

2004b

“SCAD—A Fast Algorithm for Star-Camera Attitude Determination,” M. D. Shuster, *The Journal of the Astronautical Sciences*, Vol. 52, No. 3, July–September 2004, pp. 391–404.

This work examined a sub-optimal algorithm for attitude estimation in which first the bore-sight attitude is determined and then the angle about the bore-sight in order to obtain a three-axis attitude estimate. For small fields of view the accuracy of the algorithm turns out to be very close to that of the QUEST algorithm, although the algorithm is not quite as fast as QUEST. In many ways this algorithm is a generalization of the TRIAD algorithm from 2 to  $N > 2$  measurements and in improvement of the Brozenec-Bender algorithm discussed in 2000a. This work is not suggested as a replacement for QUEST.

Superseded 1998a.