University of Eastern
Finland

Feb. 23, 2026

Generation AI

AI education in Finland

Matti Tedre, University of Eastern Finland

strategic RESEARCH

UEF DIGS
RESEARCH COMMUNITY

AI / computing education in Finland prior to 2023

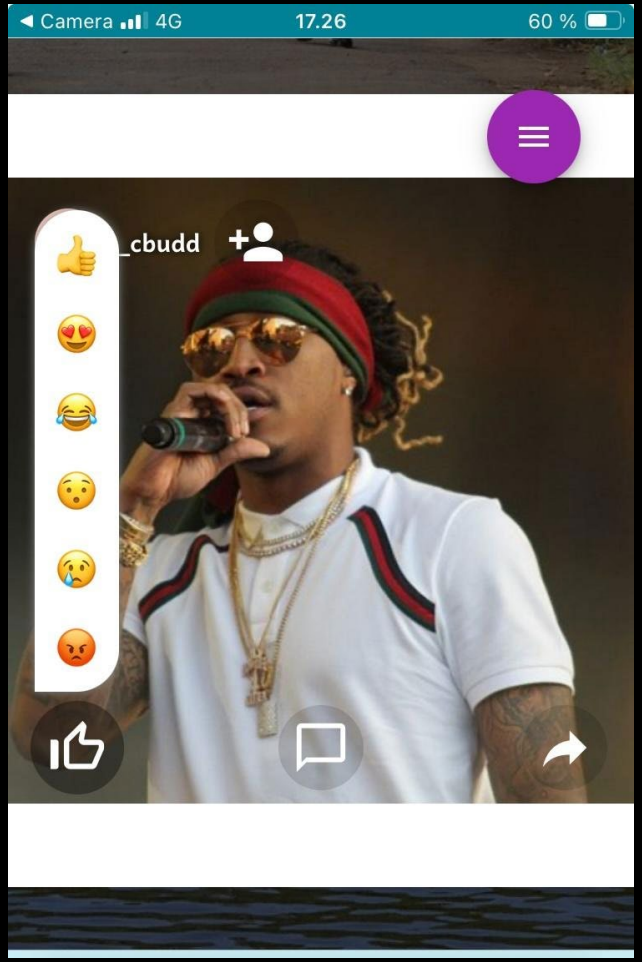
→ CT/programming integrated in math and crafts (no one's responsibility)

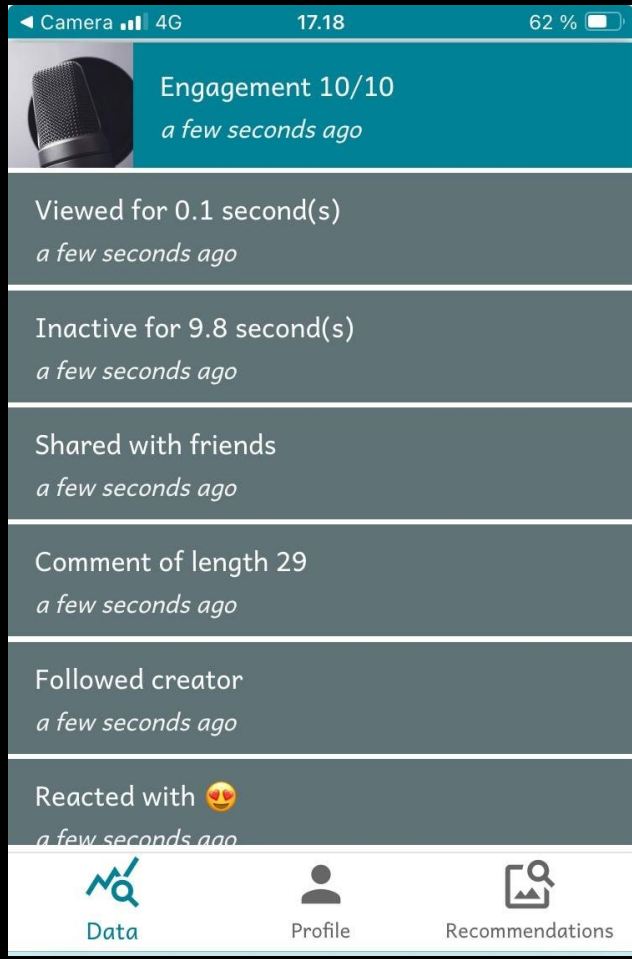
→ No clear approach to "AI" education (some suggestions to prompting / tool use)

Generation AI

Futureproofing AI education: Teach principles, not tools

Make invisible mechanisms visible



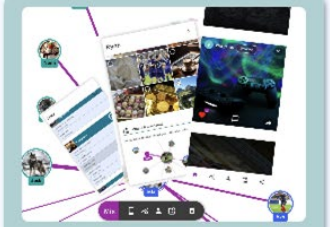


GenAI Teachable Machine

Make your own mobile phone apps using machine learning

Learn about the TM

Open tool

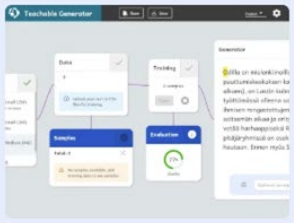


Somekone

Learn about profiling and recommendation in the classroom using a social media simulator

Learn about Somekone

Open tool

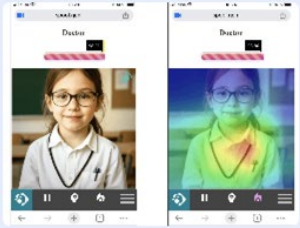


Little Language Machine

Train and prompt a tiny language model in the browser

Learn about the LLM

Try beta

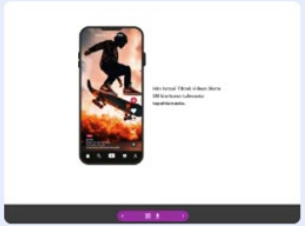


Breakable Machine

Try to cheat an image classifier in the classroom

Learn about the BM

Try beta



Profiling Game

Learn how data traces are used to build profiles of users.

Learn about Profiling game

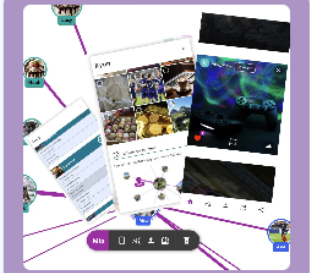
Our teaching materials

Create classifier apps

AI app design with Generation AI Teachable Machine

Teach students how AI systems are developed, and what are the pitfalls and ethical issues in modern AI.

