Supported by a hack into ROS’s Joint State Publisher written by Dana Hughes, we wrote scripts that calculated the simplified path planning time and path distance for 3 motion planning algorithms - RTTConnect, RTTk, and RTTStar. Each algorithm was run 100 times.

The above histogram of path times shows that RTTk is fastest, with RTTConnect closely behind and RTTStar last. All suffer from runs that are 2-3x slower than mode times.

We see that in terms of path distance minimization, RTTConnect is the best, while RTTk is second. RTTStar is the worst performer here, too.