

# World record for Rubik's Cube robot race: the beat goes on

February 10 2016, by Nancy Owano



Yet more world record news in how fast a machine can work out the Rubik's Cube. This time a cube-solving robot was unleashed and solved the Rubik's Cube in 0.900 seconds.

On January 26, [we reported](#) how Jay Flatland and Paul Rose had presented a robot that clocked "a time five times quicker than any

human can manage."

Flatland jumbled the colored block and covered the webcam—drumroll please—racing to the finish line in 1.047 seconds. That was January. On February 5, Flatland and Rose demonstrated their robot in front of a crowd of around 100 people including an official Guinness judge, who certified their record time at 0.900 seconds.

The story is not finished. Jay Flatland [tweeted](#), "Well my record might be short lived." He added a video link to show the world some other attempt may top the record.

The Rubik's Cube story via machines is a fast-moving story, high-fives one night, a record-setting number in some other continent discovered, chapter after chapter, no ending in sight.

On January 23 the robot "Sub1" solved a Rubik's Cube in 0.887 seconds at the Cubikon store in Munich, Germany. The video notes on that one said, "it is the first robot that can independently inspect and solve a Rubik's Cube in under 1 second" but that "[The world record](#) claim has to be investigated and approved by Guinness World Records. The notes said in the current state the record claim was submitted to Guinness.

According to the notes, the laptop identified all colors of the cube and calculated a solution with Tomas Rokicki's implementation of Herbert Kociemba's Two-Phase-Algorithm.

The solution was handed over to an Arduino-compatible microcontroller board orchestrating the 20 moves of six steppers—that is to say it took the machine 20 moves to solve a Rubik's Cube.

Darren Quick in *Gizmag* identified Sub1 as a machine created by industrial engineer and economist Adam Beer, which "is now throwing

its circuit board into the ring. In fact, Beer says Sub1 was the first machine to break the one-second barrier, albeit unofficially."

Quick said there had not been a Guinness World Record official present at the world record attempt, but that Beer was preparing his world record claim for Guinness investigation, before Sub1 could claim the title. The *Irish Independent* similarly commented: "Its attempt will still have to be verified before it can officially take the crown. The Sub1 actually set its time first, showcasing its ability in January, making it the first robot to break the 1-second barrier."

Emma Clark in the *Irish Independent* said that, record winning aside, the two teams and bystanders will be eager to see just how far they can push this record.

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