

Keystages

Time estimate from 1 to 5

- (1) Determine roadmap (workflow) ~ 2 (?)
- (2) Establish evaluation metrics
 - (2a) Decide which features of the neural network output to use/combine 1 - 2
 - (2b) Find appropriate metrics for different features
 - * 1D metrics - 2D metrics
 - * Stopping point/Convergence
 - * Calculation time
- (3) Find GEANT4 uncertainty
- (3*) Bayesian Variational Autoencoder
 - (3*a) Construct network
 - (3*b) Combine network uncertainty with GEANT4 uncertainty
 - * Need metric that can compare two distributions with uncertainty
- (4) Build evaluation framework
 - (4a) Testing workflow on dummy network
 - (4b) Integrate Bayesian VAE with evaluation framework
- (5) Integration into basf2