

CIS 400/401: Interview Suggestions

Following are some suggestions for creating a successful 15-minute PowerPoint presentation like that required for the interview. These suggestions **do not** form a specification. That is, this is **not** a grading rubric. Nothing suggested is required. Ultimately, it is up to you (and your partner) to determine the style and organization of the presentation that best suits the needs of your project.

- Example Presentation: The vast majority of groups are doing 'systems' projects. An example presentation of this style follows. The example is borrowed from two of last year's students (Matthew Evans and Mark Knichel):
 - SYNOPSIS: Given a cell-phone picture of a UPenn building, identify that building.
 - 1 Slide: Problem statement, motivation for work
 - “Given an SMS-camera-phone, new students will never get lost on campus again!”
 - 2 Slides: Current work and its shortcomings (if applicable)
 - “General image recognition is a well understood field”
 - “Our work isn't terribly new, we just want to package it for mobile, Penn-specific use”
 - 1 Slide: High-level overview of system architecture (flowchart?)
 - “Receive image -> Compare image to those in DB -> Return label of best match”
 - 1 Slide: Introduce running example, to be carried throughout
 - “Here is this picture we just took of Levine Hall”
 - ??? Slides: Step through individual system components (bulk of presentation)
 - Extract picture from SMS for processing (show in running example)
 - Use MatLab to find image edges (show in example)
 - Compare image against those in DB using algorithm [foo] (show some comparisons)
 - Provide a *quick, high-level, intuitive* bit about how [foo] works
 - Pick image with best correlation metric, return associated label
 - 2 Slides: Remarks on system effectiveness/efficiency
 - “Under normal conditions, we name the right building 85% of the time”
 - “To do our use of caching, we can process 1000+ images an hour”
 - 1 Slide: Shortcoming and future work
 - “Our image identification is most inaccurate at night – we could improve this...”
 - 1 Slide: Summary of contribution and concluding remarks

- General Suggestions: Things everyone should (probably) listen too:
 - 15-minutes is not a lot of time. Concentrate on what makes **your** project **novel**. Do not waste time describing well-understood CIS concepts, or the work of others.
 - Your task is not to present your entire work in 15-minutes – that's why you write a final paper. Rather than trying to impress (or alternatively, overwhelm) us with how much you have done and its low-level details, just help us to **understand** via **intuition**.
 - Use figures to illustrate points (using corresponding examples) whenever possible.
 - *Should I do a demonstration, or just provide screen-shots?* Our suggestion is highly interactive projects should do a demo – otherwise stick to well chosen screen-shots. Screen-shots are guaranteed to be error-free, and irrelevant details can be abstracted away.
 - Your presentations should not be a sales pitch, but instead be academic in nature. Be frank when discussing your shortcomings.
- Things To Avoid: You *really* should (probably) not have these in your presentation:
 - (*Unless a math or theory project*): If you have a LaTeX typeset equation or algorithm, **especially** one cut from a related work, you might want to reconsider.
 - Large blocks of text quoted from related works are a giant billboard that screams “I have absolutely no idea what is going on here”. There are two solutions: (1) It is not important, omit it, or (2) Learn it, or else you will never be able to impart intuition.
 - Source code, screen-shots of source code, unnecessarily complex examples, technical specifications (like RFCs), SQL statements – these are all things which do not work well in a presentation settings (too low level).

Good luck with your presentations. Feel free to contact us with further questions.