



Linkki

Teaching Computer Science to Children

Kaneli Kalliokoski 2022

Who am I?



Kaneli Kalliokoski

eng. she
sv. hon

Studies

Math teacher major
Computer science minor
Hopefully a B.S. in January

Hobbies

Making art
Translating songs
Learning Klingon and Japanese

Work

Club coordinator in
Science Lab Linkki

Contact

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telegram: @LinkinKaneli

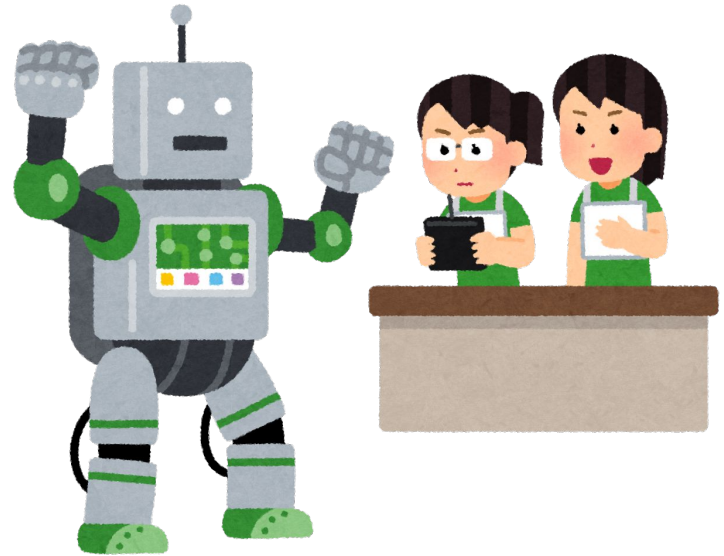
What is Linkki? (in a nutshell)

- Science lab of University of Helsinki
- Science education provider (tiedekasvatus)
- Popularize and familiarize computer science to children/teens
- We:
 - study teaching computer science to children/teens
 - provide open source and creative commons licenced materials
 - organise summer camps, after school clubs and student visits
 - provide support and trainings for teachers



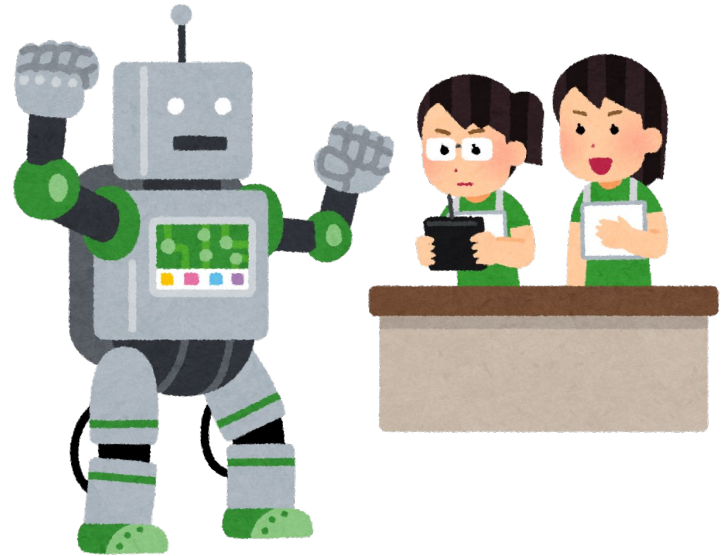
Goals and values

- Provide basic knowledge on computer science
- Be a safe space for children to share their enthusiasm and find new friends
- Giving children the tools to continue and deepen their knowledge
- Encourage one's own creation
- Support equality in the field, like girls in STEM



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What do we teach?



90%

Programming

Scratch, Python, Logo...

