HAAG Weekly Report Week 15

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Time-Log

What did you do this week?

- Updated website
- Added other image displays

What are you going to do next week

- Keep website updated
- My code is not updating to github, so i need to fix that

Blockers, things you want to flag, problems, etc.

- None

Abstracts:

Link: https://dl.acm.org/doi/pdf/10.1145/3613904.3642112

Discovering Accessible Data Visualizations for People with ADHD

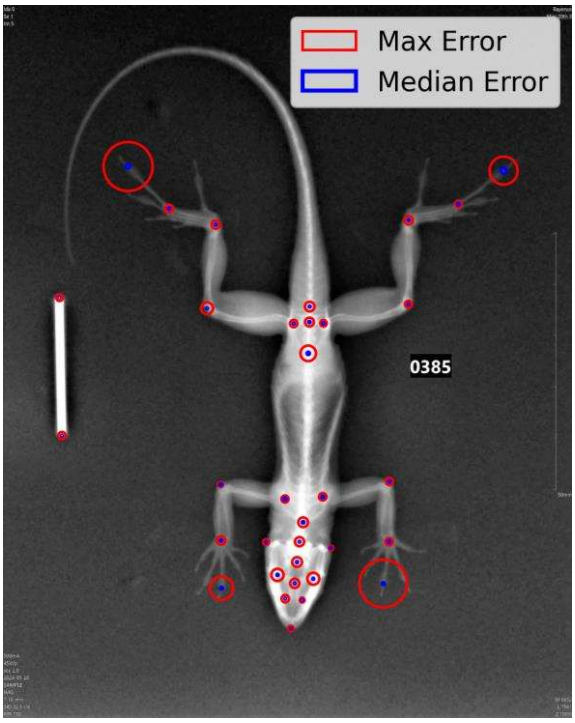
There have been many studies on understanding data visualizations regarding general users. However, we have a limited understanding of how people with ADHD comprehend data visualizations and how it might be diferent from the general users. To understand accessible data visualization for people with ADHD, we conducted a crowd-sourced survey involving 70 participants with ADHD and 77 participants without ADHD. Specifcally, we tested the chart components of color, text amount, and use of visual embellishments/pictographs, fnding that some of these components and ADHD affected participants' response times and accuracy. We outlined the neurological traits of ADHD and discussed specifc findings on accessible data visualizations for people with ADHD. We found that various chart embellishment types affected accuracy and response times for those with ADHD differently depending on the types of questions. Based on these results, we suggest visual design recommendations to make accessible data visualizations for people with ADHD.

Summary: This paper aims to make data visualization recommendations for people with ADHD by first running tests on the best conditions and then making suggestions.

What did you do and prove it

This week I added images to the visualization, prepared for the bi-weekly meeting, and made an outline for the paper. I created a piece of a figure that shows the relative error of each landmark for the test set over an example lizard. I think it is a very intuitive way to understand the strength of our model. I have included the figure outline and the figure piece below:

- Premise: LizardMorph enables rapid and accurate landmarking of lizard X-ray images
    - Figure 1 Premise: Our pipeline automatically landmarks the images with high accuracy
        - Schematic
            - Upload image
            - Make predictions
            - Fix predictions
            - Download predictions and visualization
        - Pipeline outputs TPS and prediction images
        - Predictions are accurate with a 7 pixel average deviation
    - Figure 2 Premise: Online interface enables realtime prediction monitoring
        - Zooming offers users to check points closely
        - Image filters offers users clear visuals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