### **Personal Talk Critique**

#### Important details:

- I haven't looked at most of these talks in years, so the details of how these talks went aren't fresh anymore.
- Critique information is based on a fresh look at this talk. I'm specifically trying to point out flaws in these talks, which shouldn't be emulated.
- I am writing these critiques as if these were someone else's talks.
- Conferences in this area show off novel, peer-reviewed work, and are important events.
- Workshops are relatively minor, and are not peer-reviewed. Workshops allow one to present on work at any stage of the pipeline (rough ideas, work not yet submitted, work under review, work accepted somewhere). You'll notice that some of the work I have in workshops is seen in conferences.

# 1.) SoCal PLS Fall 2013

Venue: Small, regional workshop. ~40 people in attendance.

Format: 10 minutes + 2 minutes of questions (estimate)

### **Critique:**

- Significant amount of text
- Math/code is not presented in an appropriate font
- Diagrams showing nodes use inconsistent coloring and styles
- The actual solution doesn't come until very late (slide 17/22). Most time spent on background and establishing the problem.
- Problem #2 (slide 11) is not well-motivated
- Evaluation is very brief. It seems like there should be more data. Is this preliminary?
- Related work doesn't seem like it belongs, given how short the format is. This is also true of future work.

### 2.) **ASE 2014**

**Venue:** Moderately-sized international conference. Hundreds in attendance overall, but only ~30 in the presentation room.

Format: 11 minutes + 4 minutes of questions

### **Critique:**

- Some slides have too much text
- · Animations highlighting appropriate parts at different times are a nice touch
- Slide 9: likely to lose most members of target audience
- Slides 11-12: lots of text
- Last column on slide 13 is unclear
- · Very unclear what it means to "generalize stochastic grammars"

# 3.) GSWC 2014 (1)

**Venue:** Workshop specific to UC Santa Barbara's CS department; ~50 in attendance. **Format:** 15 minutes + 5 minutes of questions **Critique:** 

- Reuses most of ASE 2014 talk, so it inherits most of the same problems.
- Slides 11-14: wall of text
- Slides 15-16: tables contain tons of data which cannot reasonably be understood in the short time.

# 4.) GSWC 2014 (2)

**Venue:** Workshop specific to UC Santa Barbara's CS department; ~50 in attendance. **Format:** 15 minutes + 5 minutes of questions

### Critique:

- Slide 6 shouldn't be so text-heavy
- · Good use of animations to illustrate behavior
- Slide 16: should first line be gray?
- Slide 17: differences are important to state, but this seems like they could have been discussed better. This is a hard transition.
- Slides 20+: only text used. I get the impression that this last part was rushed.
- Slides 20+: is it really necessary to go into so much detail?
- Only hint of demonstrating the solution is effective is on slide 24, and this reads as anecdotal.

# 5.) CGO 2015

**Venue**: Moderately-sized international conference. Hundreds in attendance overall, but only ~30 in the presentation room.

Format: 20 minutes + 5 minutes of questions (estimate)

- Slide numbers are missing.
- It's good that there is a teaser on the first slide, but the first thing you show the audience is a wall of text.
- A talk outline is ok, though this talk isn't exactly so long that it *needs* an outline.
- Conclusions should not be listed in an outline (every talk has a conclusion at the end; the audience doesn't need to be told this)
- Slide introducing dataflow analysis is completely unnecessary; the subsequent animation says the exact same thing in a clearer manner.
- Lots of text when describing prior work and core insight. Not clear that the subbullets refer to the highlighted portion. Overall, this is introducing a **lot** of information in a very short timespan, and it's unlikely even an attentive audience can keep up.
- Core insight is pure text.
- Way too much text overall.
- Slide 10 is too information-dense. The part about function call contexts is the only important part based on subsequent slides, and this could easily be explained by the top 3 elements of the call stack.
- With slide showing speedups and available contexts, the bars for the number of available context should use the same color as the lines. It's not immediately clear that these refer to the same thing. These images are also quite small, and seem low-resolution. Subsequent highlighting is necessary only because this is so unclear as presented. This is one area where next might help: more contexts != more speedup.

• If more contexts != more speedup, why? If this cannot be explained, this probably shouldn't have so much time devoted to it.

# 6.) ICSE 2015

**Venue:** Very large international conference with overall several hundred in attendance, but only ~15 in the presentation room.