5%

AI

Artificial intelligence

5%

Active exercise

"Computer science offline"

0%

Other stuff

For example networks

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Active exercise

"Computer science offline"

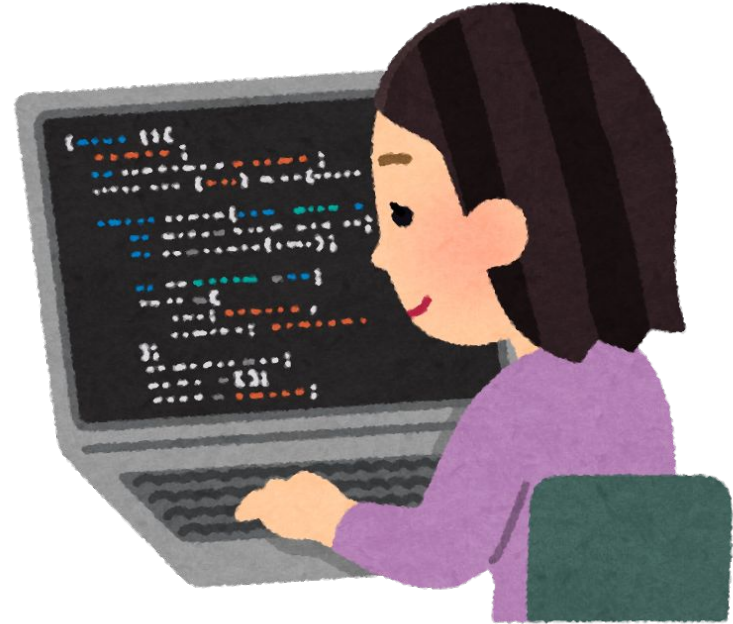
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Other stuff

All the stuff I wish I had time for, but don't :)

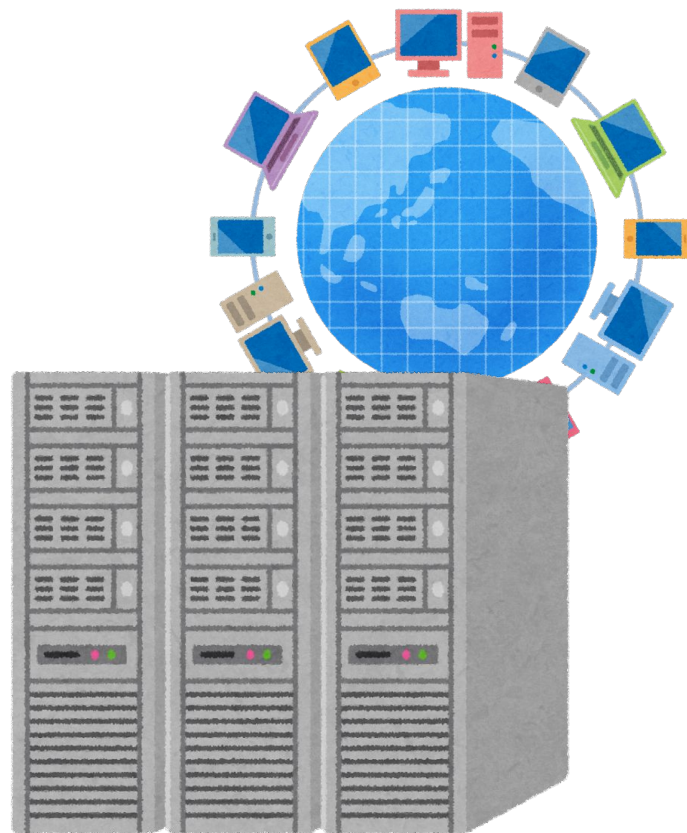
Computer science

= programming?















Is computer organisation "basic knowledge"?

Do I need to know how my computer works?

Not taught in school. I learned it for the first time in University.



What is internet to
children anyways?







It is everywhere, but thought nowhere.



What to do?

We should not only teach programming.

We should provide teachers adequate help and materials.

Maybe computer science should have its own subject at school.



Linkki evenings (Linkin iltamat)



- Activity
- A brief lecture on the topic
- A puzzle
- Open discussion

Older topics

- Musiikkiohjelmointi
- Opetusohjelmointikielet
- Menneiden vuosikymmenten tietokoneet
- Hakukoneiltama

Approximately one Thursday every month

You can find them at:

linkki.cs.helsinki.fi → ajankohtaista



Thank you!



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