

HOW TO BUILD A THINKING MACHINE?

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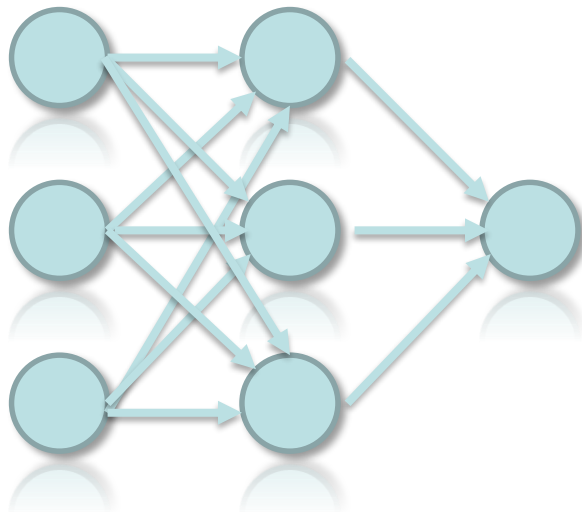
Who are we?

- Swiss company
- 3 people
- Spinoff of AlpVision SA
 - Ex-startup of the EPFL (2001)
 - Successful
 - Offices in Chicago and Shanghai

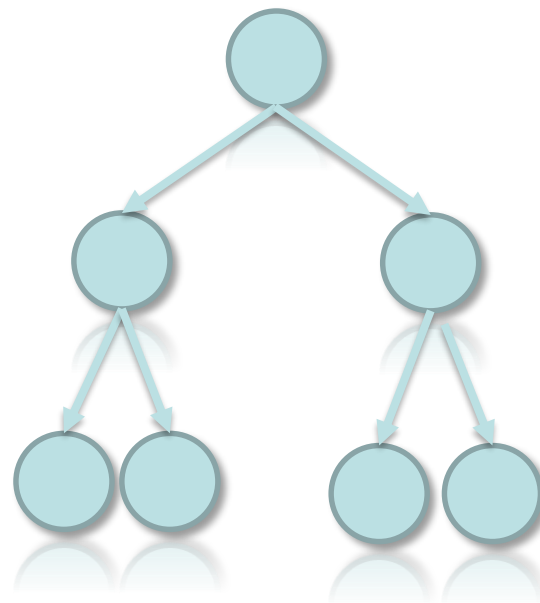


Our goal:
Make a thinking machine

What works today?