Format: 20 minutes + 5 minutes of questions

### **Critique:**

- It's good that there is a teaser on the first slide, but the first thing you show the audience is a wall of text.
- Lots of text everywhere.
- Slide 6 should use code to show the difference.
- Slide 9: what is the result? If you call out a paper, you should somehow say (either verbally or in the slide) what the paper is. Familiar audience members will want to know.
- Good use of animations to incrementally introduce code, along with how it relates to
  an English-based constraint
- Usability argument is incredibly weak. This should probably be removed entirely from the talk.

# 7.) **ASE 2015**

**Venue:** Moderately-sized international conference. Hundreds in attendance overall, but only ~30 in the presentation room.

Format: 20 minutes + 5 minutes of questions (estimate)

- It's good that there is a teaser on the first slide, but the first thing you show the audience is a wall of text.
- Outline is very large for such a relatively short talk. This should be courser-grained. Each time you go back to the outline, the audience effectively resets, and doing this too frequently gives them whiplash.
- Many slides have too much text.
- With slides 8 and 9, it seems like it would have been better to fully explain fewer bullets, as opposed to barrage the audience with bullets. At the very least, these can, and should, be shorted so they all are a few words.
- Use of System F may or may not work well with the target audience. Talk fundamentally assumes the audience is fairly familiar with type theory, which is probably not true of the average ASE goer.
- By the time you finish going through finding precision bugs, you've already gone through a **ton** of information. It may have been better to only discuss this, rather than get into soundness and precision bugs. It probably would have been ok just to say that we have a way of finding them, and you can read the paper to see more.
- Exacerbating the previous point, slides suddenly get very texty, indicating that even the author got bogged down here.
- Between the previous two points and the outline, there is too much content in these slides.

• Slide 32: this is **incredibly** important, but you give it very little time. Details of the bugs found would likely have been much more interesting to the audience than the actual technique. At the very least, this would help entice the audience to learn about the technique, instead of trying to force them to learn.

# 8.) SoCal PLS Fall 2015

**Venue:** Small, regional workshop. ~40 people in attendance.

Format: 25 minutes + 4 minutes of questions

### **Critique:**

- It's good that there is a teaser on the first slide, but the first thing you show the audience is a wall of text. This is a **big** wall of text, too.
- Conclusions should not be listed in an outline (every talk has a conclusion at the end; the audience doesn't need to be told this)
- Motivation and goal are loaded with text.
- In the motivation, it would be better to focus on one downstream application and use imagery to help convey it, as opposed to attempting an exhaustive list. Other applications can be mentioned, but they shouldn't be taking up real estate on the slide.
- With background, single lines of text shouldn't be proceeded by bullets. This looks particularly weird with the use of ellipses (...) at the beginning.
- Slides 7-10 use text where images should be used instead. Similar problem for slides 16-21, 31-32, 34-35.
- Slide 23: this is factually incorrect regarding how EUF works; out of the box, they behave as existentially-quantified functions. Extra constraints are needed for universal quantification.
- Slide 32: comment about the metainterpreter basically guarantees you'll be the only one in the room who knows what you're talking about. This doesn't add anything to the talk, and encourages audience to zone out.

# 9.) Invited Talk for the University of Utah CS Department, 2016

Venue: CS department conference room, ~20 in attendance

Format: 40 minutes + 10 minutes of questions (estimate)

- While the title is complex and confusing, it's good that it was explained right away. This also serves somewhat as a teaser (though not entirely)
- Conclusions should not be listed in an outline (every talk has a conclusion at the end; the audience doesn't need to be told this)
- Lowercase "g" is cutoff in slide 3
- Slide 3 is completely unnecessary; subsequent slides give the same information in a more intuitive manner
- Slide 5: color red on the background is difficult to see
- Slide 7: the mother of all text. A bunch of subsequent slides are guilty of the same thing.

• Remainder of the talk was scavenged from parts of multiple previous talks. These parts carried along the problems in the previous talks.

### 10.) SoCal PLS Fall 2016

**Venue:** Small, regional workshop. ~40 people in attendance.

Format: 20 minutes + 5 minutes of questions

- It's good that there is a teaser on the first slide, but the first thing you show the audience is a wall of text. This is a **big** wall of text, too.
- Conclusions should not be listed in an outline (every talk has a conclusion at the end; the audience doesn't need to be told this)
- Slide 5 is heavy on the text, and this is a very important slide, too
- Slide 8: would help to show the two potential bugs side-by-side (42:53 vs. 4:8). If the audience member missed the 42:53 part (which lasted only a moment), they are now hopelessly lost at a key point.
- Some paper is called out in slide 9, but there is no way to know what. Audience members familiar with the related work would want to know.
- · Some texty slides, particularly in the second looking at how metrics compare
- Table on slide 26 is very complex, and this is vital