# 用程式玩音樂 Sonic Pi

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Making Computer Science Audible

Examples



### Sonic Pi

The Live Coding Music Synth for Everyone.

Welcome to the future of music.

Simple enough for computing and music lessons.

Powerful enough for professional musicians.

Free to download with a friendly tutorial.

http://sonic-pi.net

Learn to code creatively by composing or performing music in an incredible range of styles from classical & jazz to EDM.

Brought to you by Sam Aaron and the Sonic Pi Core Team Sonic Pi is available free for:

Windows macOS Raspberry Pi Linux

Created at the University of Cambridge Computer Laboratory
with kind support from pi-top and generous Patreon supporters.

Sonic Pi is an Open Source Project released under the MIT Licence.

## Introducing Sonic Pi

Tutorial WALKTHROUGH







IDEN SOME Pi creator and live performer Sam Aaron as he introduces us to the joys of live-coding music on the Raspberry Pl...

berlights aliced through the mist as the tipe vich a heady mia obsynchs. However, something wast't quite right. Projected in high-i pleurs above the performer was futuristic sexmoving, dancing, fashing. This wasn't fewly visually, F. was mently a projection of Josic Pi running on a Easpherty Pt. The Frustrian wase's splaning discoshe was writing, editing, and evaluating once. Live. This is live coding.

It may sound like a far-fracted scere from a futuristic music festival, but is estually adescription. of a pap I performing at their primary school assembly. Coding music like this is a growing tond and isother described at live coding. However, this approach to manipulating code lan't just useful for performance, it's also a fabulish way of empaging a new generation of coders in the classroom.

### Engaging a new generation of coders

Across the educational landscape, in's becoming clear that teaching programming is as increasingly important aspect of our curriculum. What is not obtain a become in country landscape. award engaging students in order to effectively exact the core fundamentals of programming of award, then the core fundamentals of programming to a system fust's powerful retinamental difficult in a system fust's powerful retinamental to law. However, Johnson is come of laws fust within Education in come of laws with a standard with a system fust's powerful retinamental fust within Education fundamental retinamental fundamental fundamental fundamental retinamental fundamental funda emportant aspect or our curriculum. What is not obvious, bowever, is exactly how weigh shoutergoging students in order to effectively teach the core fundamentals of programming. arithmetic Whitstibeae may be deeply microsing and englightepics for computer iclentum, it's

not clear that they are effective topus for excrimy a broadansi dive se rangeof soderos in introductory computing. This is especially significans considering Jani most stadents will notembark in a carrer in

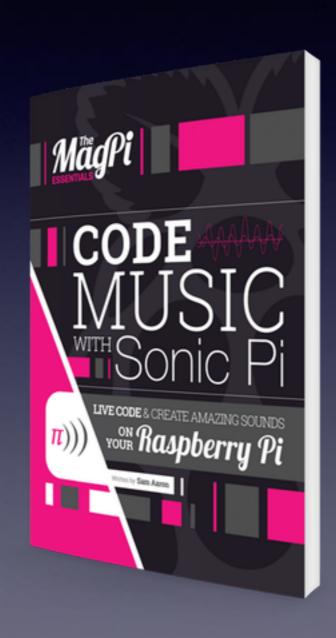
yeogramming in either industry er analemia.

Some Ti takes a different approach in sums rade into a powerful new kind of musical instrument with a focus on fine loadback and iterative learning. It evolvius studence to code the kinds of music they'ss represent students to cope the scholar bounds of represently used to listening to. It this claim sounds of little ambitious, taken a look at this quotation from the

Intra ambitious, take a look at this quotation from the kolling Shene magazine (magplus/NEVEX cores sign a second SoniceP) performance anthroughwest (Mr. "The act!" which sourced the Electric Cash-ers Cashreets, another bit of a price living above and some lightless electric—was construented through upone and deterring times of code. The abusinessy Olistic, troot-terrelating coles and finglished ambitant of many showards on the Source areas completely demonstrated. ATRO-CHERANAI DISSIA AND REPAIR AND STATE OF THE MANY MOOREST PRODUCTIONS AND ARREST ARREST ARREST AND ARREST AND ARREST AND ARREST ARREST AND ARREST ARREST ARREST ARREST ARRES more like an impitation to codeyout owned-ensure

- Sonic Pi helps you engage students in Computing through music.
- Read how in the article 'Live Coding Education'

### Free Sonic Pi Book



- 講義、範例程式下載:
- https://github.com/ ycwang812/YFMS

