# Proposal

I implement a mobile software to accomplish photo-editing, therefore, most likely I would choose Swift programming language for IOS. When emulating the traditional photo editing software, my software should consist of most of the following (If time permits, implement them all):

1. Basics: Exposure Adjustment (shadow, high light, white, dark, exposure step, etc.)

2. Colors: Temperature, Tone, Color Curve, Saturation, HSL, etc.

3. Details: Noise evaluation (Removal & Addition), Vignetting, Grain, Sharpen, etc.

4. Tailor: Object matting and Object recompositing.

Besides those, my software could also analyze the user's favorite imaging style based on pass editing history made by users and offer an option for the user that can automatically edit new images for that user in his/her style. With that being said, the machine does not have a fixed editing style/ imaging style. All the information is learned from the user's input. More specifically, the classification falls into these areas:

1. Noise/Grain level estimation, Temperature, Tone, Exposure Average, and Dynamic Range of the final images

2. Comparison of the historical input images and output images

3. Decide if the user prefers image matting

4. Record all the adjustments (button clicked/slide) user has made on previous images

Based on the above information, use appropriate machine learning algorithms to learn from the feeding data.

# Bibliography

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