Multilayered
neuron networks

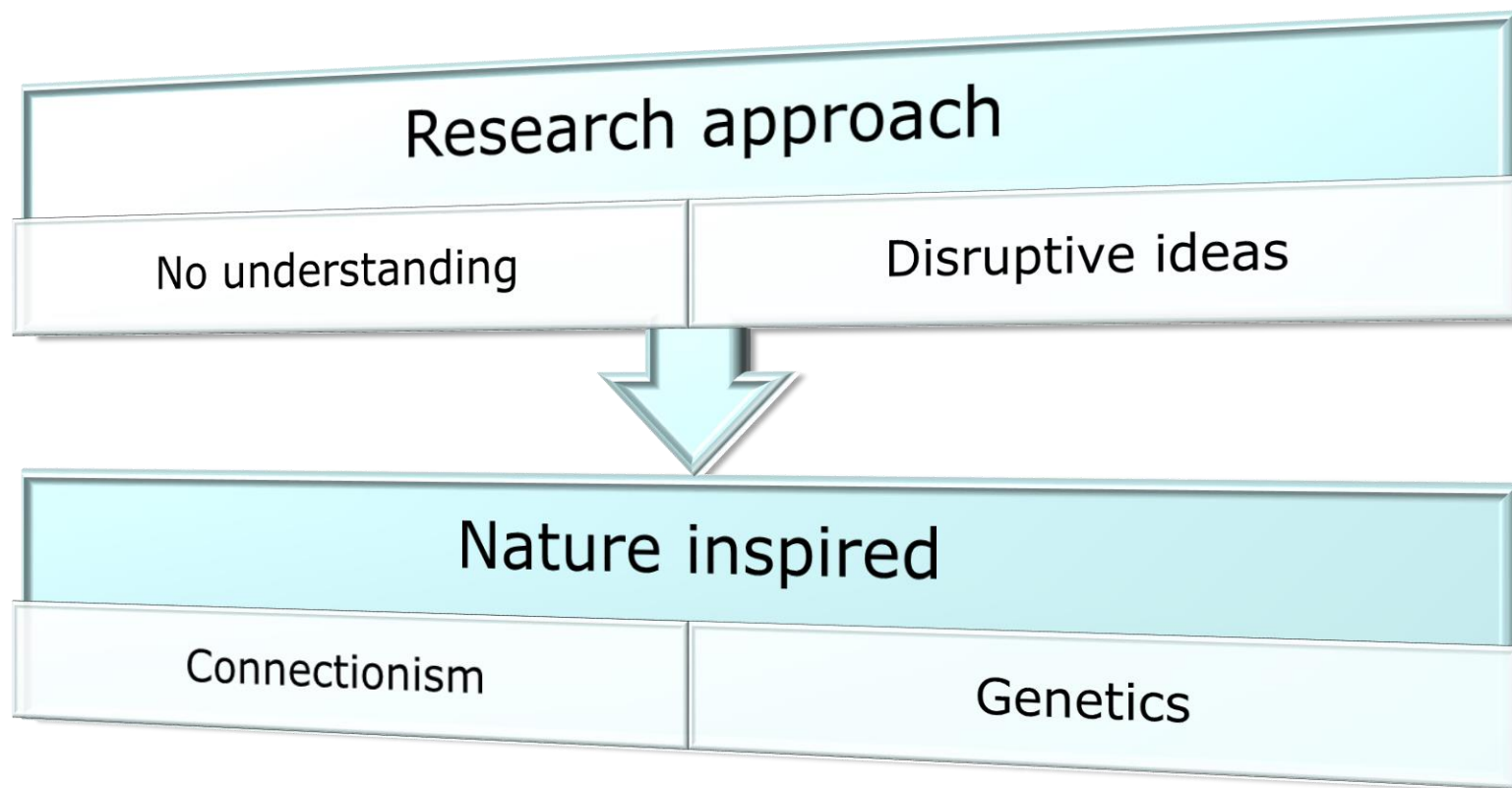


Decision
trees

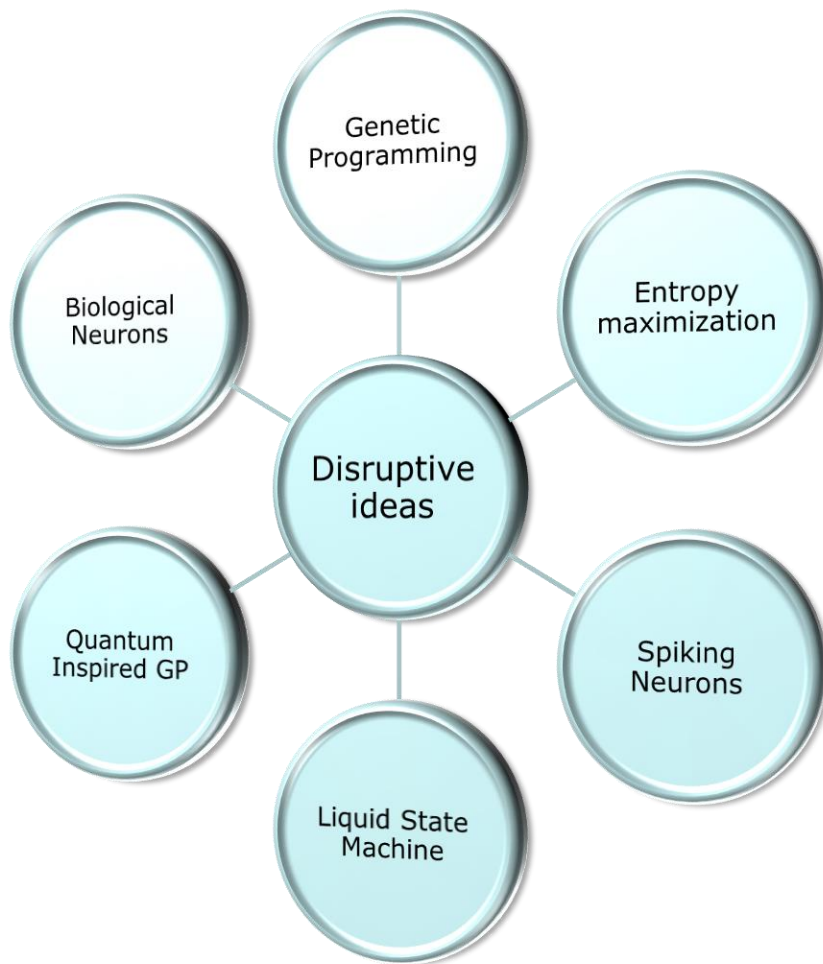
Will that ever think?

