Building upon existing children's literature research, our work endeavored to integrate computational approaches to a domain traditionally unacquainted with such methodologies. Specifically, our focus lied in recognizing the emotional experiences of African American fictional characters through a collection of award winning novels and poems.

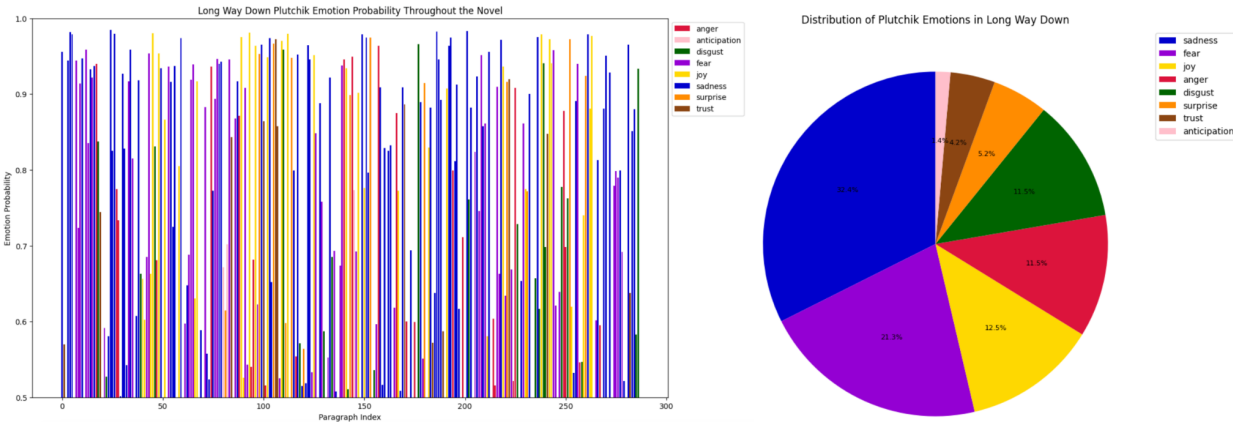**Novel-level Visualizations: "Long Way Down" by Jason Reynolds (8 Class)**

Figure 1. The diverging bar graph shows the change of emotion over time for the novel "Long Way Down" by Jason Reynolds, using our 8-class model. The bar graph employs color coding for each emotion label, and we can see here that the model detects a diverse range of emotions throughout the book. We can also see that clusters of blue, purple, and yellow are most prominent, which correspond to the emotions of sadness, fear, and joy. The pie chart shows that these three emotions are in fact the ones with the highest frequency compared to the other emotions.

Our investigation is aimed towards gathering evidence to validate the hypothesis that people-of-color characters in young adult novels exhibit traces of complex traumas unlike their white American counterparts. Our objective was to propose a method to visually represent the structures of these narratives and the characters within, with a particular emphasis on identifying critical times that evoke heightened emotions among multicultural characters. Our ultimate aim was to deliver a two-fold analysis.

Our Novel Level Analysis involved quantifying and visualizing the emotions depicted within the narratives, employing sentiment analysis language tools to provide a nuanced understanding of the emotional landscape at the broader novel level. We honed our models to recognize the 8 primary emotion classes based on the pre-established Plutchik emotion wheel (anger, sadness, joy, anticipation, trust, fear, surprise, and disgust) and also a reduced 3-class spectrum consisting of positive, negative and neutral emotion classes.

Character-level Visualizations: Buck in "Long Way Down" by Jason Reynolds (8 Class)

Our Character Level Analysis intended to visualize the intricacies of emotional shifts experienced by protagonists within the narratives, highlighting
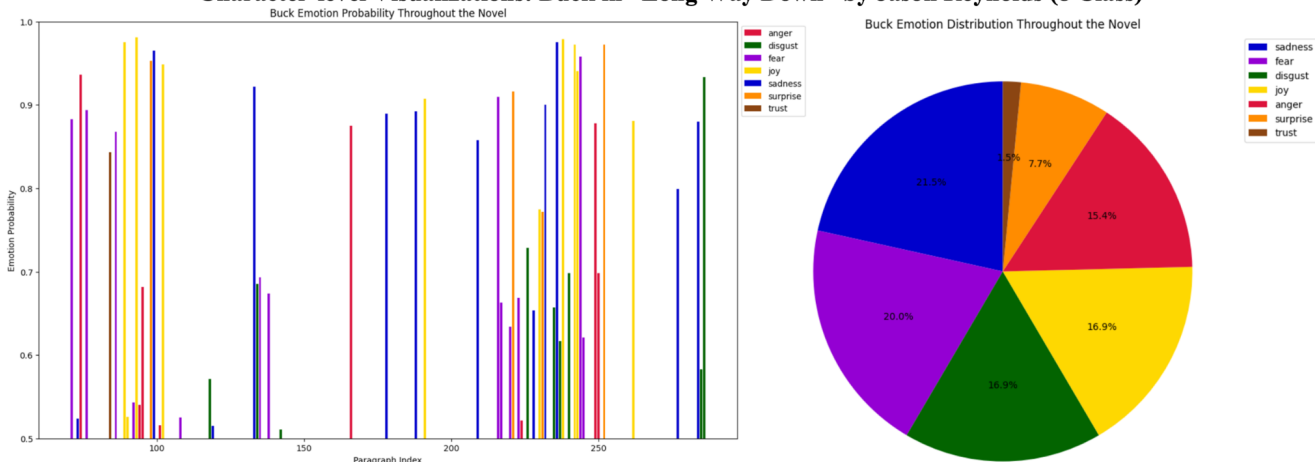
Figure 2. In these two graphs we are examining the sentiment of paragraphs where the character Buck is mentioned. Similar to the novel-level visualizations we provided, we can see that sadness, fear, and disgust are the top three emotion labels both for the bar graph and the pie chart.

what we refer to as "critical times." A preliminary approach we took was identifying character names through a word frequency analysis, while cross-validating our results with named entity recognition models. We also manually identified the alternative names, demographics, and socioeconomic backgrounds of the characters from the texts to later pinpoint patterns that may trigger exhibition of emotional fluctuations.

Our approach integrates computational rigor with a nuanced understanding of literary elements, aiming to contribute valuable insights to the exploration of emotional patterns in multicultural young adult literature.