



## 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