

Clay Crews and Lexington Whalen contributed equally to this research project on Mamba-based tumor segmentation from brain MRI scans.

Lexington Whalen:

- Identified the potential of the U-Mamba architecture for segmentation tasks
- Implemented the original U-Mamba model
- Implemented the U-Net model for comparison
- Implemented the Segformer transformer model for comparison
- Collaborated on writing the research paper

Clay Crews:

- Discovered the lightweight variant of the U-Mamba architecture (UltraLight VM-UNet)
- Implemented the UltraLight VM-UNet model and its variations (ULMUNet_v1, ULMUNet_v2, ULMUNet_v3, ULMUNet_v4, and UL-PP)
- Collected the necessary data for training and testing the models
- Collaborated on writing the research paper

Both Clay Crews and Lexington Whalen worked together as a team to conduct this research, sharing the responsibilities of model development, implementation, data collection, and paper writing. Their combined efforts and equal contributions were instrumental in the successful completion of this project, which explored the application of Mamba-based architectures for tumor segmentation in brain MRI scans.

There were no issues with regards to division of labor with this project.