[1] D. Devaurs, T. Simeon, and J. Cortes, “Optimal Path Planning in Complex Cost Spaces With Sampling-Based Algorithms,” IEEE Trans. Automat. Sci. Eng., vol. 13, no. 2, pp. 415–424, Apr. 2016.

The researchers look at the current path finding algorithms of RRT, T-RRT, and RRT\* that are able to find reasonable paths, but not optimal. They then create their own called T-RRT\* and AT-RRT that are able to more efficiently find the minima path rather than just a local minima. This article is very theory based and uses mostly linear algebra to explain how the algorithm works. There is pseudo-code, and if read carefully it is understandable. This could be used for programming the navigation of BARM in 3-space to avoid having the arm hit anything in the build area. Their algorithms of AT-RRT was able to find the optimal path much faster than the older methods.