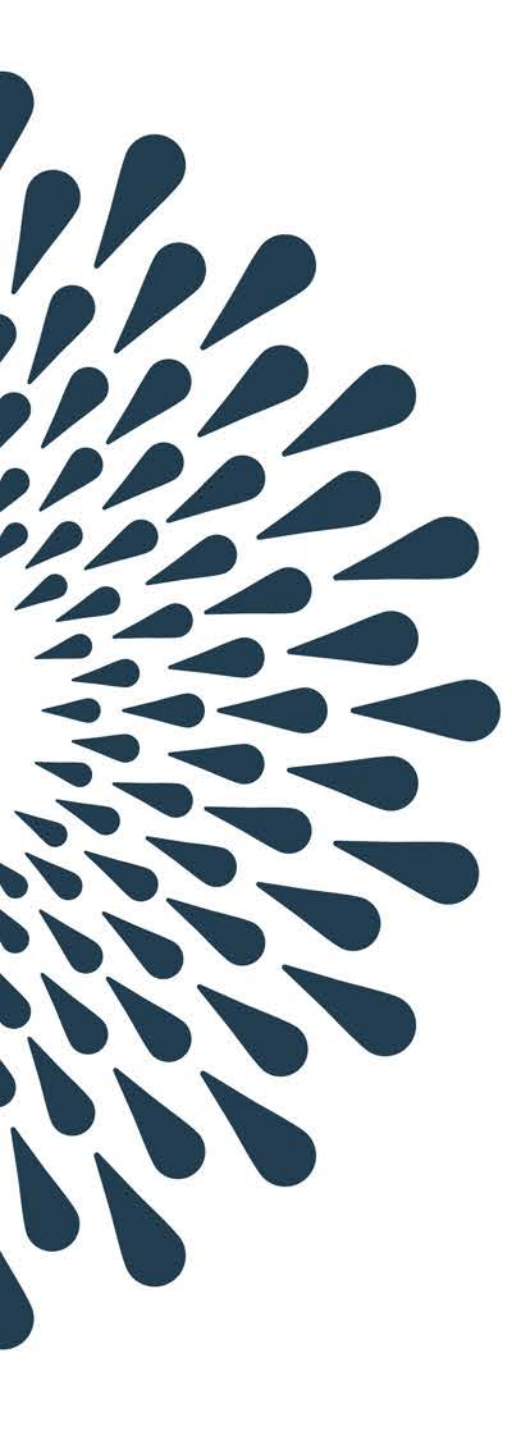
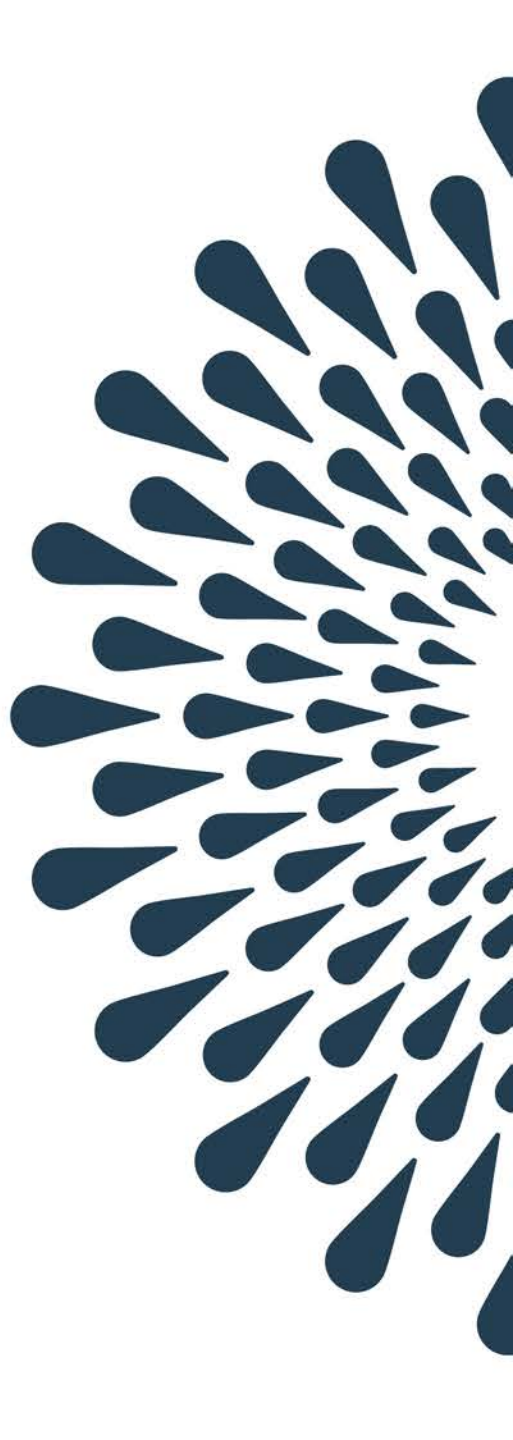




