## **Christmas** comes early!

Some makers have been getting their Christmas projects sorted well in advance

e often get messages and emails from readers who would love us to feature their project - and usually we do in our project showcase feature! Unfortunately, when it comes to seasonal projects, we don't always have time or space - so here's a couple we were sent this year that we'd love to show off a bit of!



**Interactive Nativity Scene MAKER: Tomasz Siroń** 

Tomasz was so keen to let us know about his plans, he messaged us in March about his project. It's a nativity scene in Poland that you can control via the internet!

"I wanted to show off our original project, which I built together with friends," Tomasz said. "There is a crib controlled by the internet. Everyone can control the crib. The site was created using Bootstrap and jQuery. Hosting is on our own basement server. We use a virtual machine (Debian) on Proxmox.

"We used a Raspberry Pi 3, two IP cameras, and two Arduino Nanos... In the crib, we installed the computer speaker - carols were heard around the city centre. I built it with my colleagues over about a month."

He's brought it back for another year. Find out more here: magpi.cc/nXqYzp.



Raspberry Pi Christmas Lights **MAKER: Grea Macaree** 

We got this through via email from Greg in early November, and it's a project that he's been working on and upgrading for a while now!

"At the end of last year, I added a string of 500 pixels (LEDs) to a Raspberry Pi and created an animated Christmas tree for the front garden," Greg told us in the email. "This year, we've taken it up a notch: we'll be running over 6000 pixels for our Xmas Show - still controlled by a Raspberry Pi, although connected via dedicated hardware."

It's a spectacular sight, and they even used it for Halloween! We love a good project you can recycle and repurpose - take a look here: magpi.cc/igXcwi.