Open



Understand social media algorithms

AI literacy in social media with Somekone

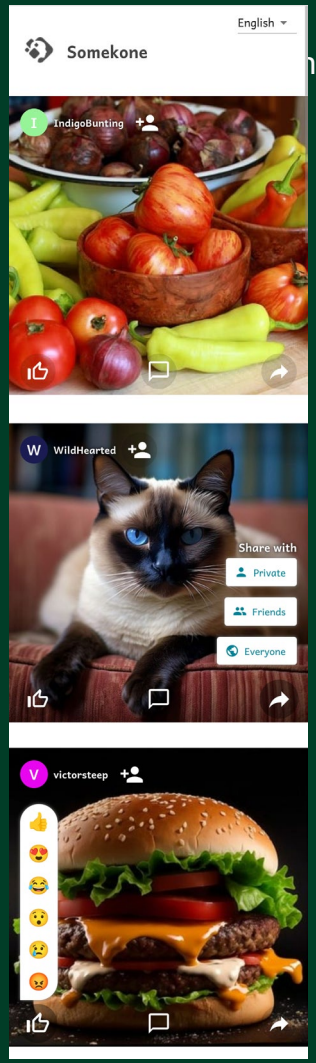
Teach students how data traces become profiles and recommendations, and how those affect our agency, identities, and polarization in society.

Open

GenAI Somekone

(Data collection, profiling, recommendation algorit

filter bubbles, polarization)



Data given, data traces

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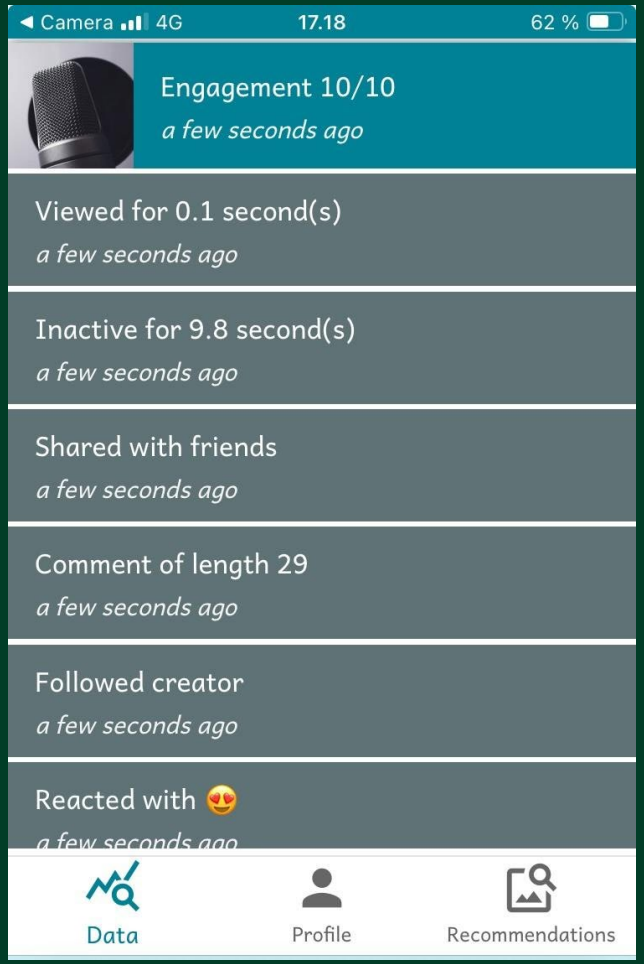


Engagement metrics

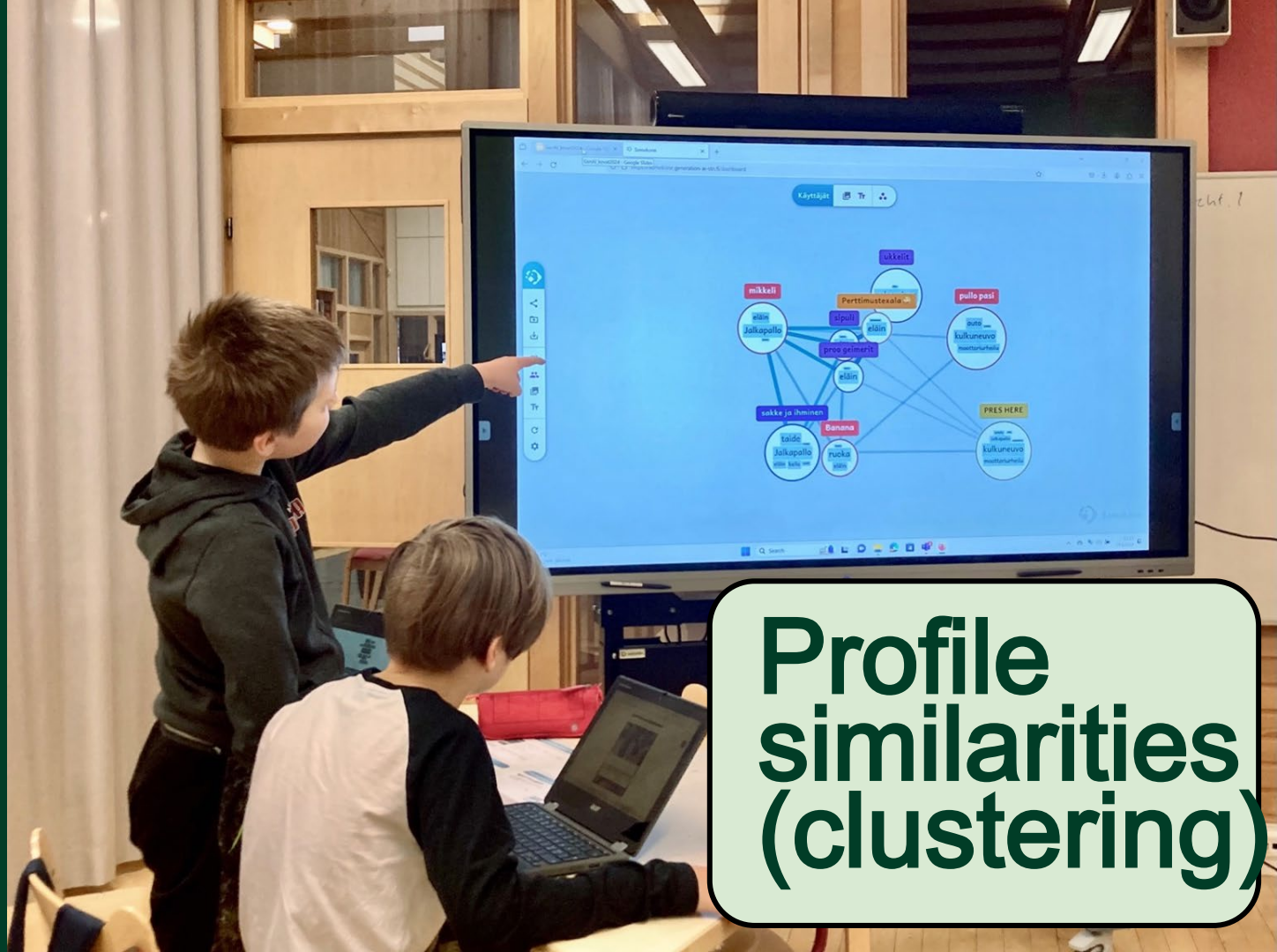
Lily

everydaylife
animals
fashion
forest
racketsports
sports
outdoors
horseracing
landscapes
individualsports

