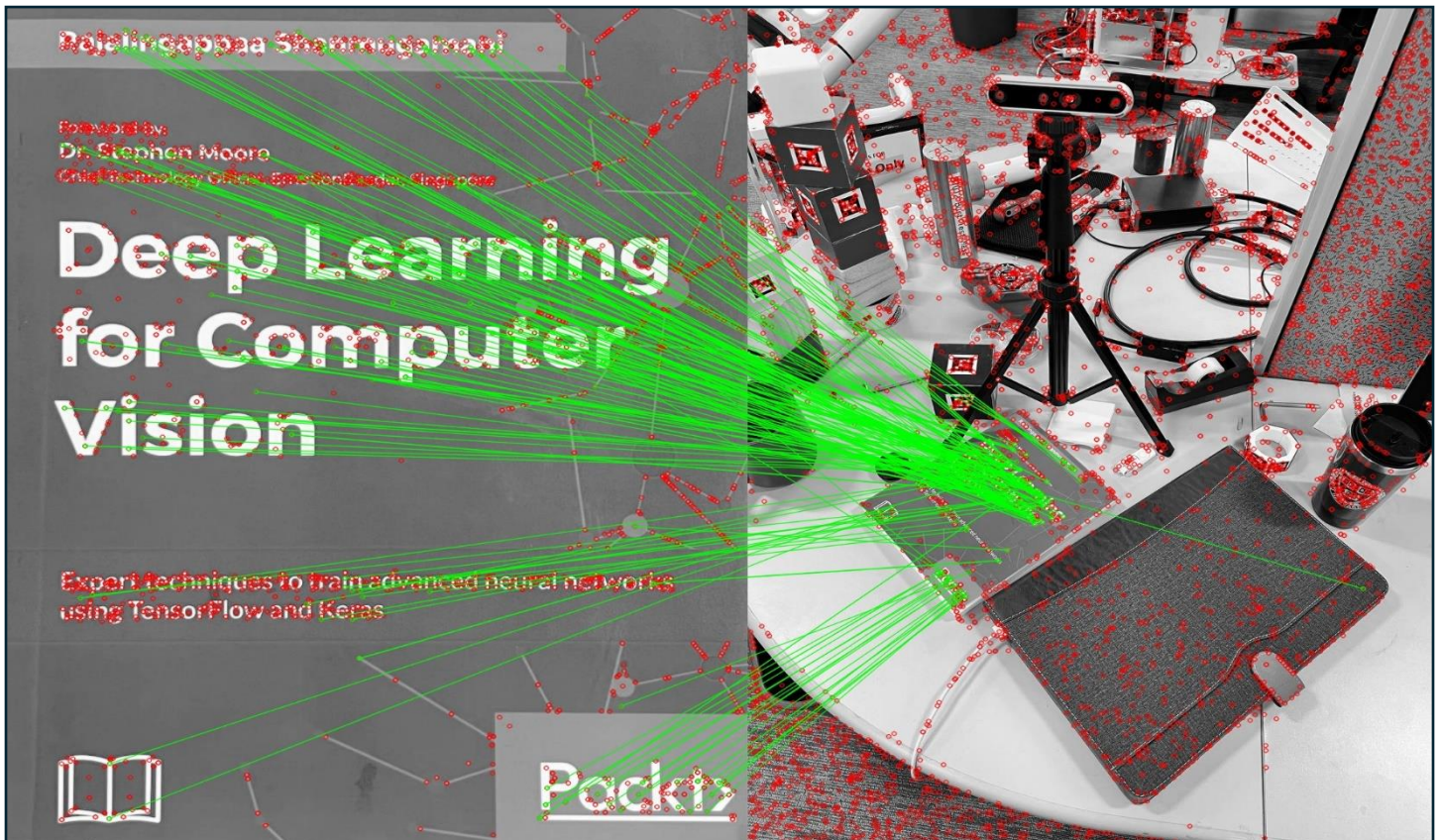
