was pleasing to look at and there are a whole bunch of things you could do with the image technically. And maybe there was something in that hinted at a kind of more perfect world that Photoshop might reveal. He would leave a copy of the software in a package including this picture at all the companies he visited.

This idea captured the interest of Dutch artist, Constant Dullaart who rebuilt the image from video screenshots. Dullaart said, “Just from an anthropological point of view I thought it would be interesting to examine what values the image contains. The fact that it’s a white topless lady, anonymous, facing away from the camera and that it was his wife. He offers her, objectifying her in this creation for the Reproduction of Reality.

His work seeks to expose technological structures that inform modern visual culture. For him, Jennifer in Paradise is a key artifact, the original Photoshop meme. His misappropriation of it is a protest in its own way.

The two instances are historic to the advancements made in both the tech communities (i.e. image processing and image manipulation) and are a great example of how an image manifests our culture, thoughts, desires etc. and is an interesting example of why do certain images become iconic and how this process has been catalysed by technology and the Internet. History also puts the two ladies – Lena and Jennifer in a position where they unknowingly played a very active role in tech advancements and its funny because I don’t think they ever thought they would one day make it to be a tech industry standard image.



John Knolls photograph of his wife Jennifer on the Bora Bora Island



Constant Dullaart's piece 'Jennifer in Paradise'

I found both these instances very interesting and I think the Internet and technologies like Artificial Intelligence (AI) are at the end of the day created by man, their intelligence only reflects man's intelligence. So what interests me is how the digital screen so honestly reflects society, it provides such an Authentic reflection for all of us to look into, and in turn look into ourselves.

Researching Authenticity of the computer screen I stumbled upon an artwork called 'Search by Image' by Sebastian Schmeig. Sebastian came up with an algorithm where he would upload an image in the search by image function on Google and then the algorithm would automatically put in the first image result back and so on infinite times and the result would be a series of images to show a kind of line of search that the Google image search result follows. Sebastian tried images of Lena and Fabio to see what search results follow and he observed "Quite quickly during the sequence – having started with either Lena or Fabio – the succession of the images lead to male politicians, or superhero guys. So again, this is nothing that I'm doing with my algorithm, it's really a Google thing. In that sense I think that the project is exposing something which is already there: a strong, huge cluster in their system, which I guess is significantly white male dominated."

This is where I choose to culminate my research and presenting this my Racon was quite helpful where discussing my research and the multiple references given to me helped me solidify what my stance is pertaining to all the research and what direction would I now choose to take to finally make a piece of Visual Art.

Also as a side project I did, I recorded a short video (I'm going to attach a YouTube link of it) of me 'Googling Google' the idea behind this was a childish and amateur revenge I take on the internet for I've wasted so much time surfing the most random websites procrastinating actual work that I have to get done. So it's like 'The Internet wastes so much of my time I wish to waste the Internet's time'.

<https://youtu.be/kj8Ln0D2BxU>

And then there was a painting I made to study form and human form in particular and I worked a bit on the printing press to make a few prints.

