Creating Accessible **Slides** Handout
for the Human Factors and Ergonomics Society (HFES) Events

1. Why create accessible slides?

Accessible slides ensure that your important research is available to a larger group of potential audience members, including audience members with a variety of access needs, whether because of disability or other life circumstances. By creating accessible slides, you remove barriers and as a result welcome and connect with more people who may otherwise have been excluded from possible discussions.

2. Quick Tips and Tricks

1. Avoid directly copying and pasting paragraphs from your paper.
2. Avoid low-contrast text and background colors, such as yellow or baby blue font on a white background.
3. Avoid cluttered design.
4. Check that all visuals (images, graphs, etc.) are large enough to be viewed at a distance.
5. Prepare alternative formats of your slides.
6. Complete a quality test prior to finalizing your slides!
   a. Display your poster on a 60" tall screen, stand 20 feet away, and see if all information is easily readable.
   b. Dim the screen to 50% light, stand 20feet away, and confirm if all information remains easily readable.
7. If a professional CART captioner is not in your session, during your presentation, turn on [closed captioning on your PowerPoint](#).

3. Slide Technical Setup

The technical aspects of these instructions are based on Microsoft PowerPoint. Similar tools and practices can and should be used in Google Slides.

Note: Downloading Google Slides into a .ppt or .pptx file can remove accessibility features, so please plan in advance to either share the downloadable .ppt or .pptx file through Microsoft PowerPoint or directly through the URL to a Google Slides document.

1. Always use the "Layout" function to select a slide layout.
   a. Slide layouts can be customized under "View" and then "Slide Master."
2. Include titles on **every** slide. If not wanted to be present visually, hide it through the "Selection Pane" tool under "Home" and then "Select" menu.
3. Ensure each slide is unique to create a navigable table of contents of slides for screen-reader users.
4. Include an easily identifiable **short link** (such as bitly.com) to the digital access copy in the footer of each slide.

5. Include a slide number in the footer of each slide.
6. Avoid or minimize use of tables.
7. Include alt text for all relevant slide images.
8. Label all hyperlinks through the "ScreenTips" function under "Edit Hyperlink."

After completing your slides, use the "Accessibility Checker" feature, found through the Search function, and make required corrections.

4. Visual Access

A. Accessible Slide Design Principles

1. Avoid high-clutter slide templates.
2. Avoid patterned backgrounds where text will be used.
3. Include white/empty space to avoid overcrowding on each slide.
4. Avoid bright and highly saturated colors for graphs and graphics.
5. Avoid relying on colors for meaning.
6. Avoid using flashing text or other sudden animations.

B. Font Selection

1. Use **sans-serif** (non-serif) fonts for all text on the poster, such as…
   a. Arial
   b. Calibri
   c. Helvetica
   d. Verdana
   e. [Atkinson Hyperlegible](#) - Designed for greater visual access and readability
   f. Use no more than 3 different fonts to avoid confusion.
2. When emphasizing text…
   a. **Bold** text
   b. Place *asterisks* around a word
   c. But do not…
      i. Rely on color text
      ii. *Italicize* text
      iii. Underline text
      iv. Use all UPPERCASE text
3. Use **high-contrast text**.
   a. Black text on a light background **or** white text on a dark background.
   b. Check possible text and background color combinations using this [Contrast Checker](#) website to design for contrast and color-blindness.
4. Use **at least 1.0-line spacing** for text.
5. Ensure **slide text** is large enough for in-person audiences in large rooms.
   a. Title text should be at least 36-point font.
   b. Body text should be at least 24-point font.
   c. Subtext or footnotes should be at least 18-point font.

5. Video Access

1. Present videos that include accurate captions.
2. Use videos that include audio descriptions. If audio descriptions are unavailable:
    a. Prepare an audio description in advance of sharing the video during your presentation.
    b. Personally provide the brief but holistic prepared audio description **prior** to presenting the video.
    c. Narrate the prepared audio description while the video plays.

6. Cognitive Access

1. Provide a slide with your introductory information for an accessible introduction, including but not limited to:
    a. Your name
    b. Your pronouns (as comfortable)
    c. Your visual description (as comfortable, based on your cultural context and presentation audience)
        i. May include race, gender (i.e. woman, man, person, etc.), hair color/length/style, clothing, and other visuals present
        ii. May also include other non-visual but important identity aspects important and/or relevant to you and your audience
    d. If applicable, your position and institution
    e. If applicable, the title of your presentation
    f. Content notices for sensitive material, whether in images or topics
    g. Information about access copies (digital and physical)
2. If you are introducing an entire session, also add a session slide sharing:
    a. The title of your session
    b. A visual description of the room (to be read aloud)
    c. Access reminders, such as:
        i. Encouraging audience members to move and sit as they need to
        ii. Reminding everyone to use a microphone for group comments
        iii. Sharing whether a break will be provided during the session
        iv. Identifying whether ASL interpretation or CART captioning is present
        v. Encouraging the use of Deaf applause instead of clapping
3. Include an agenda or outline slide at the beginning of your presentation.
4. Use five bullet points at most per slide.
    a. Keep each bullet point to one line as possible.
5. Minimize slides with extensive text.
6. Provide image descriptions and captions with relevant visuals.

A. Presenting Your Slides

1. Speak at a reasonable pace. Pause and take a deep breath after speaking for a bit (such as every three sentences).
2. Read all text directly as presented on the slides before expanding on the information provided on the slide.
   a. **Note:** Reading aloud provides visual access to slide content that may be inaccessible to various audience members and cognitive access to all audience members to follow the spoken presentation more easily.
3. Describe all relevant visuals provided on your slides.
4. Avoid saying "As seen on this slide," or "You can read that independently."
5. Provide and announce the availability of access copies digitally (through the short link) and physically in standard and large print options.
   a. Physical access copies are printouts of slides.
   b. Standard print may be 3 slides per page with lines provided for notes.
   c. Large print is 1 slide per page, with the slide occupying the full page.
   d. Print up to 10 standard-print copies and up to 5 large-print to pass out to audience members as requested prior to your presentation.