The Art of Presentations

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Enhanced Augmented Reality

- Enhanced augmented reality
  - Annotation of computer animation and graphics onto natural environment
  - Requires smart camera for tracking
  - Fusion of multiple sensor inputs, placed topographically within the scene
Communication Skills: The Traditional View

Professional Impact = Professional Achievements + Communication Skills

Communication Skills: The Real Story

Professional Impact = Communication Skills

(Not a good thing if this term is ~ 0)
The Key Elements of a Scientific Presentation. I

- **Content**
  - Clear Statement of the **Problem**
  - Summary of the **State of the Art**
  - Scientific **Approach**
    - Theoretical basis
    - Experimental protocol
    - Numerical simulations
  - **Uniqueness** of the Problem and Approach
  - **Key Results**
    - Summarized with clarity
  - **Conclusions**
    - Generalizable
  - Future **Research Directions**

The Key Elements of a Scientific Presentation. II

- **Structure**
  - **Introduction**
    - **Formulation** of the problem
    - Assumptions
    - Limitations
  - **Body**
    - Approach, methodology, **principal results**
    - Equations insofar as they are critical for understanding
  - **Conclusion**
    - **Restatement of the problem** in light of the results
    - Identification of the **contribution**
    - **Implications** of the results
    - The next steps from here
The Key Elements of a Scientific Presentation. III

- Emphasis
  - First order consideration: Audience
  - Topics chosen on the basis of importance
  - What, at the absolute minimum, do I want people to walk away with from my talk?

- Order
  - It’s a story!
  - Order of presentation is extremely important
  - Order within each viewgraph (the spatial map)

- Preparation of Viewgraphs or Visual Aids
  - Prepared for the speaker first, then for the audience
  - Font size, clarity
  - Edward R. Tufte: The Visual Display of Quantitative Information

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The Key Elements of a Scientific Presentation. IV

- **Articulation**
  - Context
    - Start at the beginning!
  - Clarity
  - Conciseness

- **Preparation**
  - Take the *stumbling blocks* out of your way
  - Room size, acoustics, mike, pointer, *CABLES*
  - The first two minutes
  - *Audience scan*
The Key Elements of a Scientific Presentation. V

Presentation Tips
- Choose a comfortable place to stand and stay there!
- Use of hand gestures
- Use of the optical (usually laser) pointer
  + It's not a weapon!
- The proper use of the title slide
  + Focusing and alignment for the audio-visual professional
  + Orientation for the session chairman, audience
- Start with a powerful visual slide if possible
  + Articulate the key goals of the presentation
- Handling questions, even difficult ones
- Be enthusiastic!