Your engagement 100%

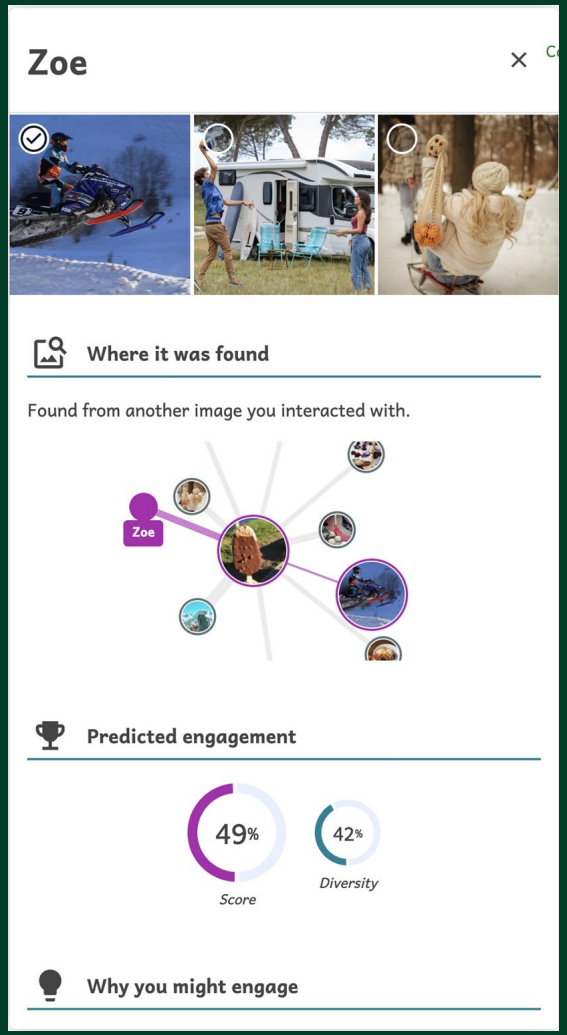
#sports 25%

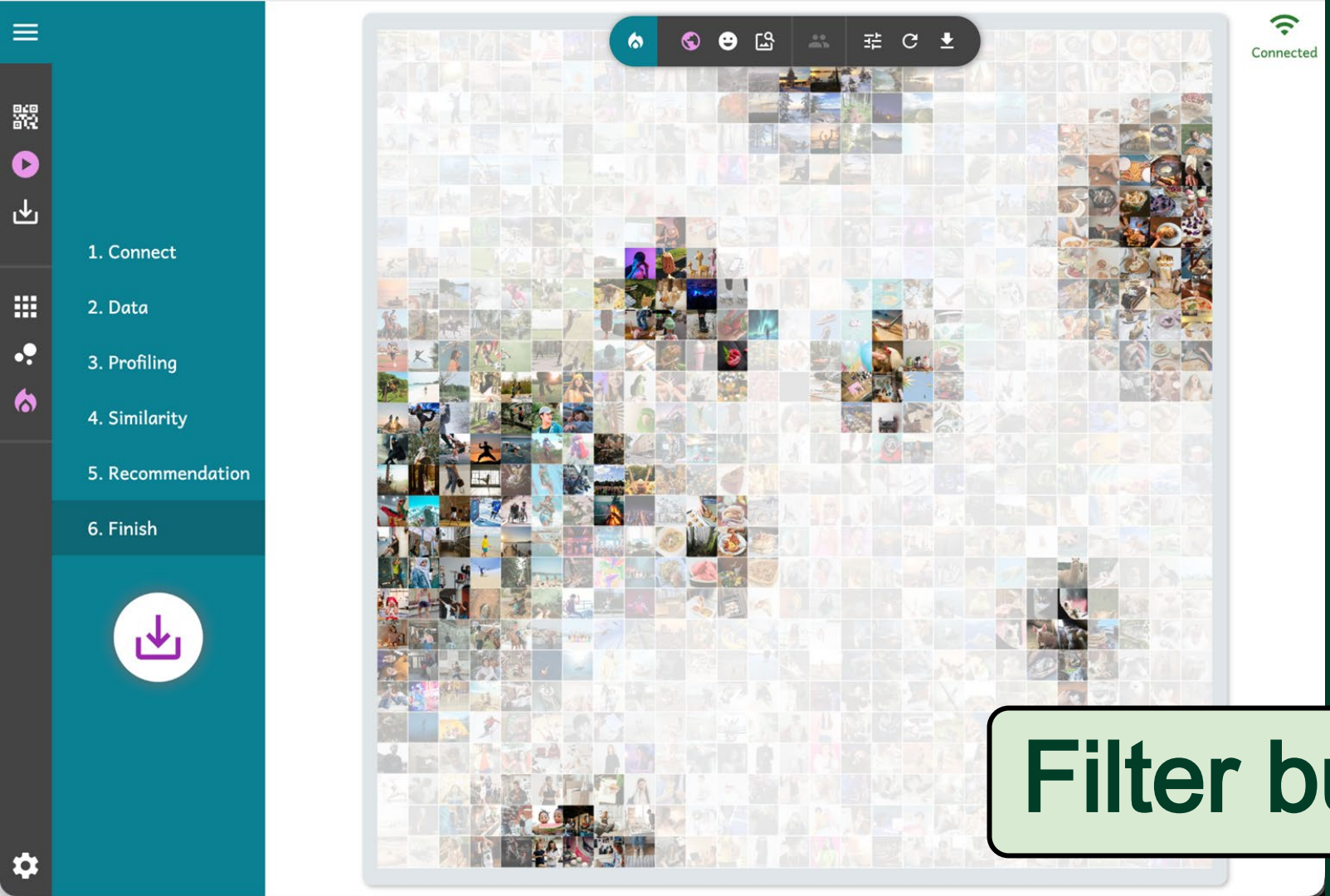
Profiling



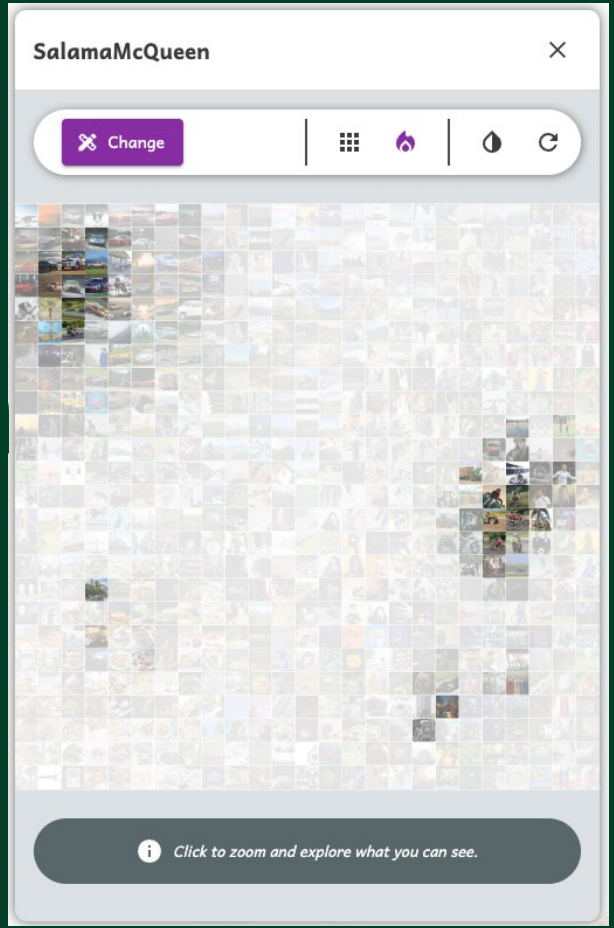
Profile similarities (clustering)

