

# Scratch on Raspberry Pi

AmiEs 2015

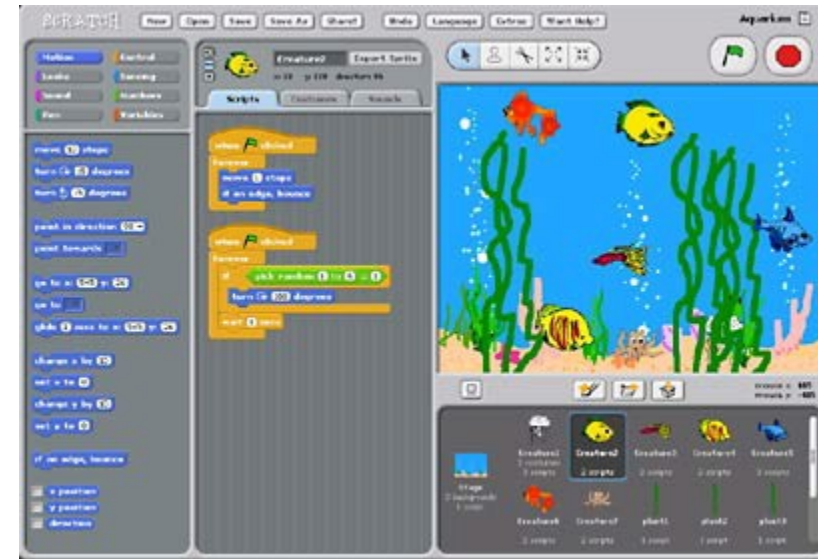
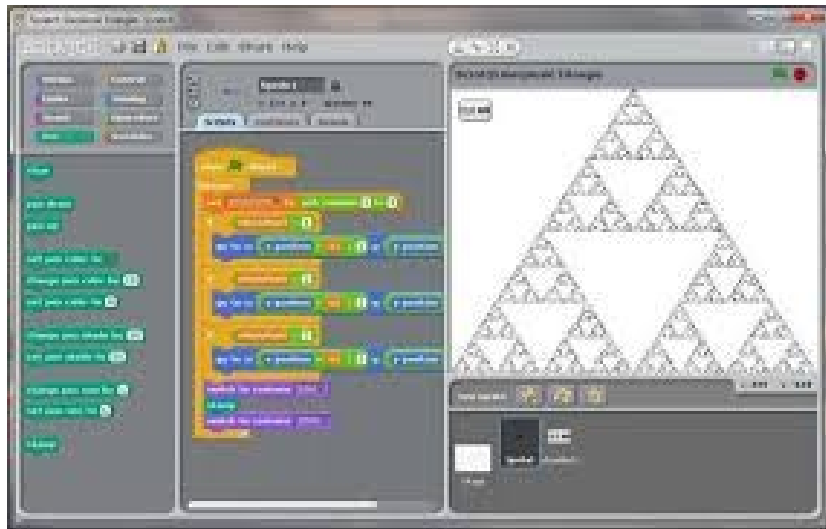
# Agenda

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- Scratch
- Raspberry Pi - Expansion board
- Remote connection
- Python - QT
- Further
- Questions

# Scratch

- <https://scratch.mit.edu/>
- Program your own interactive stories, games, and animations

