

# Dancing Divabot performs on stage (w/ Video)

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(PhysOrg.com) -- A singing, dancing humanoid recently joined a live group of dancers to perform.

Developed by the country's biggest public research organization, Japan's National Institute of Advanced Industrial Science and Technology (AIST), the new variant of HRP-4, the [female robot HRP-4C](#) deemed "Divabot," has a realistic face, movable features and even mimics human-sounding breaths.

Diva-bot's intricate software creates complicated movements such as jumping, dancing and even balancing. Using a mouse, those with zero

robotic expertise are meant to find Diva-bot easily operable, which may or may not be a good thing considering how complex the robot is.

Comparable to the software commonly used in CG character animation, Diva-bot's positioning can be controlled by clicking on the different parts and dragging them to the desired position, creating a sequence of key poses that the software generates, making the robot move.

The [robot](#) utilizes two primary technologies, using a real singer as a model. Researchers recorded the model's every move as she sung a Japanese song. They used VocalListener to synthesize the singing voice on the computer, and imitate the singing voice. For the [facial expressions](#), they used a new technology, Vocawatcher, which studies a person singing to replicate the expressions naturally. They then mapped the data onto HRP-4C and voila--Diva-bot was brought to life.

A member of the institute said they want to create a new content industry with the technology.

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