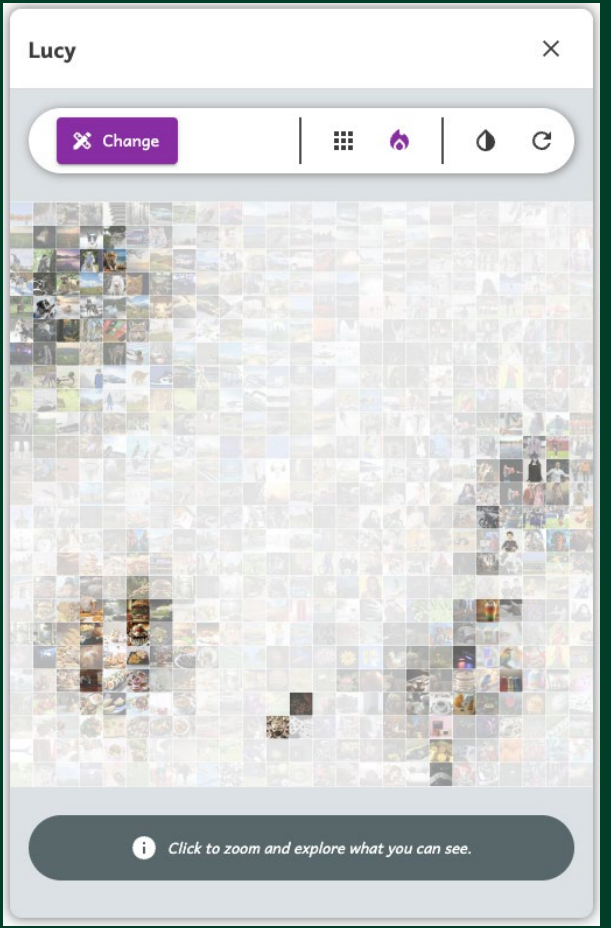
Recommendation algorithms

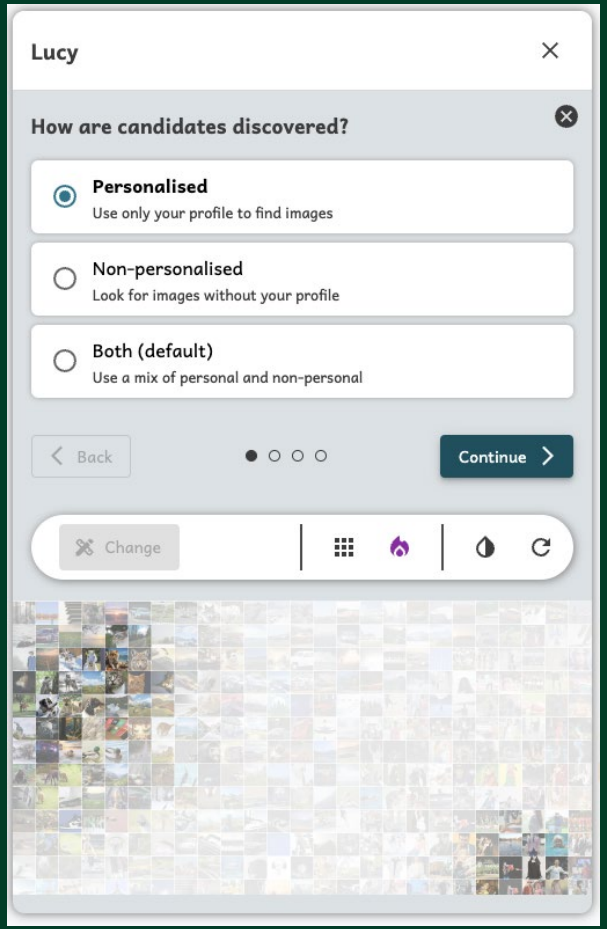



1. Connect
2. Data
3. Profiling
4. Similarity
5. Recommendation
6. Finish
Connected
Filter bubble

Polarization





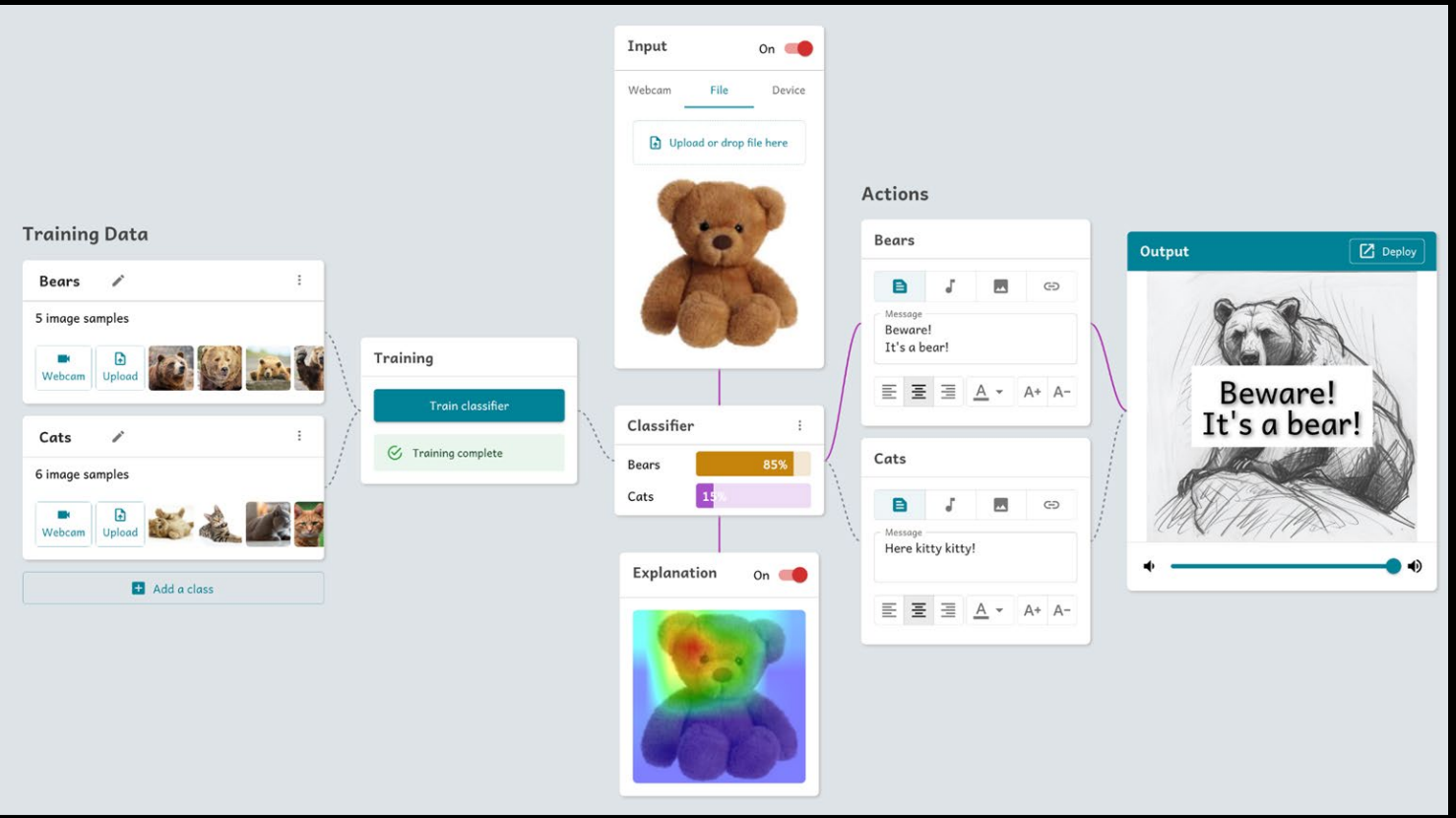


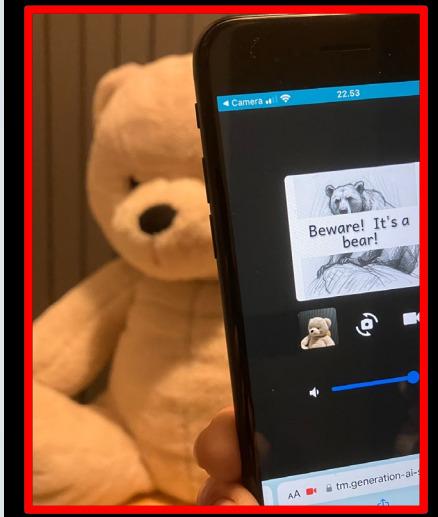
How changing c tuning the recommendation algorithm affects filter bubbles?