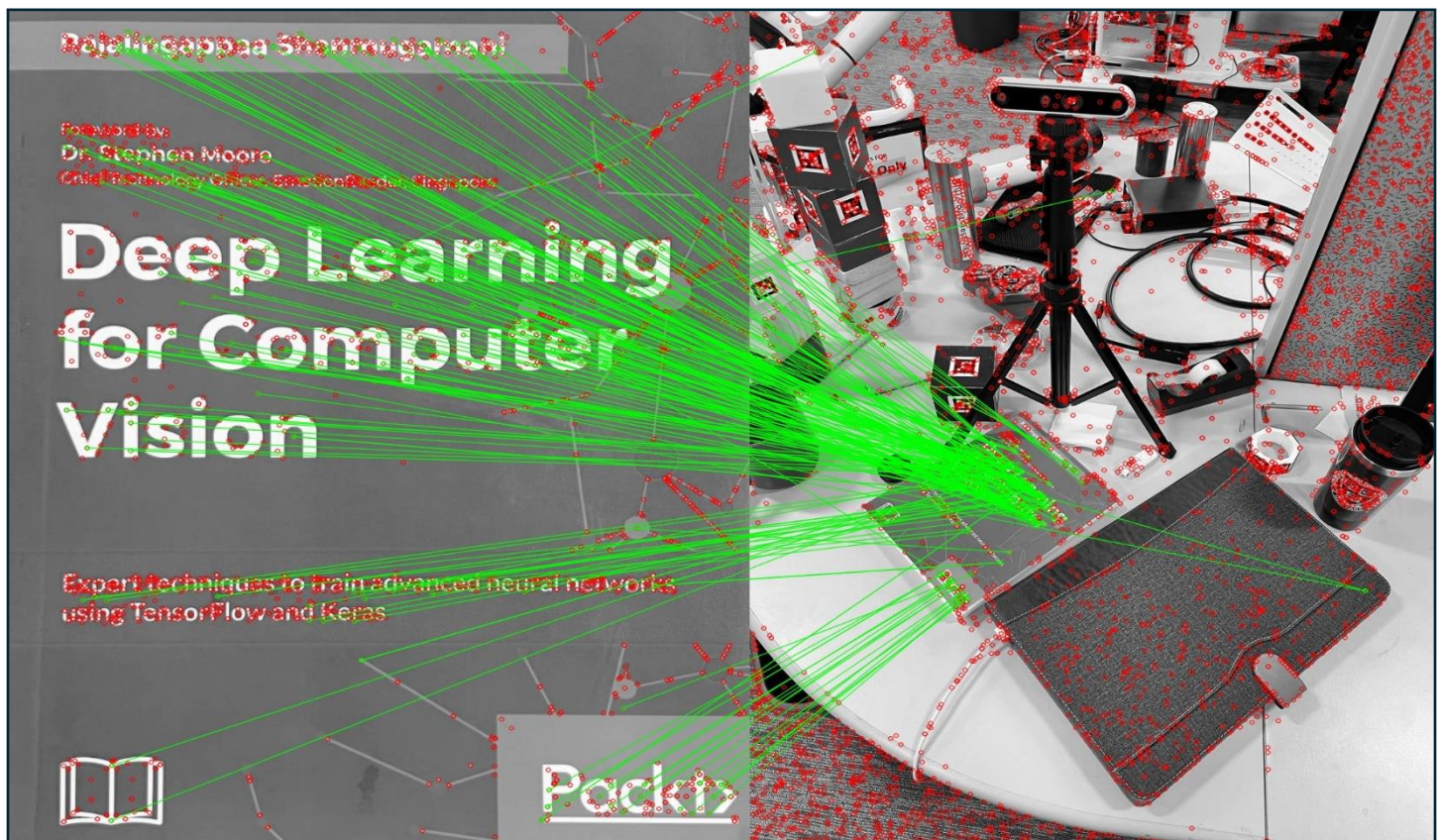


