RAW Image Transform Approximation Pipeline

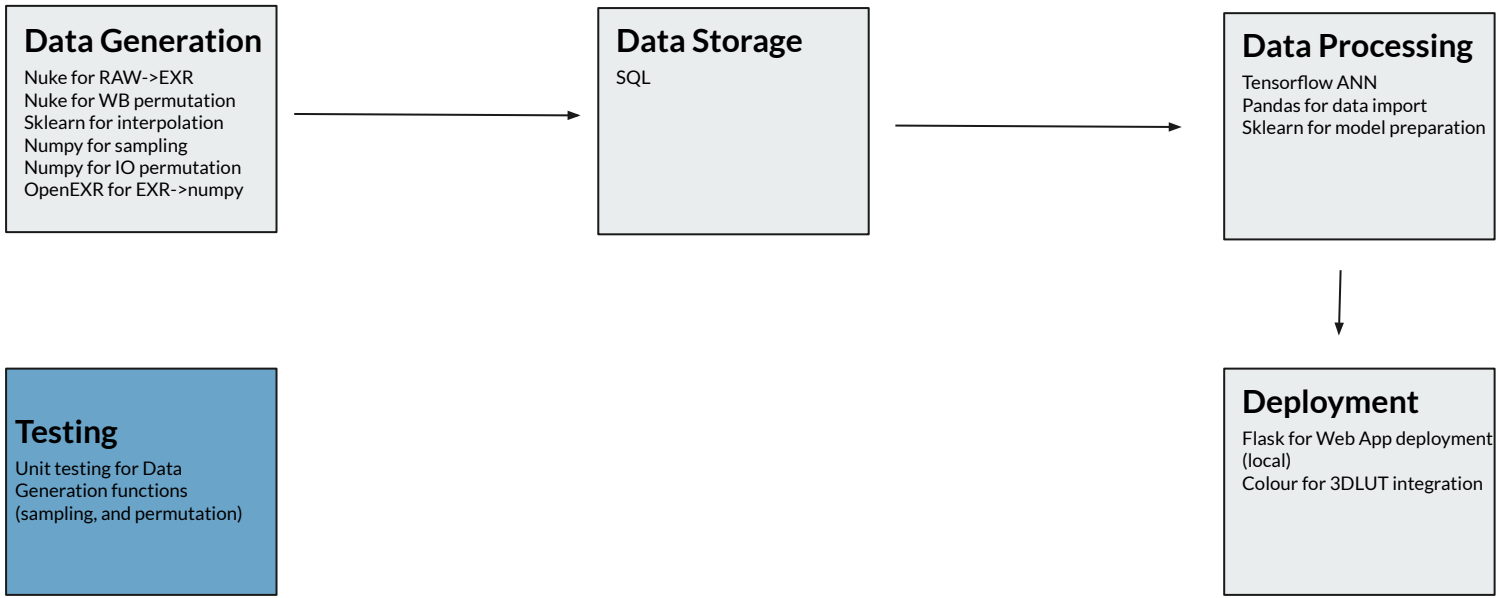
By Ryan Emanuel

- Many cinema camera manufacturers cannot record RAW formats in camera
- RAW recording usually requires external recorders
- These recorders are expensive and heavy

RAW formats allow for the same in camera color controls in post production after recording

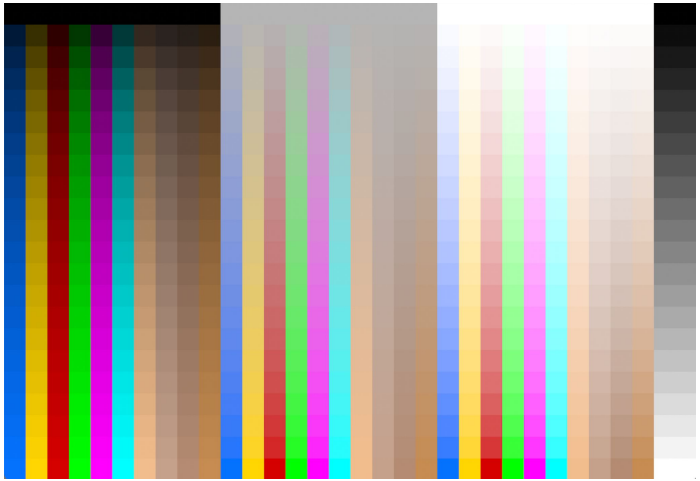
Can we create a post production plugin to mimic this control in industry leading post production software?

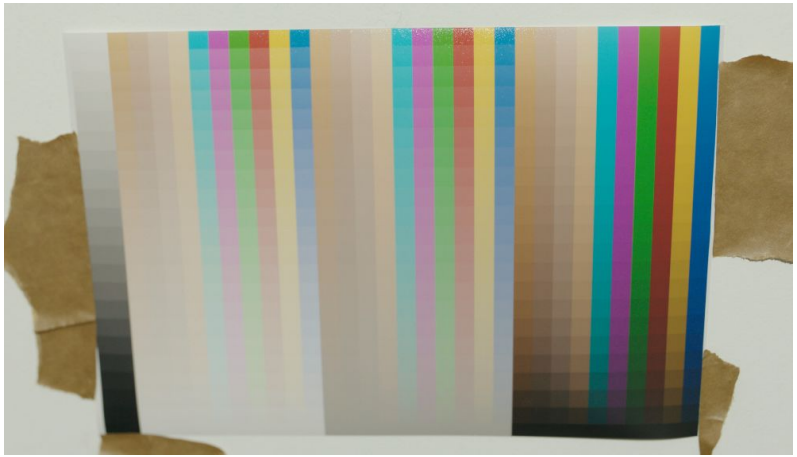
White Balance Pipeline Design



Data Engineering

18 IMAGES * 704 SWATCHES * 9 WB INPUTS * 9 WB OUTPUTS = 1M SAMPLES





Web Application

Insights

- More training is needed for non-linearities in the highlights
- Midtones and darks have good performance

Future Work

- Add more features like tint, ISO and spectral illuminant
- Integration with C translation for post production software
- Build the company FilmSTAT!