

letters $\rightarrow$ spline equations $\rightarrow$ Plot in MATLAB

(with the idea that it's a few steps to do robotic arm)

how to get handwritten letter to set of 2D points?

S *e* *p*

how to choose pts to interpolate?

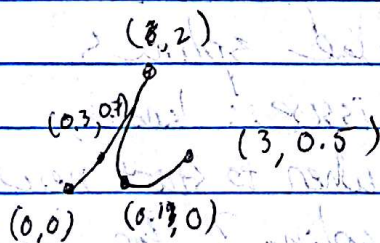
S *e* *p*

$x(t)$

$y(t)$

parameter, also use for animated plotting

2 knots allows disc.



assume touchpad

- pen up, pen down

vectorized image
 $\rightarrow$ signature

density of pts

Engelkemier

Engelkemier

contour = bw trace boundary

bottom half of signature then backwards
top half

→ find ~~max~~ the end point of my signature

→ flip 2nd half of contour variable
into new variable

→ plot 1st half w/ flipped 2nd half to
get both sides together

→ issue: they're not even lengths → # of pts

→ parameterize then guess + check
rates ~~and~~ modify "rate" of points
plotted so both come out together

→ need to get fill (or just ~~to~~ reveal original signature → bad)

↳ interpolate line
b/w end pts of
two traces and
some infill fn

infill

Monte Carlo points
inside contour

→ use points to
make splines

→ issue: knots,
when to start new
spline? for the letters
or pieces of letters?

→ need to sort points

choose several key pts manual
and sort pts w/in a box (manual) by dist
from that pt.

1. create blank image
2. draw signature as input
↳ see it in real time
- ★ 3. get each piece (pen down to pen up)

TO DO:
mod. ~~if~~
mousetrack

↓
output

↑

logic condition

combine w/
bw label to know
how many objects

13 MouseTrack okay w/ instructors? ✓

Key Press
dist b/w pointers > threshold ⇒ don't interpolate/
connect

incorporate into
isnan(NAN) → mousetrack ⇒ don't need to
change plotting

add b/w mouse clicks

xy-pts = get(0, 'userdata')