## **COMP120 Contract**

You have been hired by an App developer: Perfect Pixel who is interested in new intellecutal property around next generation photo manipulation tools for various tools in their pipleine. They are requesting protoypes for the following:

### Contract #1 - Blended Pixellation

Create method to pixellate an image and then blend the output with the original.

#### Contract #2 - Forest fires are take news

The wild fires in California have resulted in most outdoor photos in the state being saturated in orange. Create method to recolour the images to infer the fires are not happening, for the purpose of developing a misinformation filter for fake news outlets.

# Contract #3 - Popout Pop Art

A method that will mash different classics from Pop Art together. Andy Warhol meets Roy Lichtenstein. Replace the background of one image with another to create collage of imagery.

# Contract #4 - Rotoscope Portrait

Rotoscoping is the method of painting over a frame of live action imagery to create the impression that it is drawn. Combine edge detection with pixel painting and colour replacement, to create a comic book version of a photographic portrait.

### Contract #5 - Novel Snapchat Filter

Develop for social media of your choice. Use any combination of algorithms to a create novel filter to adjust an image in a unique way.

# Contract #6 - Generative Graphic Background for Menu Screen

Use a range of algorithms to generate custom bitmaps that will be displayed as menu screen background. This could make use of kaleidoscope effects with existing images or emergent graphics that are created generated from pixel drawing. Each time the screen is viewed the image will be different.