GenAI Teachable Machine

(ML-driven App making platform)

Training data - Example - Class - Name - Training - Classifier - Input - Classification result - Confidence - Activation map - Trigger - Action - Brittleness - Deployment





GenAI Breakable Machine

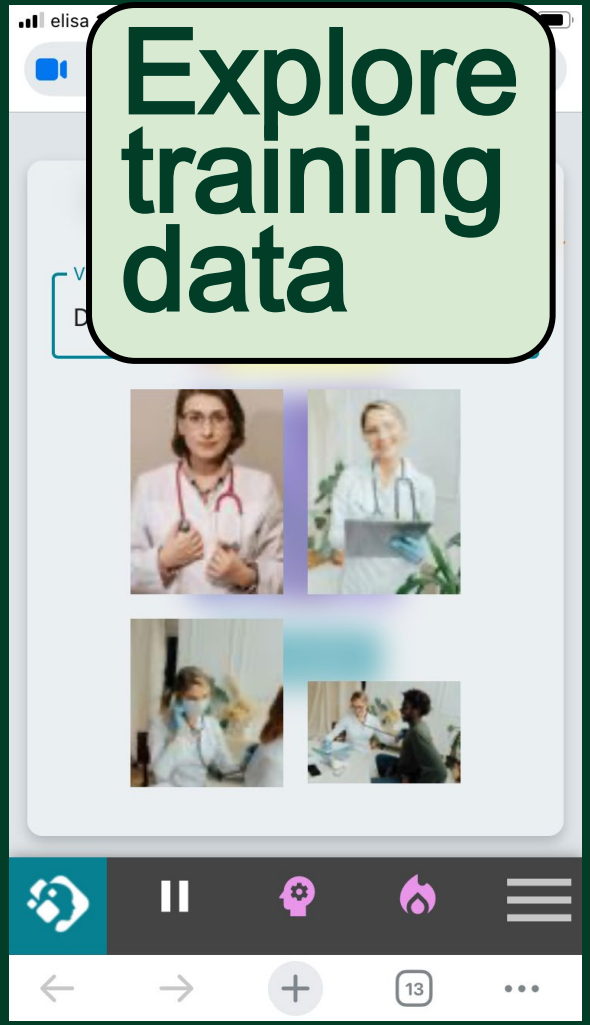
(Spoof a machine vision system)