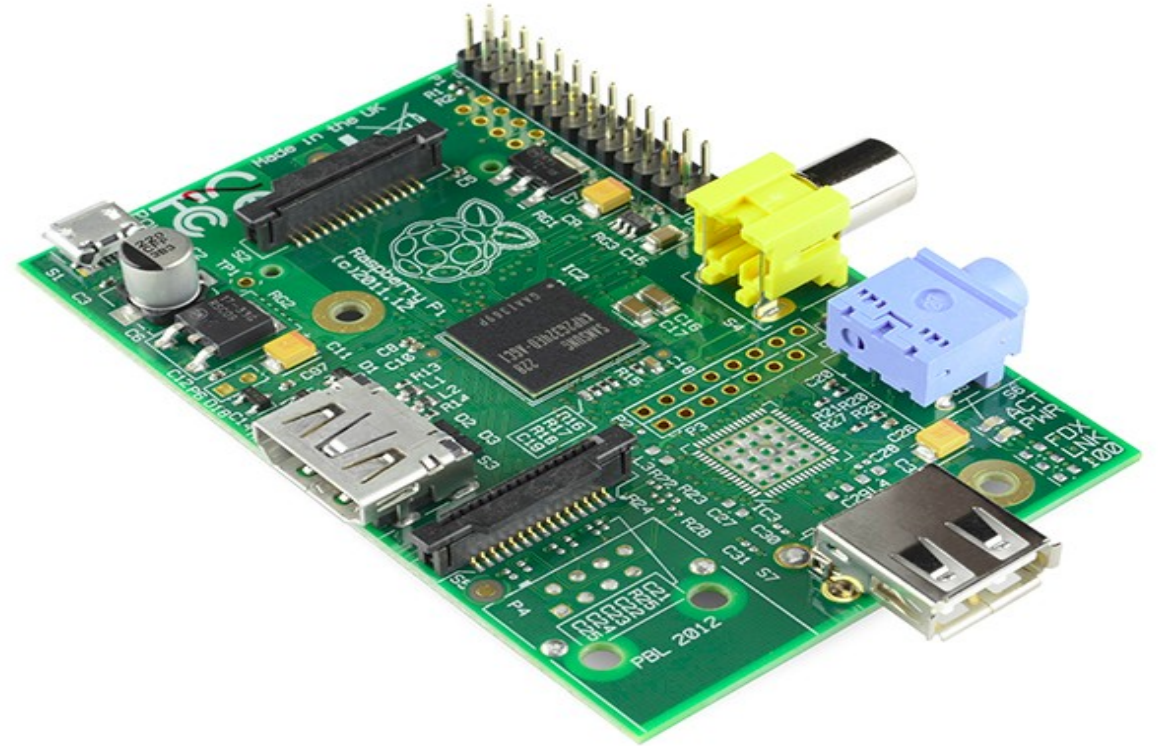
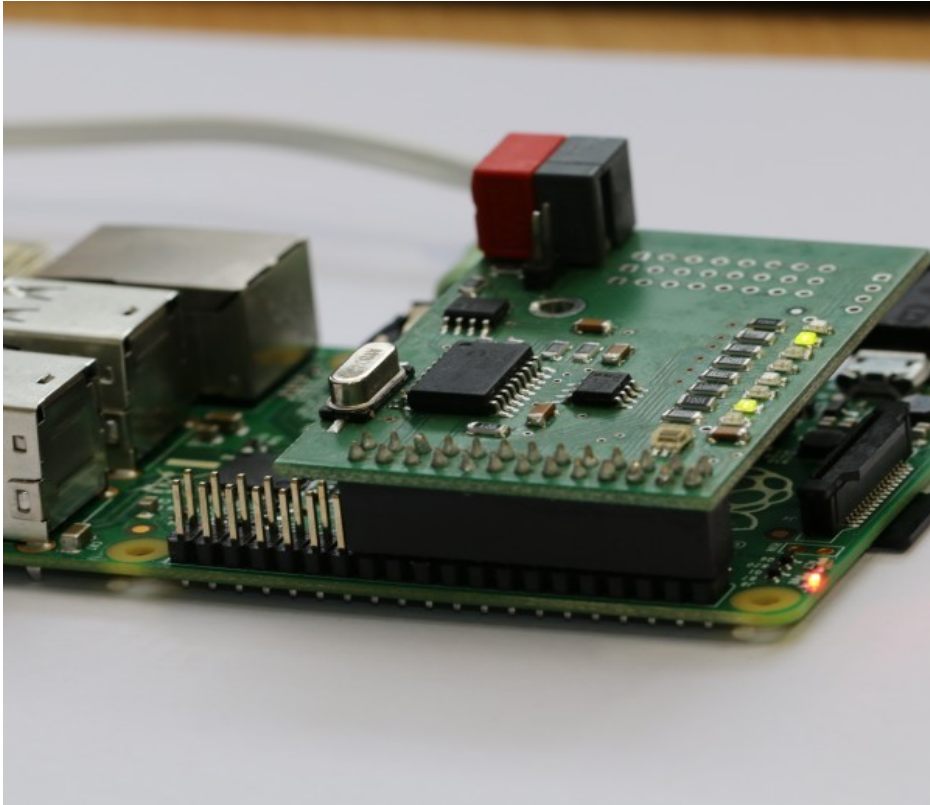