Johdatus tekoälyyn

Juha Hirvonen, yliopettaja
SeAMK tekniikka

SeAMK 



Mitä tekoäly on?



Saapuneet

Luonnokset [1]

Lähetetyt

Poistettut 422

Arkisto

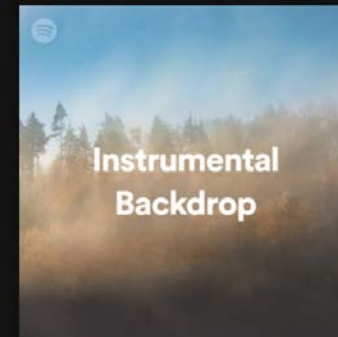
Conversation History

Lähtevät

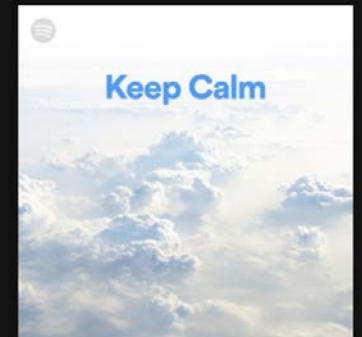
Roskaposti [3]

RSS-tilaukset

Hiljattaisen kuunteluhistoriasi inspiroimaa

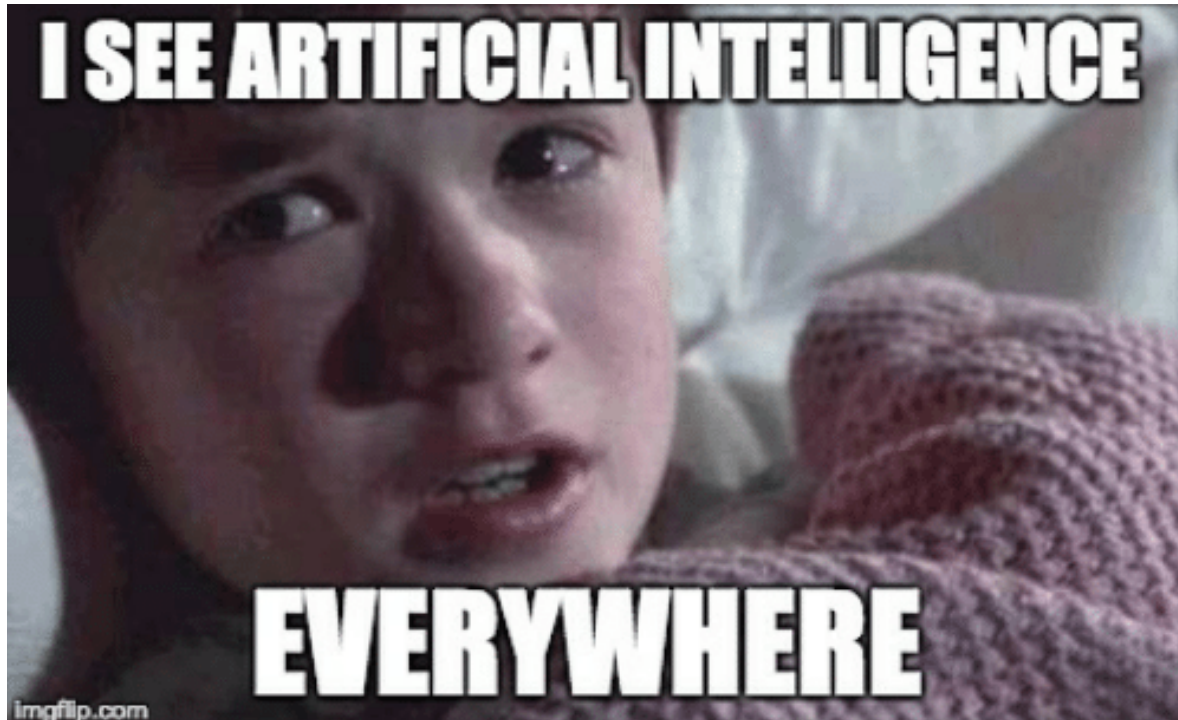


Instrumental Backdrop
John Ocean, Dilaz,
Robin Bennich, Rannar...



Keep Calm
Gavin Luke, Ever So
Blue, Tejal Yann, Prime...

Mitä tekoäly on?



ALGORITHMS

ARTIFICIAL
INTELLIGENCE

MACHINE
LEARNING

BLOCKCHAIN

imgflip.com



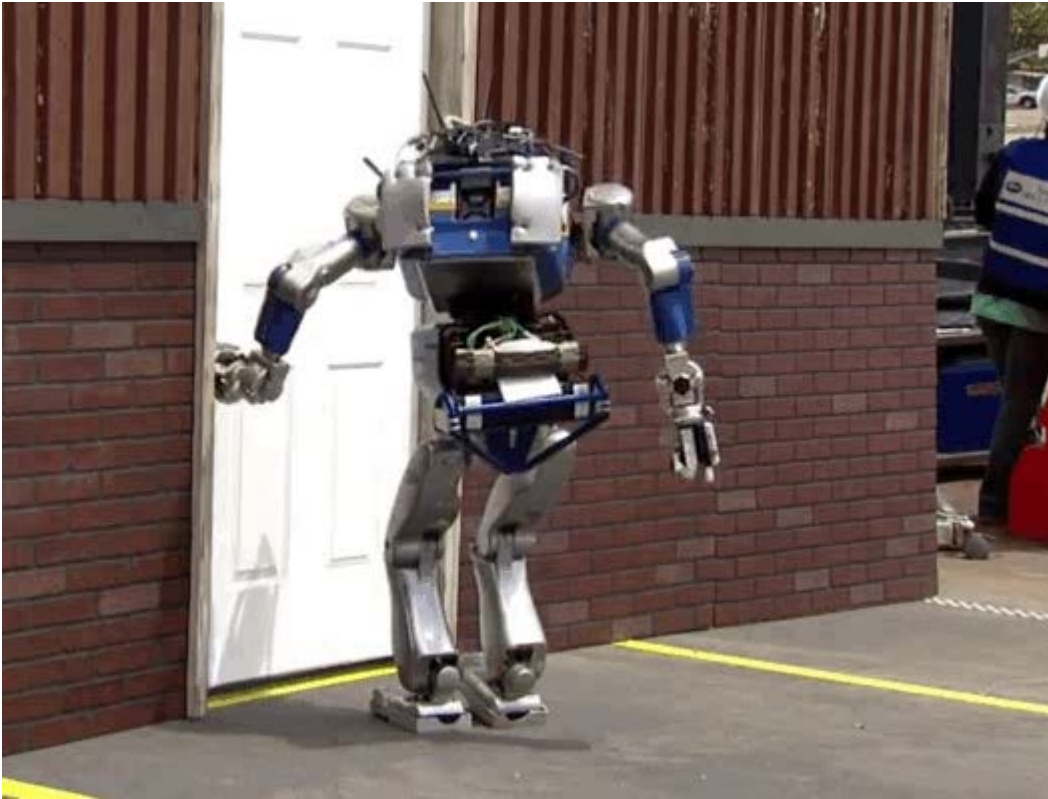
"What kind of tech does your startup use?"

