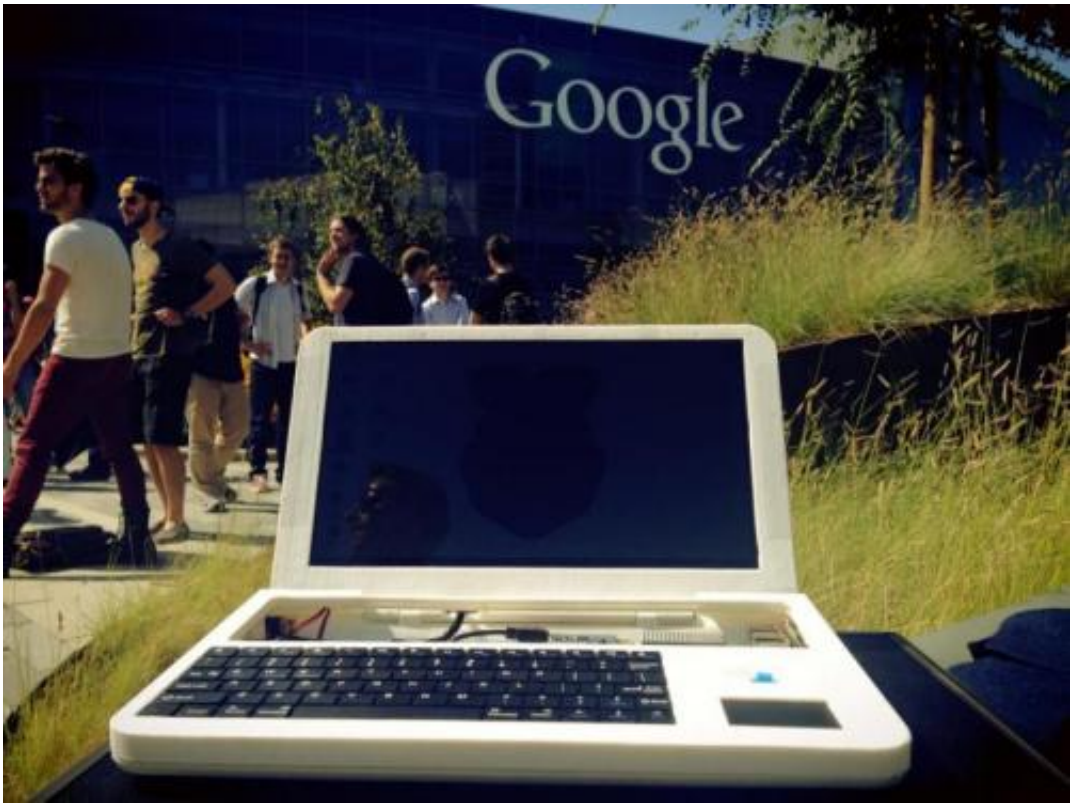
A 3D-printed laptop prepared for crowdfunding campaign

September 23 2014, by Nancy Owano



Using PLA filament, a small London-based team have managed to achieve the 3D printing of their own Raspberry-Pi-based laptop, with a battery life of six to eight hours and Wi-Fi enabled out of the box. They are offering it to others in the form of a kit that they will bring to Kickstarter. Namely, they will offer a Raspberry Pi- powered laptop kit

"you build yourself" called the Pi-Top.

The kit will have a 13.3-inch screen, keyboard and touchpad. This was no instant workup; it took them over 160 hours to print. Nonetheless, the project team shares the tinkerer spirit, and time element was overshadowed by the idea of enabling others to build their own laptop. In detail, the team aims to provide users with a kit packed with all the materials they might need to build their own device, along with instructions on how to create this computer from start to finish, said 3DPrint.com. Helping to teach others how to create electronics is nothing new to the team. They have worked with people in the UK with various forms of hardware, recently with 150 parents and students, teaching them how to make LED circuits and code them with Python.

"The Pi-Top kit is just the start," said the creators. "Our future projects will see you modifying the Pi-Top using everything you've learnt and gaining the skills to create your own products."

The creators said the hardest part was "getting the support structure right so it could survive the beating and pressure a normal laptop would experience," said John Biggs in TechCrunch. Discussing how they did it, 3DPrint.com said the team printed the first prototype for the project using a Rostock Max V2 Kit with an E3D metal hotend. The laptop shell was printed out of PLA filament over the 160-hour time span, with 0.2mm layers and 30 percent infill. The shell is printed in three separate pieces, two at the same time and the larger piece on its own.

Cofounder Ryan Dunwoody studied engineering at Oxford, where he said he became convinced Raspberry Pi could be used as a tool to accelerate practical hardware skills, even from a beginner level. Co-founder Jesse Lozano studied law at Kings College University, and in his spare time used free learning tools to become a developer.

More information: pi-top.com/