# Scratch

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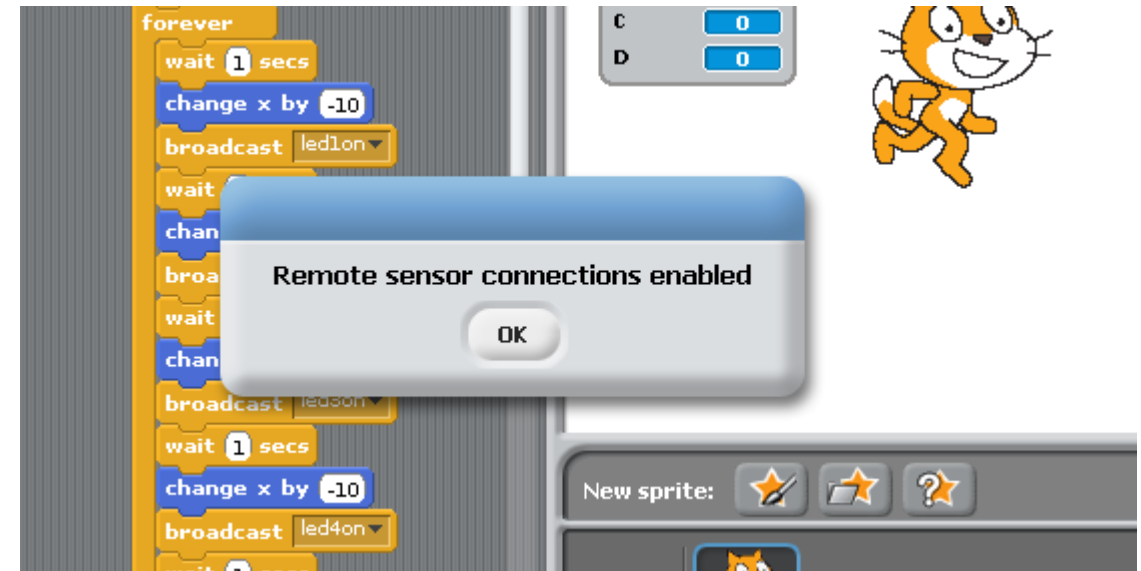
- Interactive design
- Big learning community
- Young and old (8 to 88)
- Predefined blocks
- Extendable

# Raspberry Pi - Expansion board



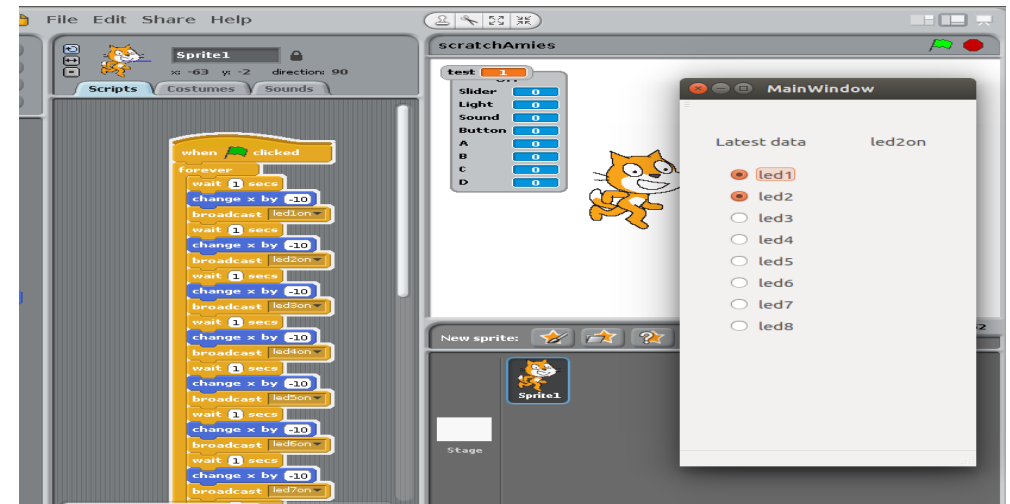
# Remote connection

- TCP port 42001
- Plain text packets
- Sockets
- C/c++ - Python - QT



# Python - QT

- Python scratch handler for raspberry pi (demo)
- QT scratch handler on laptop (but can also run on windows, linux and mac) (demo)
- <https://www.youtube.com/watch?v=4kpF6C-0-7M>



# Further

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- Expansion board contains light and temperature sensor
- Send this value to scratch program
- Motivate young students



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# Questions