Common pitfalls

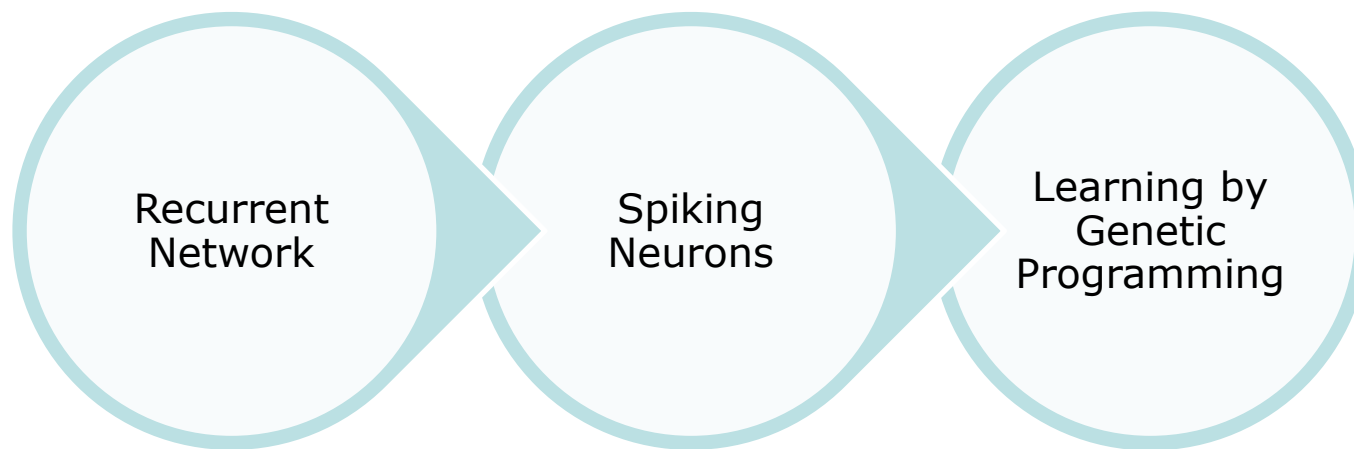
- Losing oneself on applications
- Losing oneself on understanding
- No faith
- Tuning

