# Future لے Learn



## **Certificate of Achievement**

# **Matthias Giger**

has completed the following course:

### PROGRAMMING 102: THINK LIKE A COMPUTER SCIENTIST

RASPBERRY PI FOUNDATION AND NATIONAL CENTRE FOR COMPUTING EDUCATION

This course covered Python programming at an intermediate level. It covered how to break down problems into smaller parts, and use functions with and return values. It also covered the concept of algorithms, in particular examples of sort and search algorithms.

4 weeks, 2 hours per week

**Dr Sue Sentance** Chief Learning Officer Raspberry Pi Foundation







This learner has not verified their identity. The certificate and transcript do not imply the award of credit or the conferment of a qualification from Raspberry Pi Foundation and National Centre for Computing Education.



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#### STUDY REQUIREMENT

4 weeks, 2 hours per week

#### LEARNING OUTCOMES

- Produce your own functions to break down problems into more manageable parts
- Apply several common search and sort algorithms to data
- Compare the efficiency of algorithms
- Modify functions to take parameters and output return values
- Interpret algorithms expressed in plain English, in pseudocde and as flowcharts

#### SYLLABUS

- use functions with parameters and return values
- design and apply algorithms to data
- breaking down problems into smaller parts
- searching and sorting
- efficiency of algorithms
- understanding of list structures and their uses

