# Storytelling and Effective Communication

## Two Fundamental Questions

### What is the goal?

### Who cares?

## IMAC

* I: Inferatial goal (scientific question of interest)
* M: Model (all models are wrong, some are useful)
* A: algorithms
* C: conclusions and checking

## Key principals

### Remember The Golden Rule

### Know your audience

### Tell a story

* You want to have a simple but memorable example
* Any story has a beginning, a middle, and an end.
  + Introduce interesting characters
  + Put them in a predicament
  + Resolve the predicament
  + But leave room for sequels! (limitations and future work)

### Choose and use notation carefully

### Read great writers

### Create good sense of direction (with the help of signposts), with clear flow of logic

## Tell a Story with Data

* If you give a talk, use some visuals

## Stories

* Stories are the most powerful delivery tool for information, more powerful and enduring than any other art form.

## Key Considerations

### Who is your audience?

* What do they know about your topic?
* What motivates them? What do they desire?
* What experiences do you share? What are common goals?
* What insights can you give them? What tools and ‘magical gifts’?
* Don’t make them think!
  + Your audience does not want to spend cognitiave effort on things you know and can just show them
  + Lead them through the major steps of your story
  + Point out interesting key facts and insights using captions and annotations

### What questions are you answering?

### Why should the audience care?

### What are your major insights and surprises?

### What change to you want to effect?

## Messaging

### Framing – Why should I care?

* Tell the audience: ‘Here is the right way to think about the problem I was trying to solve.’
* Catch the audience’s attention and frame the story using captions and annotations
* If done well, your insights will seem obvious given this framing.

## Visual Story Design

* Beginning is at the upper left
* The middle is at the right
* The end is at the bottom

## Further reading

* The functional art
* Presentationzen
* Made to stick
* resonate