Cheat a machin vision system to classify you as a doctor

Explore salient features


elisa
18.23
94 %
spoof.gen
Doctor
98.91
1

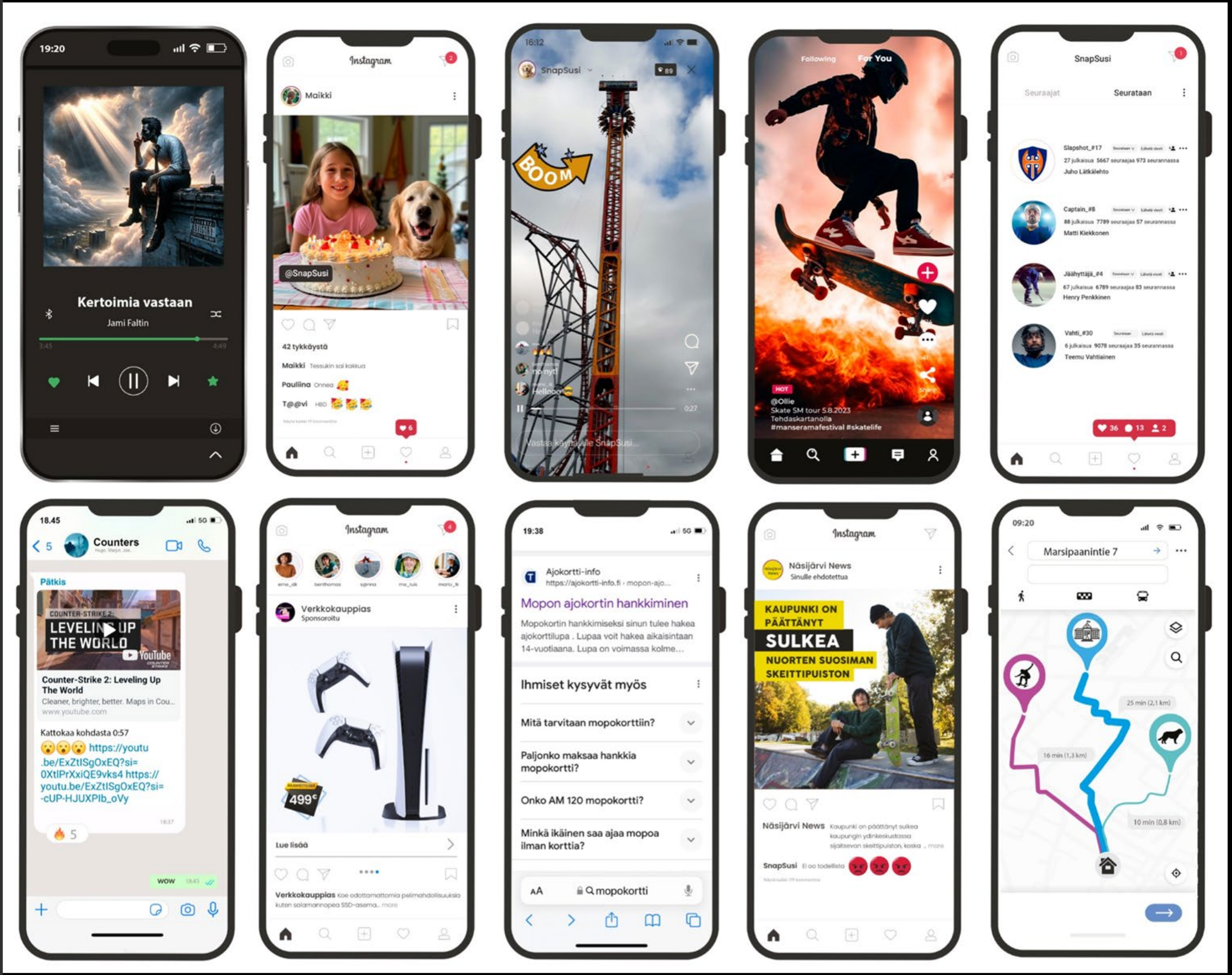

elisa
18.24
94 %
spoof.gen
Doctor
98.86
1


Explore training data
13

Exploit the model's weaknesses to forc a misclassification

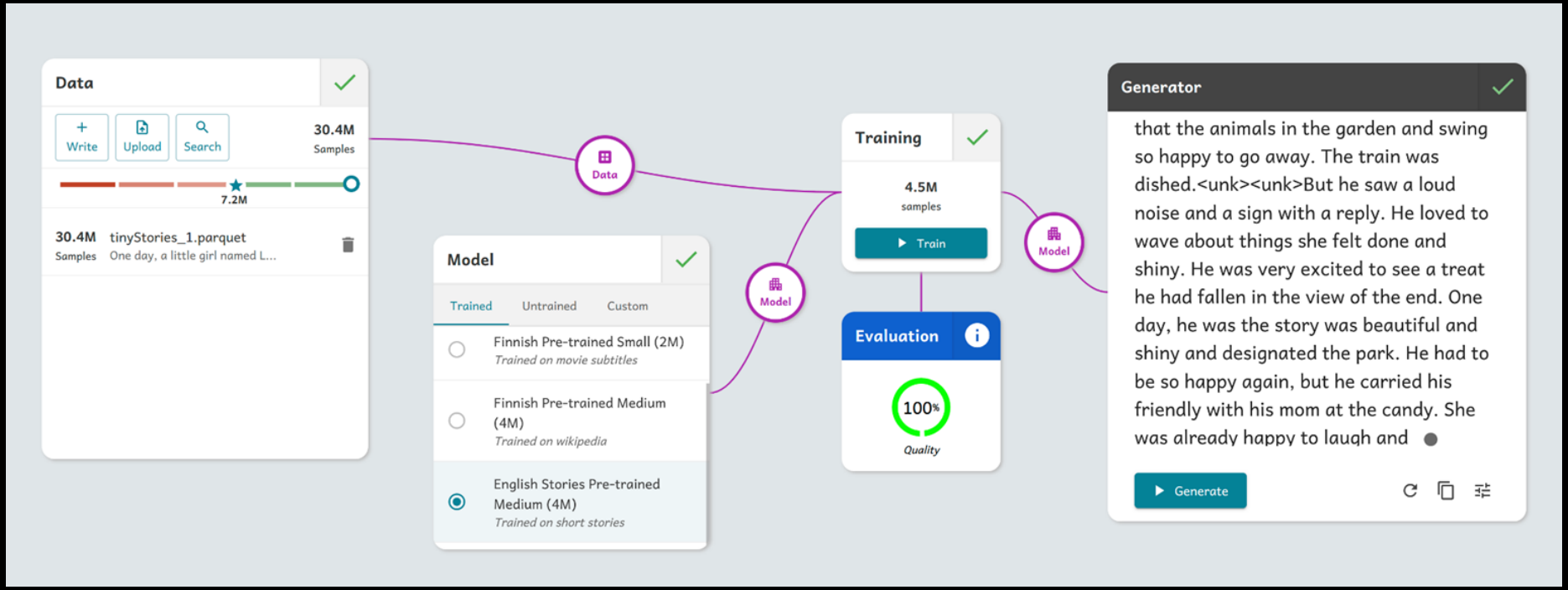
GenAI Profiling Game

(Data collection, profiling, DQ)

