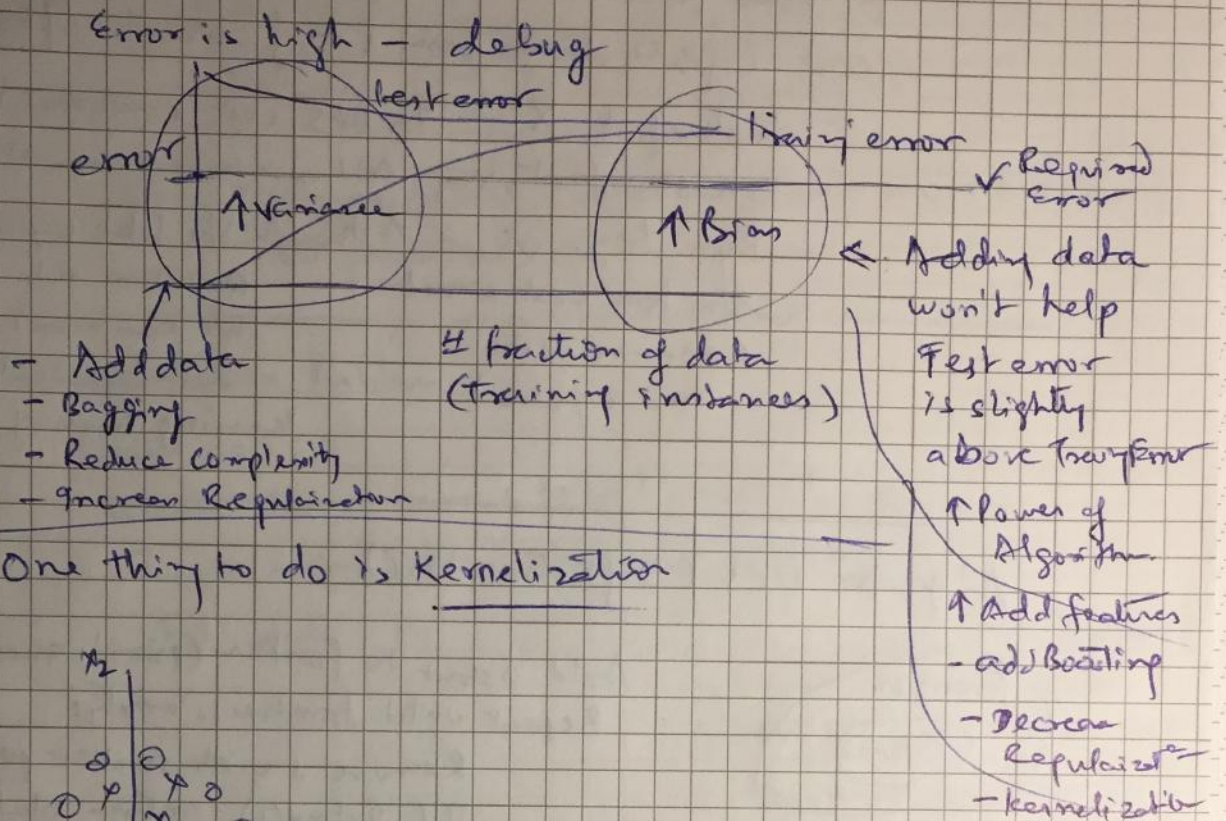


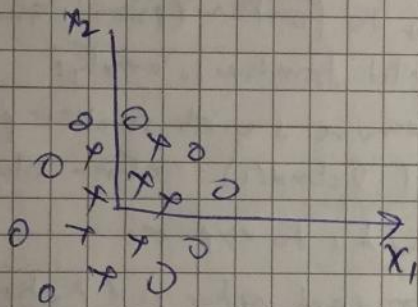
CS4780 dec 27

Model Set / Kernels

Error = Bias + Variance + Noise



One thing to do is Kernelization



$\vec{x} \xrightarrow{\text{Transform}} \phi(\vec{x})$  or Add interaction terms

$$\begin{pmatrix} x_1 \\ \vdots \\ x_d \end{pmatrix} \rightarrow \begin{pmatrix} x_1 \\ x_d \\ x_1 x_2 \\ x_1 x_3 \\ \vdots \\ x_1 x_d \\ x_2 x_d \\ \vdots \\ x_1 x_2 \dots x_d \end{pmatrix}$$

2d