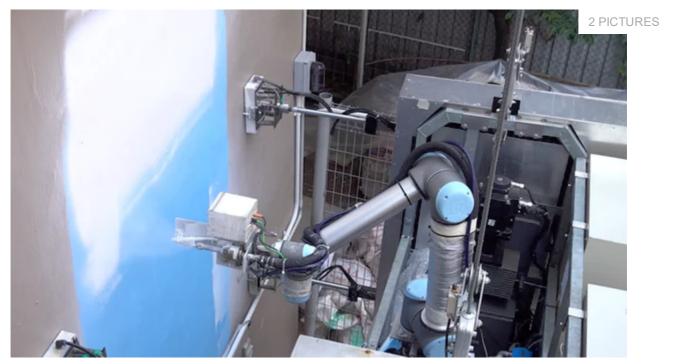
Robot paints and washes buildings, but doesn't do windows



Ben Coxworth 6 hours ago



OutoBot applies white paint to an industrial building (Credit: NTU)

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Singapore's Housing & Development Board (HDB) recently called for proposals to automate the painting of its high-rise buildings, in order to increase efficiency and enhance worker safety. In response, ELID Technology International and Nanyang Technological University (NTU) teamed up to create a robotic system that does the job. Known as OutoBot, it can also give high-rise exteriors a good washing.

According to NTU, a minimum of five people is usually required to paint or wash a building – that includes one on the ground, one on the roof, and three in the gondola that moves up and down the face of the structure. By contrast, OutoBot just needs a ground-based operator and a safety officer.

It consists of a sub-500-kg (1,102-lb) camera-guided robotic arm with six degrees of freedom, that's mounted on its own special gondola. That arm moves a spray nozzle back and forth across the building's surface, delivering a high-pressure jet of paint or water, and avoiding windows as it does so.



Not only does the system require fewer people – none of which are in danger of falling – but it can also work longer hours, as it doesn't have to take breaks. Additionally, it's said to apply a more consistent coat of paint than human workers using rollers, plus it uses approximately 20 percent *less* paint to do so.

OutoBot has already been tested on an industrial building, and will soon also be tested on public housing blocks in consultation with HDB. ELID and NTU are currently pursuing other commercial applications of the technology.

Source: Nanyang Technological University