As we know that the neural networks sometimes require long training times and data sets to learn interesting tasks. The ALVJ(Automated Land Vechile In a Neural network Desined to drive the CMU NAVlab), By using the real time techniques the system learns quickly to autonomously control the navlab by watching how the human driver reacts. And after completing the forward pass through a steering command is the output layer. That steering direction dictated by the network is taken as the center of mass of the hill activation surrounding the output unit with the highest activation level. By using this technique, the direction to steer permits finer steering corrections. Thus, improving the driving accuracy.

And the weights in the network are altered using the backpropagation algorithm. That is this back propagation helps the network outputs are more closely corresponds to correct steering directions. The main changes to the standard algorithm used is the weight change momentum factor which is the factor that helps to steadily increasing during training, and that is increasing the learning rate constant for each weight that scales and works. Despite this the training has many drawbacks , generating the synthetic road scenes was quite time consuming. Which consumed almost 6 hours. These were the main components of the model