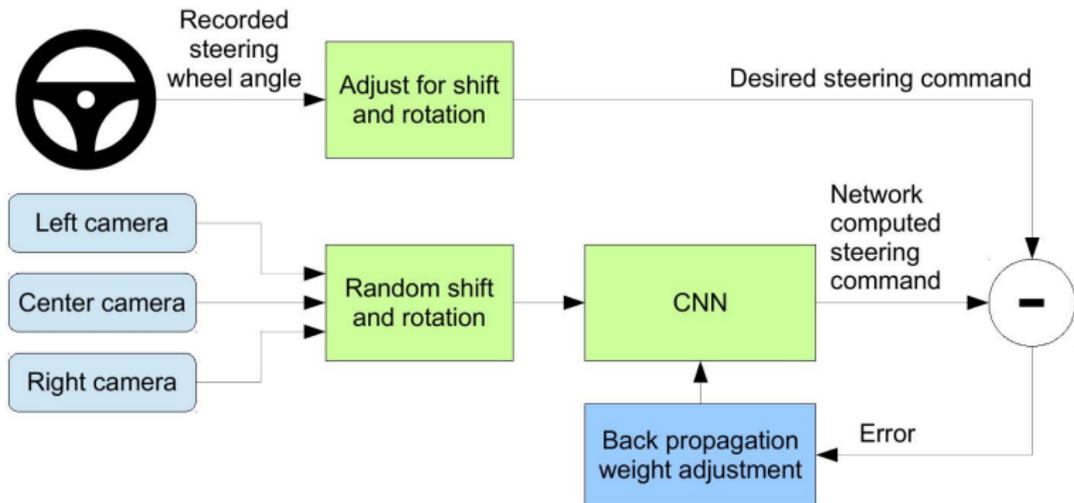


End to End Learning for Self-Driving Cars

M. Bojarski, D. D. Testa, D. Dworakowski, B. Firner, B. Flepp, P. Goyal, L. D. Jackel, M. Monfort, U. Muller, J. Zhang, X. Zhang, J. Zhao (ARXIV 2016)



- ▶ Convolutional Neural Network that learns vehicle control using images
- ▶ Left and right images are used for data augmentation to simulate specific off-center shifts while adapting the steering command
- ▶ Approximated viewpoint transformations assuming points below horizon lie on a plane and above are infinitely far away
- ▶ The final network outputs steering commands for the center camera only
- ▶ Tested with simulations and with the NVIDIA DRIVE PX self-driving car