

- A fairly general introduction to early image classification/ psychophysical reverse correlation by Ahumada, who first combined the RC technique with psychophysics, initially in the auditory domain:
-Ahumada AJ Jr. Classification image weights and internal noise level estimation. *J Vis.* 2002;2(1):121-31
- Nice early work/review by Peter Neri:
-Neri P, Levi DM. Receptive versus perceptive fields from the reverse-correlation viewpoint. *Vision Res.* 2006 Aug;46(16):2465-74.
-Neri P, Parker AJ, Blakemore C. Probing the human stereoscopic system with reverse correlation. *Nature.* 1999 Oct 14;401(6754):695-8
-Neri P, Heeger DJ. Spatiotemporal mechanisms for detecting and identifying image features in human vision. *Nat Neurosci.* 2002 Aug;5(8):812-6
- The need for large numbers of trials is a major challenge using this approach, such that it's often not possible to examine kernels over time within a trial. One useful approach is to restrict the noise to a subspace of interest.

-Dario Ringach's subspace reverse correlation to improve the S/N ratio:
Ringach DL, Sapiro G, Shapley R. A subspace reverse-correlation technique for the study of visual neurons. *Vision Res.* 1997 Sep;37(17):2455-64
-Subspace mapping in the disparity domain:
Nienborg H, Cumming BG. Decision-related activity in sensory neurons reflects more than a neuron's causal effect. *Nature.* 2009 May 7;459(7243):89-92. doi: 10.1038/nature07821
-Motion pulses to increase S/R ratio (allowing for time-resolved pRC):
Yates JL, Park IM, Katz LN, Pillow JW, Huk AC. Functional dissection of signal and noise in MT and LIP during decision-making. *Nat Neurosci.* 2017 Sep;20(9):1285-1292. doi: 10.1038/nn.4611

Additional literature (incomplete):

Bondy AG, Haefner RM, Cumming BG. Feedback determines the structure of correlated variability in primary visual cortex. *Nat Neurosci.* 2018 Apr;21(4):598-606. doi: 10.1038/s41593-018-0089-1

Brunton BW, Botvinick MM, Brody CD. Rats and humans can optimally accumulate evidence for decision-making. *Science.* 2013 Apr 5;340(6128):95-8. doi: 10.1126/science.1233912

Kiani R, Hanks TD, Shadlen MN. Bounded integration in parietal cortex underlies decisions even when viewing duration is dictated by the environment. *J Neurosci.* 2008 Mar 19;28(12):3017-29.

Richard D. Lange, Ankani Chattoraj, Jeffrey M. Beck, Jacob L. Yates, Ralf M. Haefner
<https://www.biorxiv.org/content/10.1101/440321v2>,
doi: <https://doi.org/10.1101/440321>

Okazawa G, Sha L, Purcell BA, Kiani R. Psychophysical reverse correlation reflects both sensory and decision-making processes. *Nat Commun.* 2018 Aug 28;9(1):3479. doi: 10.1038/s41467-018-05797-y.