Boston Dynamics gives Spot bot a furry makeover

Boston Dynamics may have relocated the bipedal Atlas to a nice farm upstate, but the company continues to let everyone know its four-legged line of Spot robots have a lot of life left in them. And after years of obvious dog-bot comparisons, Spot’s makers finally went ahead and commissioned a full cartoon canine getup for its latest video showcase. Sparkles is here and like its fellow Boston Dynamics family, it’s perfectly capable of cutting a rug.  
  
  
  
  
  
  
  
  
  
Unlike, say, a mini Spot programmed to aid disaster zone search-and-rescue efforts or explore difficult-to-reach areas in nuclear reactors, Sparkles appears designed purely to offer viewers some levity. According to Boston Dynamics, the shimmering, blue, Muppet-like covering is a “custom costume designed just for Spot to explore the intersections of robotics, art, and entertainment” in honor of International Dance Day. In the brief clip, Sparkles can be seen performing a routine alongside a more standardized mini Spot, sans any extra attire.  
But Spot bots such as this duo aren’t always programmed to dance for humanity’s applause—their intricate movements highlight the complex software built to take advantage of the machine’s overall maneuverability, balance, and precision. In this case, Sparkles and its partner were trained using Choreographer, a dance-dedicated system made available by Boston Dynamics with entertainment and media industry customers in mind.  
[Related: RIP Atlas, the world’s beefiest humanoid robot.]  
With Choreographer, Spot owners don’t need a degree in robotics or engineering to get their machines to move in rhythm. Instead, they are able to select from “high-level instruction” options instead of needing to key in specific joint angle and torque parameters. Even if one of Boston Dynamics robots running Choreographer can’t quite pull off a user’s routine, it is coded to approximate the request as best as possible.  
“If asked to do something physically impossible, or if faced with an environmental challenge like a slippery floor, Spot will find the possible motion most similar to what was requested and do that instead—analogously to what a human dancer would do,” the company explains.  
Choreographer is behind some of Boston Dynamics’ most popular demo showcases, including those BTS dance-off and the “Uptown Funk” videos. It’s nice to see the robots’ moves are consistently improving—but maybe nice still is that it’s at least one more time people don’t need to think about a gun-toting dog bot. Or even what’s in store for humanity after that two-legged successor to Atlas finally hits the market.