

## Applied Machine Learning Days 2020

# Welcome to EPFL

Martin Vetterli EPFL President



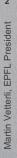
 École polytechnique fédérale de Lausanne

STCC 27.01.2020



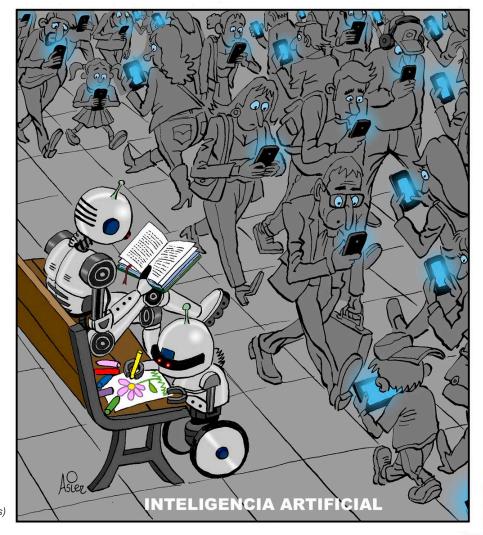
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Today's digital dream: machines for humans

# ...and not the other way around

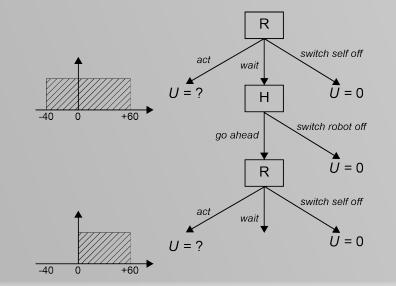


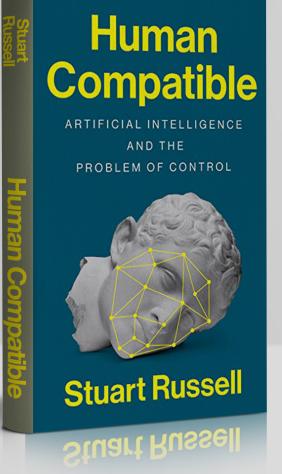
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# We can succeed (problem of control)





Martin Vetterli, EPFL President

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## But... a similar (Swiss) dream, 200 years older

Tankenstein by Mary Shelley Ma Diddati in Genera, where Mary Shelley conceived of the book

# ANKENSTEIN

Signet Classi

MARY SHELLEY

WITH A NEW INTRODUCTION BY DOUGLAS CLEGG

#### EPFL **Synthetic biology**



The first stage of Phil's growing 'mini-brain'. Biopsy through the eye piece with an iPhone, using a light microscope

> How to Grow a Human: Adventures in Who We Are and How We Are Made Philip Ball



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Adventures in How We Are Made and Who We Are

6

conversion of skin cells to neurons. This shows a colony that has been transformed to a stem cell-like state

## **EPFL** Last month

#### A scalable pipeline for designing reconfigurable organisms

Sam Kriegman, Douglas Blackiston, Michael Levin, and Josh Bongard

PNAS first published January 13, 2020 https://doi.org/10.1073/pnas.1910837117

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#### EPFL **Merger of infotech** and biotech K Hacking Humans - Yuval Noah Harari Roundtable at EDFL

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EPFL Exclusive conference: Yuval Noah Harari On 10 July 2019, Yuval Noah Harari gave an exclusive public conference at the SwissTech Convention Center.

EPFL

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72 793 view • 10 july 2019

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# So how will the real machines look like?

**R.U.R**. is a 1920 science fiction play by the Czech writer Karel Čapek.

R.U.R. stands for Rossumovi Univerzální Roboti (Rossum's Universal Robots).

The English phrase "**Rossum's Universal Robots**" has been used as a subtitle. It premiered on 25 January 1921 and introduced the word "robot" to the English language and to science fiction as a whole.



U.S. WPA Federal Theatre Project poster for the production by the Marionette Theatre, New York, 1939.

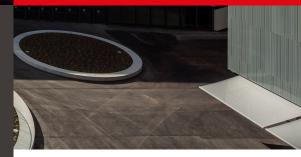
## What do we learn?

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# Thank you



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