Part 1/Part 2/Part 3

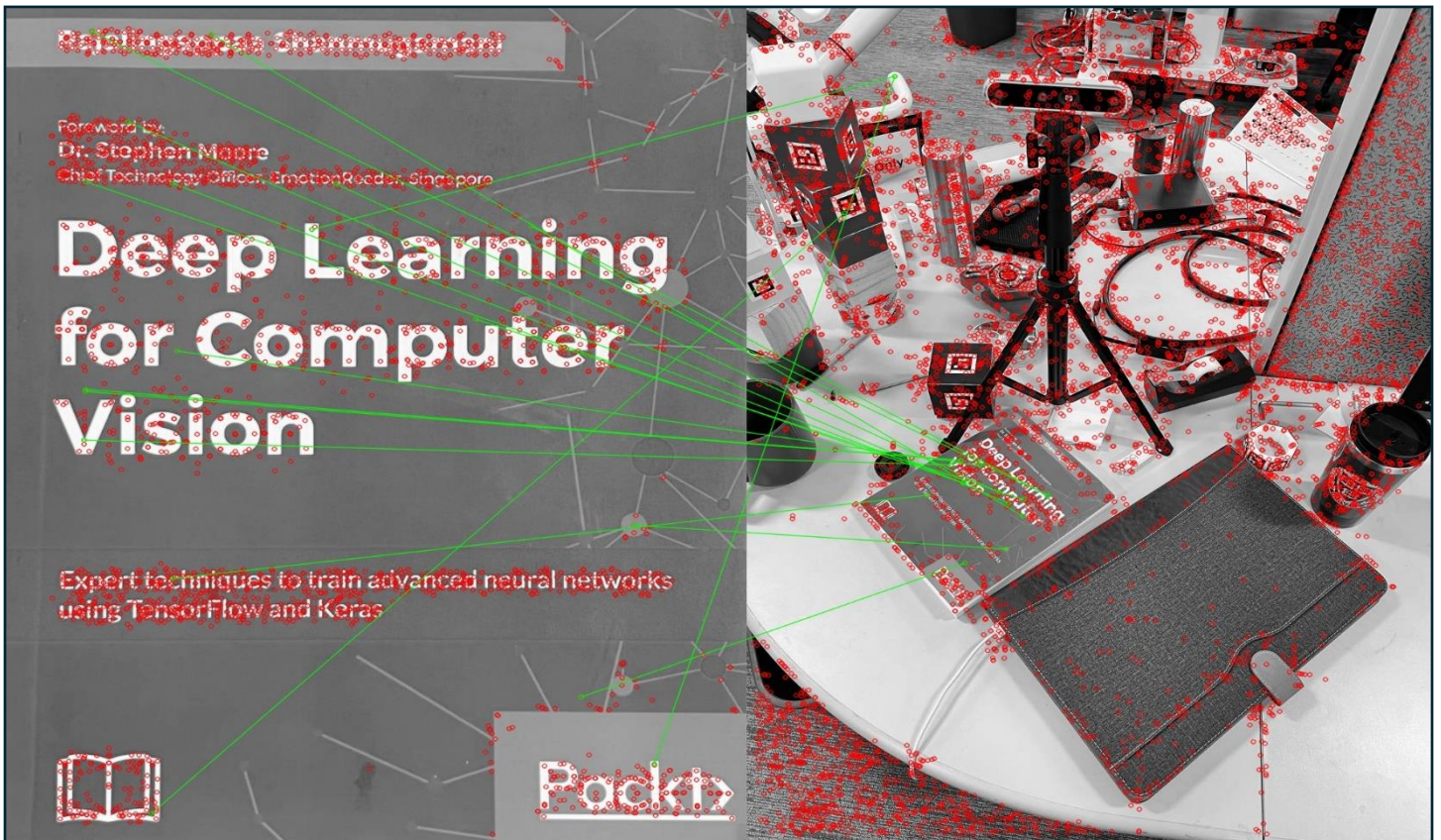
1. SIFT with BF Matcher



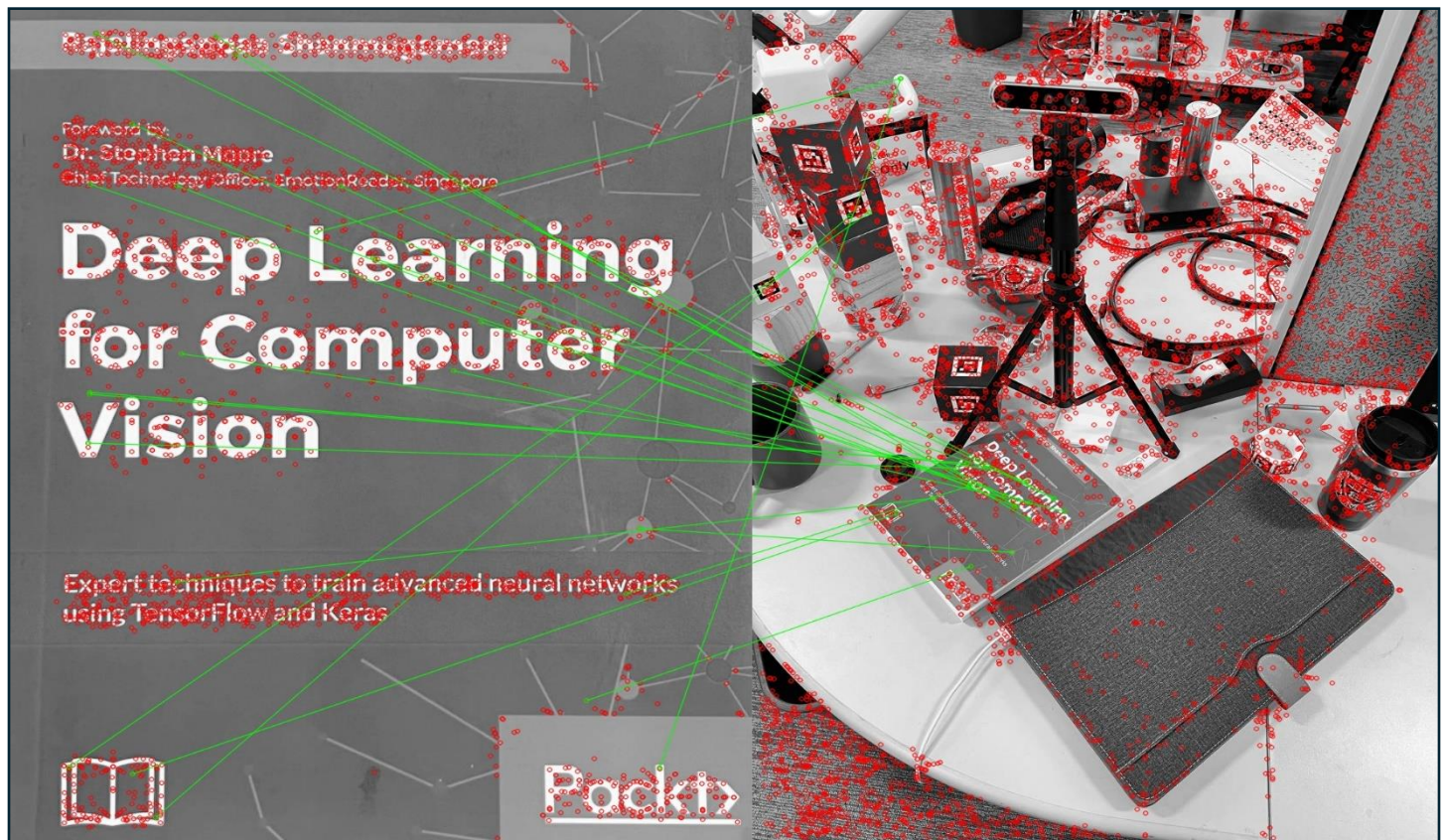
2. SIFT with FLANN Matcher



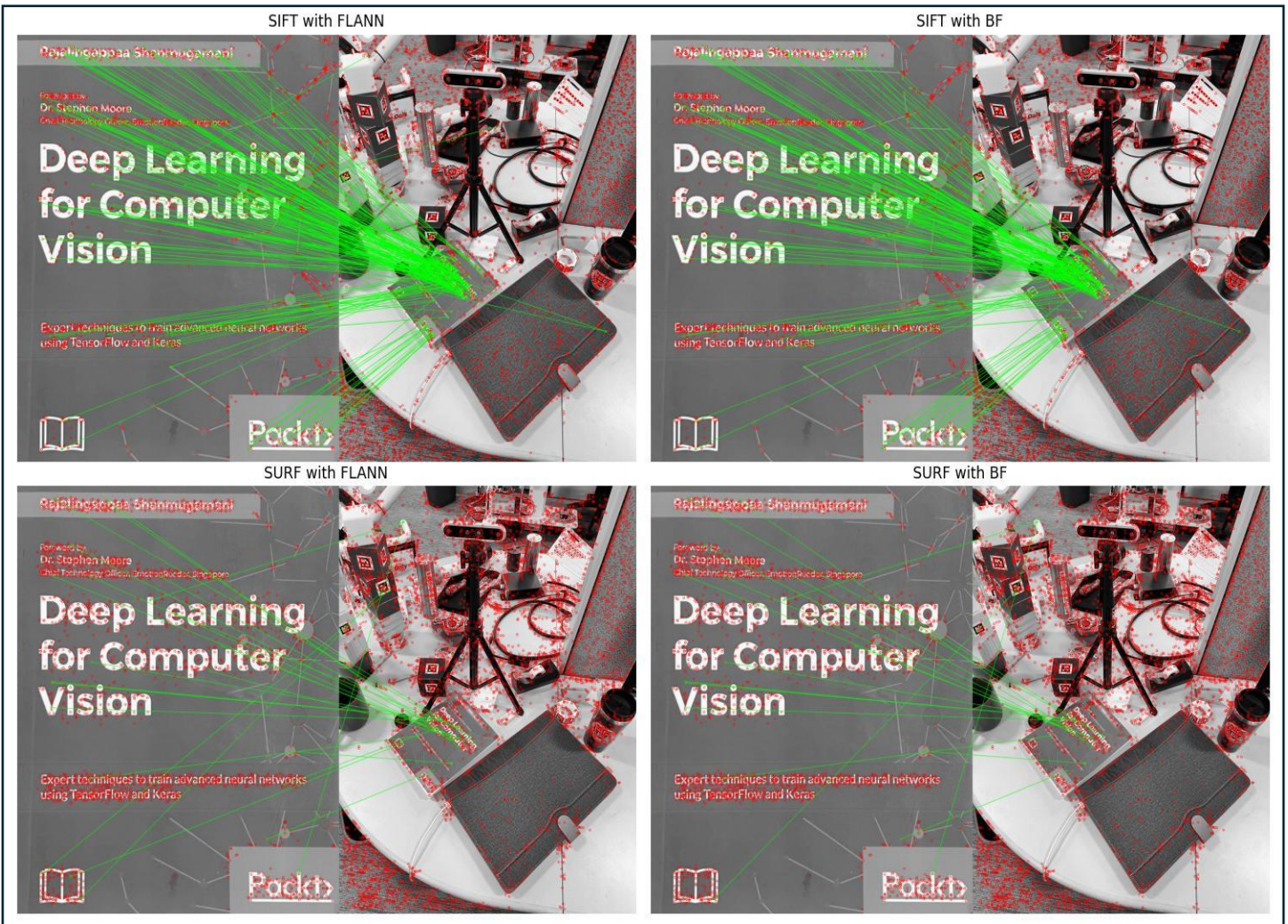
3. SURF with BF Matcher



4. SURF with FLANN Matcher



Sub plot of all four results:



Observations:

- SIFT is more robust than SURF as you can see with the same parameters SIFT is giving better matches compared to SURF, though SURF is faster compared to SIFT.
- Same trend goes with the BF and FLANN, if we compare in the same feature category FLANN is giving more outliers (wrong matches) compared to BF, as BF is exhaustive search algorithm and FLANN uses K nearest neighbors to find the best matches, FLANN is faster compared to BF.
- Hence, SIFT with BF is the optimal choice in the offline conditions where speed is not the primary necessary, and SURF with FLANN is optimal choice in the online (real-time) situations where speed is more concerned than accuracy.

Please, checkout video for real-time tracking result, I used SIFT with BF as I wanted accurate results.