

BeatBot designed to help make the best of a runner's time

May 3 2016, by Nancy Owano



(Tech Xplore)—The PUMA BeatBot is being promoted in a video as the future of faster. The world's fastest man and PUMA athlete Usain Bolt is featured in this video as well. The device is designed not only for world stunners such as Bolt but for runners at all levels.

This is a programmable, self-driving, line-following robot. The purpose

is to inspire runners to push harder by giving them a real visual target to beat, not just running against the time on a stopwatch.

The premise: You run faster when there is someone or something to beat, not just some wearable flashing numbers and decimal points.

The product accommodates varied types of workouts, from short and fast sprints to long-distance runs.

You take out your smartphone, enter the distance you want to race and the time you want to beat, either entering your own best time or that of your rival.

Jeff Beer, a staff editor and writer with *Co.Create*, wrote about what BeatBot does as your running challenge:

"The BeatBot scans and follows the line on a track using nine infrared sensors, while wheel [revolutions](#) measure both speed and distance. That data is processed in real-time, to make more than 100 maneuvers per second to stay on the line, navigate bends, and cross the finish line at the pace you've programmed. It's outfitted with rear LED lights so you can see the BeatBot in your peripheral vision, and GoPro cameras on the front and back allow you to review your run after the race."

Adam Westlake in *SlashGear* said the device was designed to look like, well, a Puma [shoebox](#). "The LED lights keep the rolling box visible when it gets ahead, while the GoPro cameras record footage that can be used for review later," he added.

The device was created with input from the J. Walter Thompson ad agency, a robotics engineer and three MIT students. Beer quoted JWT New York executive creative director Florent Imbert, who commented on the work that went into BeatBot. "We went through over eight

prototypes, and interrogated every aspect of the robot, from the weight of the car, to the lag between the Arduino and servo. We even enlisted the expertise of a NASA robotics engineer and three MIT grads."

Men's Fitness commented on why BeatBot may be useful:

"BeatBot acts as your pacer, allowing you to complete interval workouts with absolute [consistency](#), race against your own best time, and chase your desired personal best (say hello to a sub 6-minute mile). BeatBot reaches top speeds of 27.7 mph, so, yes, you can even try to go up against Usain Bolt's record-shattering 100m dash time of 9.58 seconds. Or, at the very least you can marvel at it."

Right now it's only available to Puma-sponsored athletes and teams, said Beer.

© 2016 Tech Xplore

Citation: BeatBot designed to help make the best of a runner's time (2016, May 3) retrieved 4 May 2024 from <https://techxplore.com/news/2016-05-beatbot-runner.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
