



 Domain situation


 **Threat** Wrong problem

 **Validate** Observe and interview target users

 Data/task abstraction

 **Threat** Wrong task/data abstraction

 Visual encoding/interaction idiom

 **Threat** Ineffective encoding/interaction idiom

 **Validate** Justify encoding/interaction design

 Algorithm


 **Threat** Slow algorithm

 **Validate** Analyze computational complexity


Implement system

 **Validate** Measure system time/memory

 **Validate** Qualitative/quantitative result image analysis

 **Validate** Lab study, measure human time/errors for task

 **Validate** Test on target users, collect anecdotal evidence of utility

 **Validate** Field study, document human usage of deployed system

 **Validate** Observe adoption rates