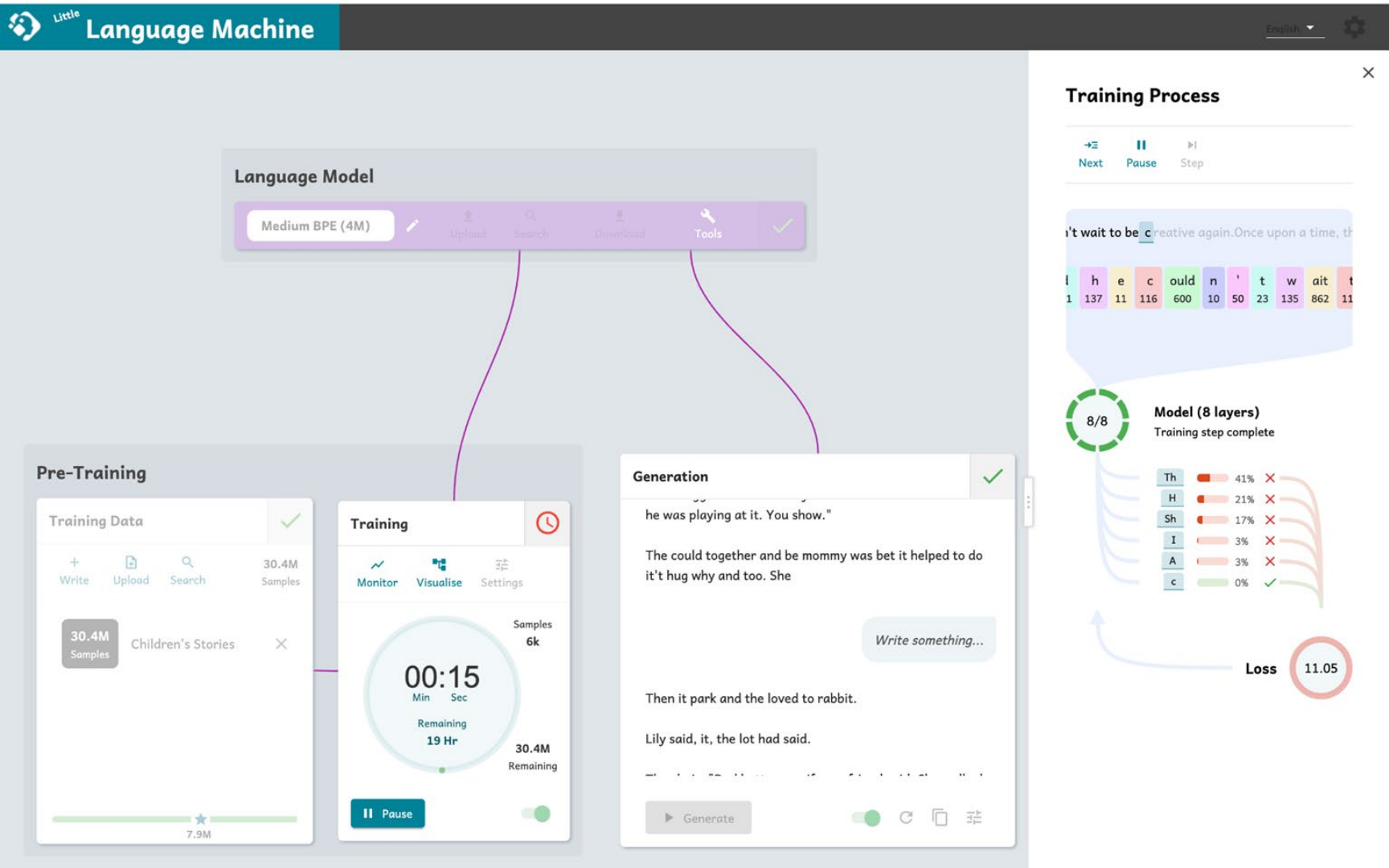

19:20
Kertoimia vastaan
Jami Faltin
Instagram
Maikki
@SnapSusi
42 tykkäystä
Maikki Tessukin sai kakkua
Pauliina Onnea
T@@vi HBD
16:12
SnapSusi
BOOM
0:27
Following
For You
HOT
@Ollie
Skate SM tour 5.8.2023
Tehdaskartanolla
#manseramafestival #skatelife
SnapSusi
Seuraajat
Seurataan
Slapshot_#17
27 julkaisua 5667 seuraajaa 973 seurannassa
Juho Lätkälehto
Captain_#8
88 julkaisua 7789 seuraajaa 57 seurannassa
Matti Kiekkonen
Jäähyttäjä_#4
67 julkaisua 6789 seuraajaa 83 seurannassa
Henry Penkkinen
Vahti_#30
6 julkaisua 9078 seuraajaa 35 seurannassa
Teemu Vahtiainen
18.45
Counters
Pätkis
COUNTER-STRIKE 2:
LEVELING UP THE WORLD
Counter-Strike 2: Leveling Up The World
Cleaner, brighter, better. Maps in Cou...
www.youtube.com
Kattokaa kohdasta 0:57
https://youtu.be/ExZtISgOxEQ?si=0XtlPrXxiQE9vks4 https://youtu.be/ExZtISgOxEQ?si=-cUP-HJUXPIb_oVy
WOW
Instagram
Verkkokauppias
Sponsoroitu
499€
Lue lisää
19:38
Ajokortti-info
https://ajokortti-info.fi › mopon-ajo...
Mopon ajokortin hankkiminen
Mopokortin hankkimiseksi sinun tulee hakea ajokorttilupa . Lupaa voit hakea aikaisintaan 14-vuotiaana. Lupa on voimassa kolme...
Ihmiset kysyvät myös
Mitä tarvitaan mopokorttiin?
Paljonko maksaa hankkia mopokortti?
Onko AM 120 mopokortti?
Minkä ikäinen saa ajaa mopoa ilman korttia?
mopokortti
Instagram
Näsijärvi News
Sinulle ehdotettua
KAUPUNKI ON PÄÄTTÄNYT
SULKEA
NUORTEN SUOSIMAN SKEITTIPUISTON
Näsijärvi News
SnapSusi
09:20
Marsipaanintie 7
25 min (2,1 km)
16 min (1,3 km)
10 min (0,8 km)

Little Language Machine

(Train your own transformer on your own comput



Little Language Machine on a Chromebook


Little Language Machine
English
Language Model
Medium BPE (4M)
Upload
Search
Download
Tools
Pre-Training
Training Data
Write
Upload
Search
30.4M Samples
30.4M Samples
Children's Stories
7.9M
Training
Monitor
Visualise
Settings
Samples 6k
00:15
Min Sec
Remaining 19 Hr
30.4M Remaining
Pause
Generation
he was playing at it. You show."
The could together and be mommy was bet it helped to do it't hug why and too. She
Write something...
Then it park and the loved to rabbit.
Lily said, it, the lot had said.
Generate
Training Process
Next
Pause
Step
't wait to be c reative again.Once upon a time, th
l 1
h 137
e 11
c 116
ould 600
n 10
' 50
t 23
w 135
ait 862
t 11
8/8
Model (8 layers)
Training step complete
Th 41%
H 21%
Sh 17%
I 3%
A 3%
c 0%
Loss 11.05

Why a No Code Approach?

Why Is It So Hard to Learn to Program?

The Trouble with Teaching Programming

Patricia Ha,
Dr SAmuel m

School of Information Technology and Electrotechno
Otago Polytec

Tampere University of Technology
Tampere University of Technology
Tampere University of Technology

