LETTER OF RECOMMENDATION

To Whom It May Concern

This recommendation is for my student, Mr. Kush Vora, to support his graduate admission application. Kush worked as a research intern under my supervision. Having interacted with him closely, I have regularly assessed his capabilities and overall aptitude. Hence, I can state that he is a bright individual and a deserving candidate. Kush has always expressed a deep interest in topics in the field of deep learning, machine learning, and computer vision. He also possessed excellent skills in Python, Tensorflow, PyTorch, MATLAB, and OpenCV, which I could sense from his projects. He grasped concepts quickly, and could also apply them skillfully to different problem statements given to him, during the internship. Kush would often visit my office to discuss the work assigned to him.

As a research intern, Kush worked on segmenting exudates from fundus images of patients suffering from diabetic retinopathy (a diabetes complication that affects the eye). My initial discussions with Kush focused on identifying the project deliverables. I could sense his curiosity about the research methodology and his eagerness to work in the artificial intelligence domain, specifically in medical imaging. Kush and his team designed a residual recurrent U-Net that achieved good results on three benchmark diabetic retinopathy datasets. Their work is currently under submission and its preprint titled 'A deep learning based approach to segment exudates in retinal fundus images using Recurrent Residual U-Net' is currently available on IEEE Techrxiv. Kush also worked with me on a breast cancer severity detection project. The team faced a lot of challenges due to a large number of misclassifications. This was because the density of the pectoral muscle in the mammogram was similar to the density of the cancer tissue, thus confusing the neural network. Kush developed an image processing pipeline that detected and removed the pectoral muscle from the mammograms, which increased the classification accuracy. The work resulted in 'EEF-Net: An Enhanced EfficientNet for Breast Tumor Classification in Mammograms', which is currently under consideration with Elsevier's Clinical Breast Cancer journal.

To summarize, Kush is a motivated, organized, and disciplined student who loves challenges and is good at facing them. I would therefore **strongly recommend** Kush Vora to be considered as a potential student for a master's at your university. If you need any further information, you can reach out to me

Regards,

Dr. Ninad Dileep Mehendale,
Associate Professor,
Department of Electronics Engineering,
K. J. Somaiya College of Engineering, Vidyavihar, Mumbai, India 400077
Post-doc (KIT Germany), Ph. D. (IIT Bombay)
Email: ninad@somaiya.edu
Contact: +91 9820805405