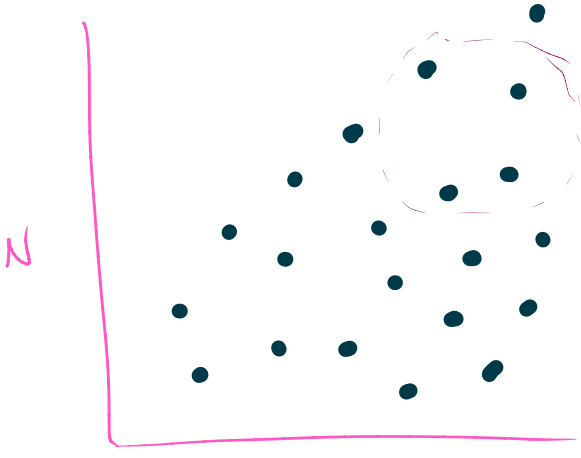
About KNN regression.....

- this to me seems like perhaps the most appropriate method here — coupled with a more even/dense training set.

Somehow I have ended up with this v. dense region and then the high spike.

KNN, to my understanding, just finds the K points that are closest in SxN space (or more generally in predictor variable space) and then takes the mean/smoothes that cloud.



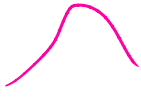
So to predict the light blue dot, I think it picks a subset (say the 4 in the ring) and then interpolates. It's interpolation.

So that might be great...

only for kind of within-sample interpolation, probably, but we can work with that.

S, N → KNN predict μ, sd →  hill draws → % ile

or

 2-sure etc

Importantly, while I think you can start to workshop it w/the training "catch" you have now, you will eventually need a more extensive or regularized sample.

Next steps...

- find KNN implementation → dib this in feasible-neighbors notebook
- reFigure sampling array