Programming is not a prerequisite for AI literacy

Data-driven computing
versus
Rule-driven computing

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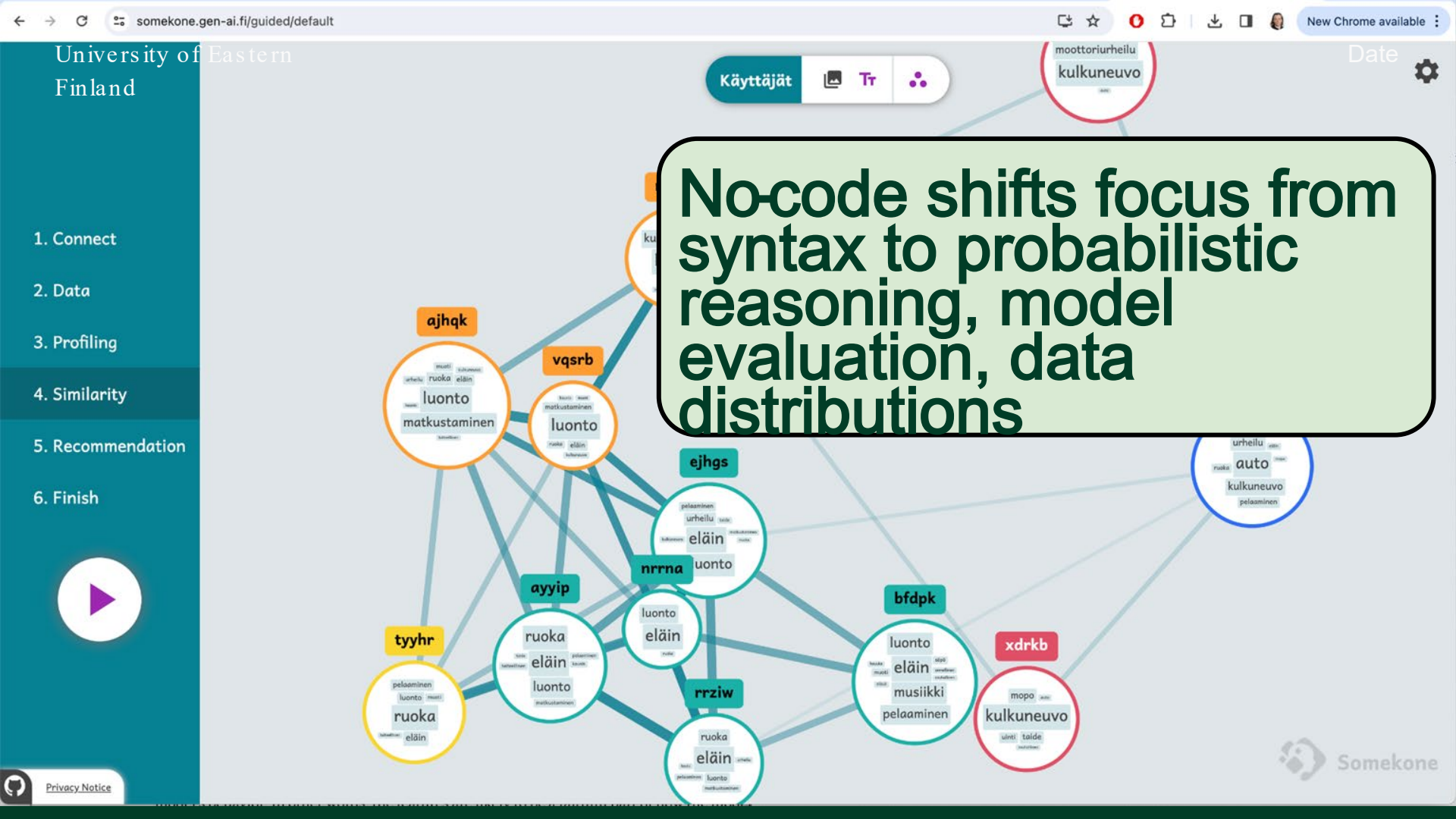
Why ncode?

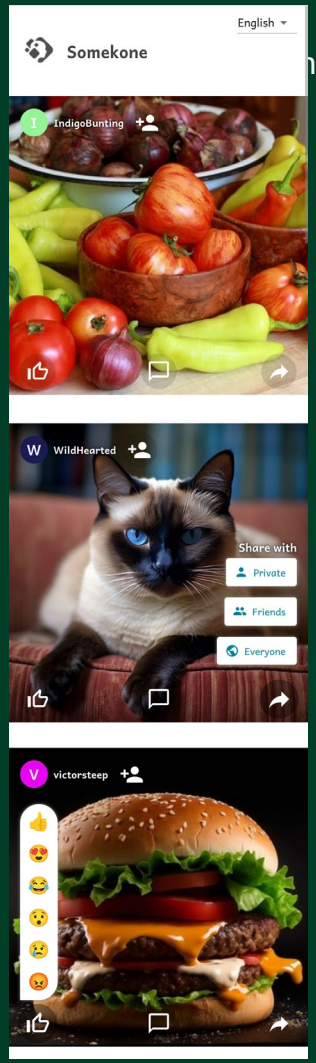
1. Low-floor

2. Equitable

3. Disciplinary concepts -first

4. Scalable


Käyttäjät
1. Connect
2. Data
3. Profiling
4. Similarity
5. Recommendation
6. Finish
No-code shifts focus from syntax to probabilistic reasoning, model evaluation, data distributions
ajhqk
vqsrb
ejhgs
nrrna
ayyip
tyyhr
rrziw
bfdpk
xdrkb
luonto
matkustaminen
eläin
ruoka
urheilu
auto
kulkuneuvo
musiikki
pelaaminen
mopo
moottoriurheilu
Somekone
Privacy Notice



AI education is as much a societal issue as it is a technical on

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Based on the CED Pedagogical Mode

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Child Rights Based Designs

GDPR-safe

Run locally in browser

Open source

Co-designed with 12 teachers & over 200 children

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Feb 23, 2026

Cumulative learning paths

Year 1

Data-driven design

Data, classifier, confidence, brittleness, bias, …

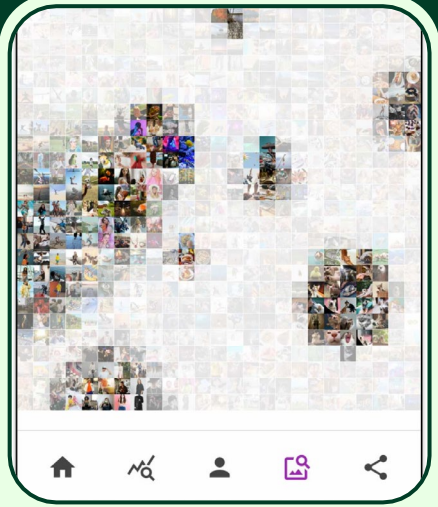
Year 2

Social media mechanisms

Data collection, profiling, recommending, targeting, …

Year 3

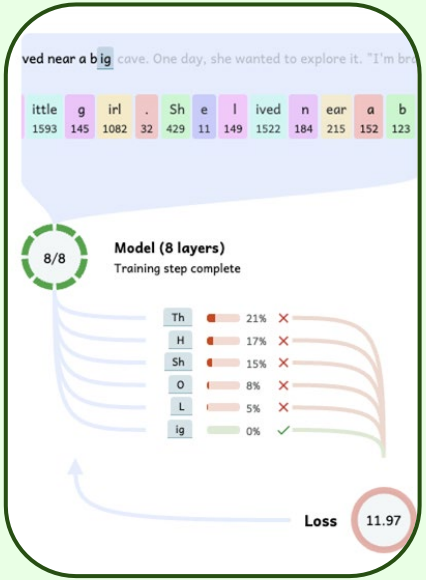
Impacts on me and others



Filter bubbles, manipulation, polarization, intended and unintended impacts, …

Year 4

Generative models



Training pipelines, bias mitigation, tokenizing, fine-tuning, …