library(magick) # Library that can read/write .gif files

library(Rvision)

library(plot.matrix)

library(pixelproj)

#255 = white

#0 = black

# Path to a .gif file

root.pth <- "/Users/duckz1653782/Desktop/Tytell\_database/extract\_featherpattern/registered/Registered\_CB06.gif/"

pth1 <- paste0(root.pth,"7.gif") # Path to an image

pth2 <- paste0(root.pth,"2.gif") # Path to an image

# Load and mean threshold registered image stack(s):

stk1 <- thresh.img.obj(image\_read(pth1))

stk2 <- thresh.img.obj(image\_read(pth2))

A.img <- stk1[[sample(1:5, size = 1)]] # Select one of the images in the registered stack

B.img <- stk2[[sample(1:5, size = 1)]] # Select one of the images in the registered stack

# Plot thresholded images:

par(mfrow=c(1,2))

plot(A.img)

plot(B.img)

dev.off()

regA <- register.template(template.img = A.img,

reference.img = B.img,

fill.typ = "255", return.imgQ = T, printQ = T, plotQ = T)

# fill.typ = "NA", "opposite", "random", "devils.advocate", "0", "1", "255"

# Overlap result, image coords:

dev.off()

par(mfrow=c(2,2))

plot(regA) # Registered and (possibly) padded/chopped A

plot(B.img) # B which A is registered to

plot(A.img) # Original A

dev.off()

# Result, matrix coords:

plot(A.img[,,1]) # Original A

plot(regA[,,1]) # Registered and (possibly) padded/chopped A

plot(B.img[,,1]) # B which A is registered to

dev.off()

par(mfrow=c(1,2))

plot(flip(regA)[,,1], key=NULL) # Registered and (possibly) padded/chopped A

plot(flip(B.img)[,,1], key=NULL) # B which A is registered to