Final Presentations

• Template (may change)
  – Introduction/Framing: 20%
  – Main: 30%
  – Limitations/Critique/Lessons: 10%
  – Discussion and future work
  – Course requirements vs research paper standards

Course requirements vs research paper standards

• research novelty not required
• mid-level discussion of implementation is required
  – part of my judgement is about how much work you did
• high-level what vocabulary etc did you use
• medium-level what pre-existing features did you use/adopt
• low-level not required manual of how to use, data structure details
• design justification is required
  – differs in flavour between design study projects and technique projects
  – technical explanation alone is not enough
• publication-level validation not required
  – user studies, extensive computational benchmarks, utility to target audience

Report structure: General

• low level: necessary but not sufficient
  – correct grammar/spelling
  – sentence flow
• medium level: order of explanations
  – build up ideas
• high through low level: why/what before how
  – paper level
  – motivation: why I should care
  – overview: what did you do
  – details: how did you do it
• section level
• overview then details
• sometimes subsection or paragraph level
  – almost all got full credit if submitted.

Final Presentations Schedule

• 3-4:30 Main Yiologies
  – Geographical
  – Financial
  – Economic
  – Technical
• 3-4:30 Unifying and Non-Unique
  – others
• 4-4:30 Mocks and demo

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Contributions in research papers
• what are your research contributions?
– what can we do that wasn’t possible before?
– how can we do something better than before?
– what do we know that was unknown or unclear before?
– determines everything
• often not obvious
– diverged from original goals, in retrospect
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– don’t leave unsaid should be obvious after close reading of previous work
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Idiom pitfalls
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Sample outlines: Analysis (diffs)
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– relevant work, read papers, your own background/connections
• Data/Task-Abstraction, Related Work (same as above)

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Research Process & Pitfalls

Final pitfalls: Results
- Unfettered By Time
  - choose level of detail for performance numbers
  - detailed graphs for technique papers, high-level for design & eval papers
- Stray Man Comparison
  - compare appropriately against state-of-the-art algorithms
  - head-to-head hardware is best (re-run benchmarks yourself, all on same machine)
- Tiny Toy Datasets
  - compare against state-of-the-art dataset sizes for technique (small ok for eval)
- But My Friends Liked It
  - asking labmates not convincing if target audience is domain experts
- Unjustified Tasks
  - use ecologically valid user study tasks; convincing abstraction of real-world use

Final pitfalls: Style
- Deadly Detail Dump
  - explain how only after what and why; provide high-level framing before low-level detail
- Story-Free Captions
  - optimize for flip-through pictures skimming
- My Picture Speaks For Itself
  - explicitly walk them through images with discussion
- Grammar Is Optional
  - good low-level flow is necessary (but not sufficient), native speaker check if ESL
- Mistakes Were Made
  - don’t use passive voice, leaves ambiguity about actor
  - your research contribution or done by others?

Review reading pitfalls
- Reviewers Were Idiots
  - review the paper they submitted
  - remember you’ve only read the best of the best!
- Reviewers Were Thrashed By My Brilliance
  - seldom: unkind harsh since intimately familiar with area
  - I Just Know Person X Wrote This Review
  - sometimes true, sometimes false
  - don’t get fixated, try not to take it personally
- It’s The Writing Not The Work
  - sometimes true; bad writing can doom good work (good writing may save borderline)
  - sometimes false: weak work common! reinvent the wheel worse than previous one

Conference talk pitfalls
- Results As Dessert
  - showcase early to motivate
  - A Thousand Words, No Pictures
  - aggressively replace words with illustrations
  - most slides should have a picture
  - Full Coverage Or Bust
  - cannot fit all details from paper
  - communicate big picture
  - talk as advertising convince them it’s worth their time to read paper!

Final pitfalls: Style 2
- Jargon Attack
  - avoid where you can, define on first use
  - all acronyms should be defined
- Non-specific Use Of Large

Paper writing process suggestions
- pre-paper talk
  - write and give talk first, as if presenting at conference
  - then create paper outline from final draft of slides
  - encourage concise explanations of critical ideas, creation of key diagrams
  - avoid wordiness, depressing saturated jargon
  - easier to cut than add (or still may be over)
- pre-paper/practice talk feedback session: at least 2x talk length
  - global comments, then slide by slide detailed discussion
  - nurture culture of internal critique (build your own critique group if necessary)
  - have non-authors read paper before submitting
  - internal review can catch many problems
  - ideally group feedback session as above

Redesign En Masse: Makeover Mondays
- easy entry point (Tableau focus)
  - see edge technical research: Tableau

Review writing pitfalls
- Uncalibrated Dismay
  - remember you’ve only read the best of the best!
  - most new reviewers are overly harsh
- It’s Been Done, Full Stop
  - you must say what did it if in which paper; full citation is best
  - You Don’t Cite Me
  - stop and think whether it’s appropriate
  - be calm, not petulant
- You Didn’t Channel Me
  - don’t compare against paper you would have written
  - review the paper they submitted

Visual Design Process In Depth: Dear Data
- inspiring celebration of data humanism
  - http://www.dear-data.com/by-week/
  - Giorgia Lupi and Stefanie Posavec

Tools & ideas: Andy Kirk’s Visualizing Data
- http://www.visualisingdata.com/resources/
- https://www.visualisingdata.com/blog/

Next Steps

Videos
- many great conferences with free videos online
  - broadly accessible: OpenVisConf, Eyeo, InformationPlus
  - cutting-edge technical research: IEEE VIS

Conference talk pitfalls
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Visual Design Process In Depth: Data Sketches
- detailed process notes, from sketching through coding
  - http://www.datasketch.es/
  - Shirley Wu and Nadieh Brehmer
Pathways for more participation

- join Viz@UBC
  - [https://dfp.ubc.ca/initiatives/viz-ubc](https://dfp.ubc.ca/initiatives/viz-ubc)
  - get on visatubc-announce email list (send mail to visatubc-info@cs.ubc.ca)
  - talk series

- join Vancouver Visualization meetup
  - [https://www.meetup.com/Vancouver-Data-Visualization/](https://www.meetup.com/Vancouver-Data-Visualization/)
  - 4K members

- join Data Visualization Society
  - [https://www.datavisualizationsociety.com/](https://www.datavisualizationsociety.com/)
  - less than two years old, 10K+ members around the world
  - resources, jobs board, super-active Slack incl local groups, challenges, ...
  - Medium articles: Nightingale

Come talk!

- encourage meeting with me to get advice/feedback before final present
  - chance to get feedback while you can still act on it
  - optional, not mandatory
  - do send email to schedule, can’t meet with all 16 teams in last few days or in Tue office hours!