

██████████ Peer Review for ██████████ Spring 2021 Argonne SULI Internship

While ██████████ worked on two main projects this SULI term, she focused on just the second one for her presentation, which contributed to it being well-focused. Her work was on modeling vehicle characteristics, such as age and fuel efficiency, based on various location-based demographic, socioeconomic, and policy factors such as median household income, urbanicity, and state-wide safety and emissions regulations. The project was quite well researched, which was evident through the many results that ██████████ presented, such as the correlation between urbanicity and vehicle type (car vs. truck) and between median household income and fuel efficiency. She explained that they ran over 2,000 single variable linear regressions to determine the most significant factors, indicating that the work and presentation were very well researched.

This presentation was very informative, in part due to its clear organization. The presenter did a good job of motivating the work to help the audience understand its importance and implications, which made the entire presentation more cohesive. ██████████ began with a high-level introduction, before spending time explaining the datasets she used and their key variables. Understanding the background to the variables and the reasoning for using them made it easier for me to follow the results later in the presentation. After presenting several maps and figures of her key results, the presenter concluded with the most important takeaways and implications from her work this term.

I found the slides effective in aiding to the presentation. There were a few text-heavy slides during the introduction and conclusion during which it was challenging to follow both the written and spoken text. However, most slides contained one key map/figure with the important takeaways from that graphic. This style was an effective use of slides to support the discussion that ██████████ provided. I was impressed that all text was large enough to be read, even axes titles and labels, which can often be too small to read in presentation slides.

Due to the virtual nature of the presentations this term, it was a little challenging to closely follow both the presenter and the slides, as the video of the presenter was just a small box in the corner of the screen. Regardless of this less personal presentation setting, the presenter was rehearsed, spoke congruently, and was in control of the flow of the presentation. At times, I found the pace to be a little too fast to follow both what was being said and what was being presented in the slides. Slowing down, especially while presenting some of the key results, would have made this presentation stronger.

Eye contact, engagement with the audience, and use of notes were all especially challenging to assess due to the virtual nature of the presentation. While making physical gestures to point out key points on the slides was not possible, at times, ██████████ made effective use of the mouse cursor to direct the audience's attention. The tone and inflection of the speaker was engaging and aided the presentation, though slowing down in certain sections could have been valuable.

██████████ was very knowledgeable and was able to concisely answer my question; I was curious why several zip codes had average vehicle ages of 20-25 years and whether this was incorrect data. She succinctly explained that in Montana, the area where we see the oldest average vehicle age, 11+ year-old vehicles can be registered for life, so some vehicles may linger on registration data even after they are out of use since they need not be re-registered. In other areas, such as in certain zip codes in Arizona, the high vehicle age is likely due to outliers/low vehicle registration density. Overall, this was a very effective presentation which was clearly well-researched, though not too broad in scope.