Helppoa vai vaikeaa?

$$\begin{aligned}
 & -\mathbb{E} \int_{\delta}^T \int_G \theta \left[\sum_{i,j=1}^n (b^{ij} v_{x_i})_{x_j} + s\lambda \varphi \psi_t v \right] \left[du - \sum_{i,j=1}^n (b^{ij} u_{x_i})_{x_j} dt \right] dx \\
 & + \frac{1}{4} \lambda \mathbb{E} \int_{\delta}^T \int_G \theta v \left[dy - \sum_{i,j=1}^n (b^{ij} y_{x_i})_{x_j} dt \right] dx \\
 & = -\mathbb{E} \int_{\delta}^T \int_G \sum_{i,j=1}^n \left(b^{ij} v_{x_i} dv + \frac{1}{4} \lambda b^{ij} v_{x_i} v dt \right)_{x_j} dx \\
 & + \frac{1}{2} \mathbb{E} \int_{\delta}^T \int_G d \left(\sum_{i,j=1}^n b^{ij} v_{x_i} v_{x_j} - s\lambda \varphi \psi_t v^2 + \frac{1}{8} \lambda v^2 \right) dx \\
 & - \mathbb{E} \int_{\delta}^T \int_G \left(\frac{1}{4} \lambda \sum_{i,j=1}^n b^{ij} v_{x_i} v_{x_j} dt + \frac{1}{2} \sum_{i,j=1}^n b_t^{ij} v_{x_i} v_{x_j} dt - \frac{1}{2} \sum_{i,j=1}^n b^{ij} dv_{x_i} dv_{x_j} \right) dx \\
 & + \mathbb{E} \int_{\delta}^T \int_G \left[\frac{1}{2} s \lambda^2 \varphi \psi_t^2 v^2 dt + \frac{1}{2} s \lambda \varphi \psi_{tt} v^2 dt \right. \\
 & \left. - \frac{1}{4} s \lambda^2 \varphi \psi_t v^2 dt + \frac{1}{2} s \lambda \varphi \psi_t (dv)^2 - \frac{1}{8} \lambda (dv)^2 \right] dx \\
 & + \mathbb{E} \int_{\delta}^T \int_G \left[\sum_{i,j=1}^n (b^{ij} v_{x_i})_{x_j} + s\lambda \varphi \psi_t v \right]^2 dx dt. \tag{2.2}
 \end{aligned}$$



Helppoa vai vaikeaa?



Helppoa vai vaikeaa?



<https://www.popularmechanics.com/technology/robots/a15907/best-falls-from-darpa-robot-challenge/>

Tekoälyn ominaisuuksia



Itsenäisyys

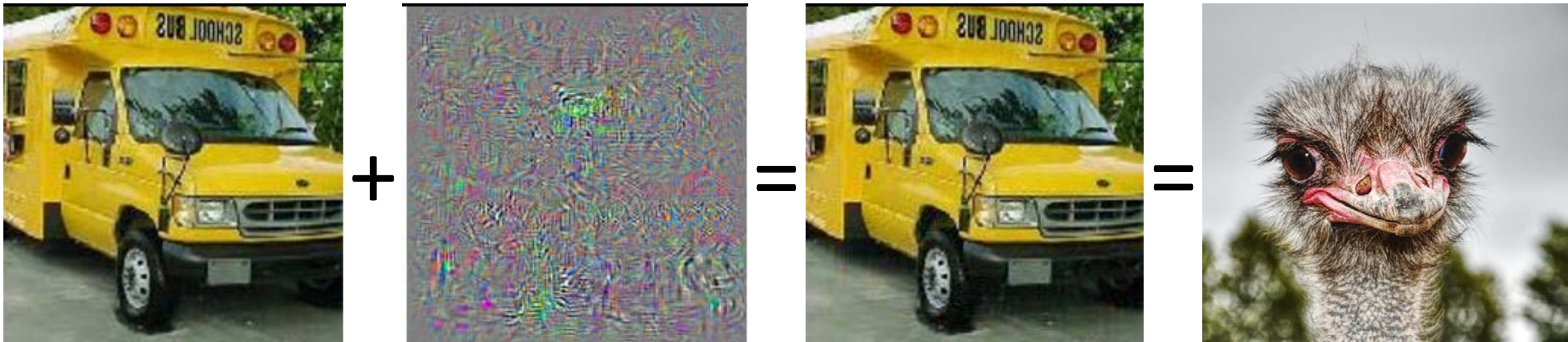


Oppiminen

Miten opitaan?



Miten opitaan?



Tärkeitä asioita



”Uusi sähkö”

