

Open Hardware: Arduino and Beyond

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[Don't try this at home: Colin Furze creates a semi-automatic potato cannon](#) [2]

Colin Furze decided that he needed a potato cannon for his DIY screw tank, and after making a manually loaded version, he automated the process.

What he came up with uses a pair of linear actuators to push the barrel forward under Arduino control, allowing a potato-projectile to drop into the device's chamber assembly. After a short delay, it closes up again, cutting the roundish vegetable into a cylindrical plug. Flammable gas then enters via a solenoid valve for a carefully regulated amount of time.

With the gas mixed, the cannon is then fired, and a single button press starts the process over again. The powerful cannon creates a mess in his test area after a few shots, actually taking a plug out of the mattress he used to absorb the impact. It should be quite impressive once mounted on the screw tank, though it's a project that you probably shouldn't try at home.

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[The Simplest TS100 Upgrade Leads Down A Cable Testing Rabbit Hole](#) [3]

The fake "Grundlagen Audio" USB lead from my April 1st sojourn into using GNU Radio for audio analysis meanwhile is surprisingly stiff for what was in reality a cheap Amazon Basics item. This is probably due to two factors; it has a braided outer in a bid to copy more expensive leads, and my spraying it with gold paint has only made it stiffer.

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[HeyTeddy is a conversation-based prototyping tool for Arduino](#) [4]

Programming an Arduino to do simple things like turn on an LED or read a sensor is easy

enough via the official IDE. However, think back to your earliest experiences with this type of hardware. While rewarding, getting everything set up correctly was certainly more of a challenge, requiring research that you now likely take for granted.

To assist with these first steps of a beginner's hardware journey, researchers at KAIST in South Korea have come up with HeyTeddy, a general-purpose prototyping tool based on dialogue.

As seen in the video below, HeyTeddy's voice input is handled by an Amazon Echo Dot, which passes these commands through the cloud to a Raspberry Pi. The system then interacts with the hardware on a breadboard using an Uno running Firmata, along with a 7" 1024 x 600 LCD touchscreen for the GUI.

[Hardware](#)

Source URL: <http://www.tuxmachines.org/node/139707>

Links:

[1] <http://www.tuxmachines.org/taxonomy/term/39>

[2] <https://blog.arduino.cc/2020/07/09/dont-try-this-at-home-colin-furze-creates-a-semi-automatic-potato-cannon/>

[3] <https://hackaday.com/2020/07/09/the-simplest-ts100-upgrade-leads-down-a-cable-testing-rabbit-hole/>

[4] <https://blog.arduino.cc/2020/07/09/heyteddy-is-a-conversation-based-prototyping-tool-for-arduino/>