



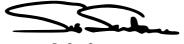
Matthias Giger

has completed the following course:

REPRESENTING DATA WITH IMAGES AND SOUND: BRINGING DATA TO LIFE RASPBERRY PI FOUNDATION AND NATIONAL CENTRE FOR COMPUTING EDUCATION

This online course from the Raspberry Pi Foundation explored how computers do interesting things with data. It included character encoding, how images can be represented as bitmaps or vectors, and how sounds are sampled and represented digitally. It also covered the basics of compression.

3 weeks, 2 hours per week



Dr Sue Sentance Chief Learning Officer Raspberry Pi Foundation











Matthias Giger

has completed the following course:

REPRESENTING DATA WITH IMAGES AND SOUND: BRINGING DATA TO LIFE RASPBERRY PI FOUNDATION AND NATIONAL CENTRE FOR COMPUTING EDUCATION

This online course from the Raspberry Pi Foundation explored how computers do interesting things with data. It included character encoding, how images can be represented as bitmaps or vectors, and how sounds are sampled and represented digitally. It also covered the basics of compression.

STUDY REQUIREMENT

3 weeks, 2 hours per week

LEARNING OUTCOMES

- Describe how computers represent text, images and sound in binary
- Explain how text is represented digitally by using common text encoding (ASCII and UTF-8)
- Produce your own emoji in bitmap and vector
- Investigate the physics of sound, and how sampling allows computers to represent sounds
- Compare lossy and lossless compression

SYLLABUS

- Units of information
- Character encoding
- Representing images
- · Representing sound
- Data compression

