

Further Reading for Advanced Motion Lecture

I would suggest reading these references roughly in the order listed:

- Chapter 8 of *Visual Perception* by Bruce, Green & Georgeson.
Adelson, E.H. & Movshon, J.A. (1992). Phenomenal coherence of moving visual patterns. *Nature*, 300, 523–525.
Movshon, J.A., Adelson, E.H., Gizzi, M.S., & Newsome, W.T. (1985). The analysis of moving visual patterns. In C. Chagas, R. Gattass, & C. Gross (Eds.), *Pattern recognition mechanisms* (pp. 117– 151). Vatican City: Vatican Press.
<http://www.cns.nyu.edu/~tony/Publications/movshon-adelson-gizzi-newsome-1985.pdf>
<https://monkeybiz.stanford.edu/Moving%20Visual%20Patterns-1.pdf>
Yo, C. & Wilson, H.R. (1992). Perceived direction of moving two-dimensional patterns depends on duration, contrast and eccentricity. *Vision Research*, 32, 135–147.
Bowns, L. & Alais, D. (2006). Large shifts in perceived motion direction reveal multiple global motion solutions. *Vision Research*, 46, 1170–1177.
Adelson, E.H. & Bergen, J.R. (1985). Spatiotemporal energy models for the perception of motion. *Journal of the Optical Society of America, A*, 2, 284–299.

Other References Cited in Advanced Motion Lecture

- Adelson, E.H., & Bergen, J.R. (1986). The extraction of spatio-temporal energy in human and machine vision. *Workshop on motion: representation and analysis*, Charleston, SC.
http://persci.mit.edu/pub_pdfs/extraction86.pdf
DeAngelis, D.C., Ohzawa, I. & Freeman, R.D. (1993). Spatiotemporal organization of simple-cell receptive fields in the cat's striate cortex. I. General characteristics and postnatal development. *Journal of Neurophysiology*, 69, 1091–1117.
Emerson, R.C., Bergen, J.R. & Adelson, E.H. (1992). Directionally selective complex cells and the computation of motion energy in cat visual cortex. *Vision Research*, 32, 203–218.
Fennema, C.L. & Thompson, W.B. (1979). Velocity determination in scenes containing several moving objects. *Computer Graphics and Image Processing*, 9, 201–315.
Ferrera, V.P. & Wilson, H.R. (1990). Perceived direction of moving two-dimensional patterns. *Vision Research*, 30, 273–287.
How, M.J. & Zanker, J.M. (2014). Motion camouflage induced by zebra stripes. *Zoology*, 117, 163–170.
Johnston, A., McOwan, P.W., & Buxton, H. (1992). A computational model of the analysis of some first-order and second-order motion patterns by simple and complex cells. *Proceedings of the Royal Society of London B*, 250, 297–306.
Qian, N. & Andersen, R.A. (1994). Transparent motion perception as detection of unbalanced motion signals. II. Physiology. *The Journal of Neuroscience*, 14, 7367–7380.
Reichardt, W. (1957). Autokorrelationsauswertung als Funktionsprinzip des Zentralnervensystems. *Zeitschrift für Naturforschung*, 12b, 447–457.

- Reichardt, W. (1961). Autocorrelation, a principle for evaluation of sensory information by the central nervous system. In W. Rosenblith (Ed.), *Sensory communication*, pp.303–317. New York: John Wiley.
- Rodman, H.R., & Albright, T.D. (1987). Coding of visual stimulus velocity in area MT of the macaque. *Vision Research*, 27, 2035–2048.
- Sclar, G., Maunsell, J.H.R., & Lennie, P. (1990). Coding of image contrast in central visual pathways of the macaque monkey. *Vision Research*, 30, 1–10.
- Ullman, S. (1979). *The interpretation of visual motion*. MIT Press.
- van Santen, J.P.H., & Sperling, G. (1984). Temporal covariance model of human motion perception. *Journal of the Optical Society of America A*, 1, 451–473.
- Wilson, H.R., Ferrera, V.P., & Yo, C. (1992). A psychophysically motivated model for two-dimensional motion perception. *Visual Neuroscience*, 9, 79–97.