

image, physicians can make more informed decisions for treatment planning, surgical intervention, and radiation therapy. A single CPU hardware resource was utilized for the training progress model. A CUDA Capable GPU is required for performing semantic segmentation of the image volumes.

References

- [1] Novsheena Rasool^{1*} and Javaid Iqbal Bhat² 1 Islamic, “Multimodal Brain Tumor Segmentation using 3D-U-Net” Indian Journal of Natural Sciences www.tnsroindia.org.in ©IJONS Vol.14 / Issue 78 / June / 2023.
- [2] Girija Chetty¹, Mohammad Yamin² Matthew White³, “A low resource 3D U-Net based deep learning model for medical image analysis”. Int. j. inf. tecnol. (February 2022) 14(1):95–103 <https://doi.org/10.1007/s41870-021-00850-4>.
- [3] Bahar Uddin Mahmud, Guan Yue Hong, Abdullah Al Mamun, Em Poh Ping and Qingliu Wu “Deep Learning-Based Segmentation of 3D Volumetric Image and Microstructural Analysis”. <https://doi.org/10.3390/s23052640>.
- [4] Sidratul Montaha¹ · Sami Azam² · A. K. M. Rakibul Haque Rafid¹ · Md. Zahid Hasan¹ Asif Karim², “Brain Tumor Segmentation from 3D MRI Scans Using U-Net”. SN Computer Science (2023) 4:386, <https://doi.org/10.1007/s42979-023-01854-6>.
- [5] Punn NS, Agarwal S. “Multi-modality encoded fusion with 3D inception U-net and decoder model for brain tumor segmentation”. Multimed Tools Appl. 2021;80(20):30305–20. <https://doi.org/10.1007/s11042-020-09271-0>.
- [6] Owais Ali, Hazrat Ali, Senior Member, IEEE, Syed Ayaz Ali Shah, Aamir Shahzad. “Implementation of a Modified U-Net for Medical Image Segmentation on Edge Devices”. IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II: EXPRESS BRIEFS, VOL. XX, NO. XX, AUGUST 2021.
- [7] Ayesha Younis¹ , Li Qiang^{1,*}, Charles Okanda N. yatega^{2,3} , Mohammed Jajere Adamu¹ and Halima Bello Kawuwa. “Brain Tumor Analysis Using Deep Learning and VGG-16 Ensembling Learning Approaches”. Appl. Sci. 2022, 12, 7282 <https://doi.org/10.3390/app12147282>.
- [8] Rupal Kapdi, Mehul S Raval. “3D Semantic Segmentation of Brain Tumor for Overall Survival Prediction”. DOI: 10.1007/978-3-030-72087-2_19 Chapter · March 2021. <https://www.researchgate.net/publication/350379189>.
- [9] Olaf Ronneberger, Philipp Fischer, and Thomas Brox. “U-Net: Convolutional Networks for Biomedical Image Segmentation”. arXiv:1505.04597v1 [cs.CV] 18 May 2015.
- [10] Novsheena Rasool^{1*} and Javaid Iqbal Bhat². “Multimodal Brain Tumor Segmentation using 3D-U-Net”. Indian Journal of Natural Sciences www.tnsroindia.org.in ©IJONS.Vol.14 / Issue. 78 / June / 2023 International Bimonthly (Print) – Open Access ISSN: 0976 – 0997.
- [11] Sidratul Montaha¹ · Sami Azam² · A. K. M. Rakibul Haque Rafid¹ · Md. Zahid Hasan¹ · Asif Karim². “Brain Tumor Segmentation from 3D MRI Scans Using U-Net”, SN Computer Science (2023) 4:386. <https://doi.org/10.1007/s42979-023-01854-6>.