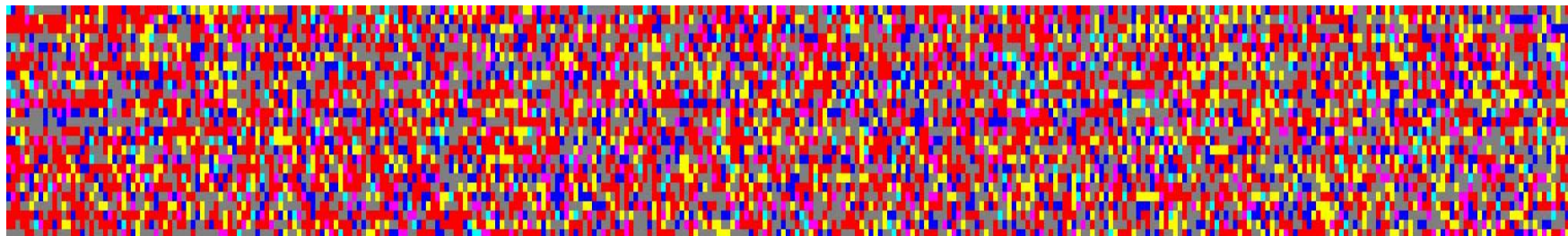


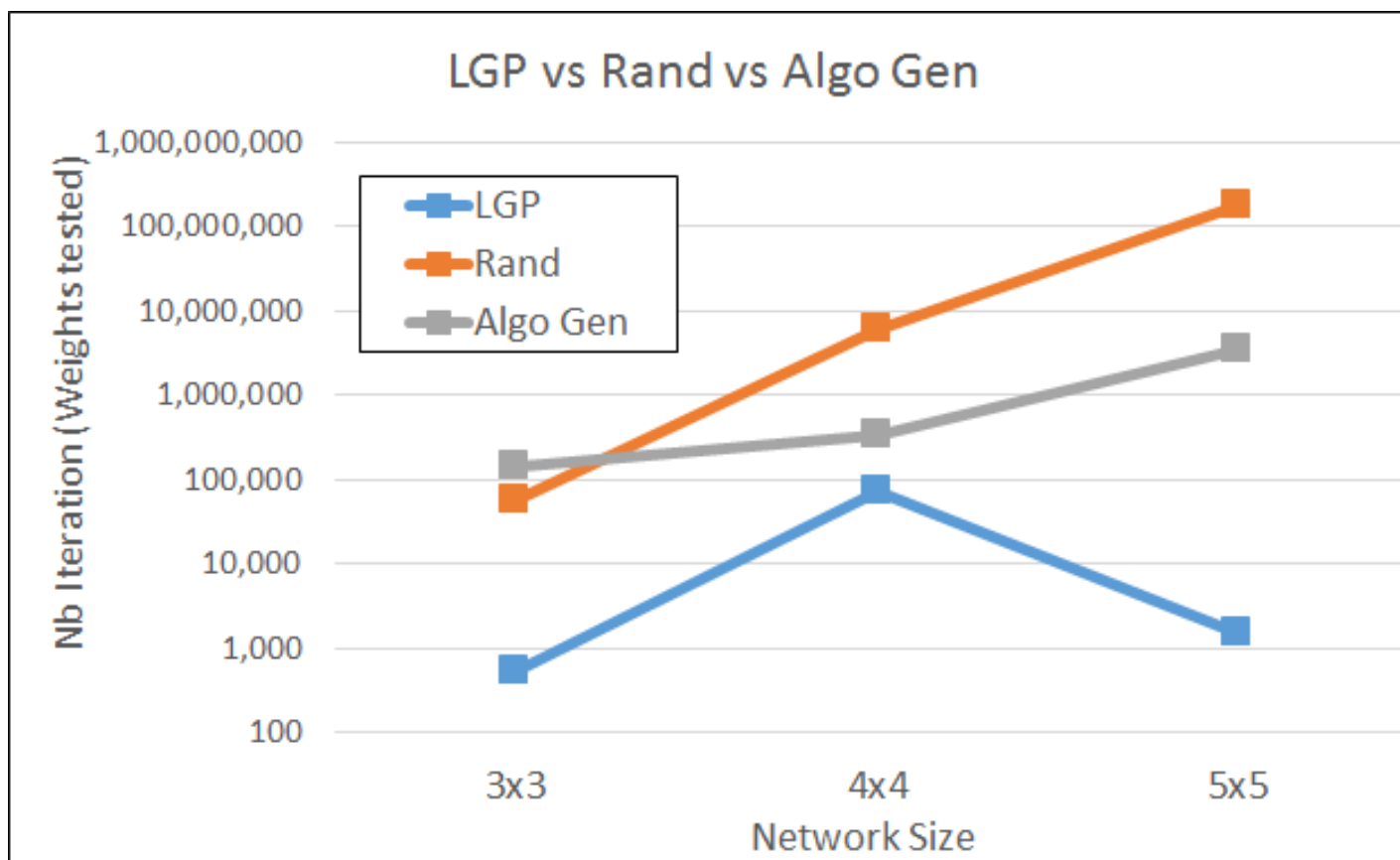
Disruptive ideas examples?



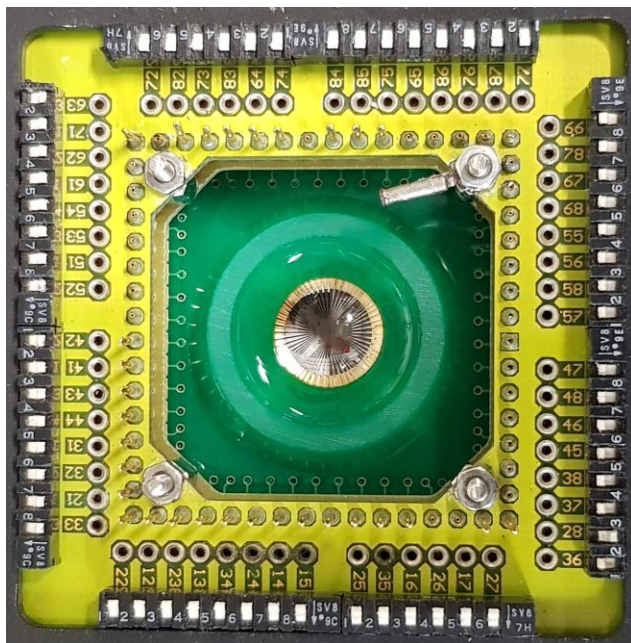
So what are we doing?







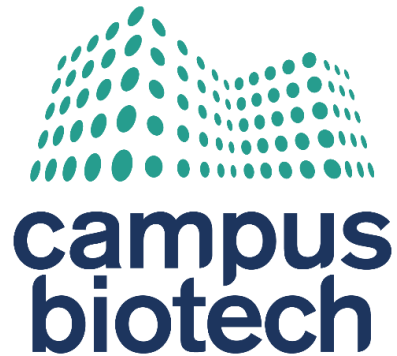
How to scale to
100 millions neurons?



Biological
Human
Neural Cells

Multi-
electrode
array

Learning by
Genetic
Programming



Tissue Engineering
Laboratory

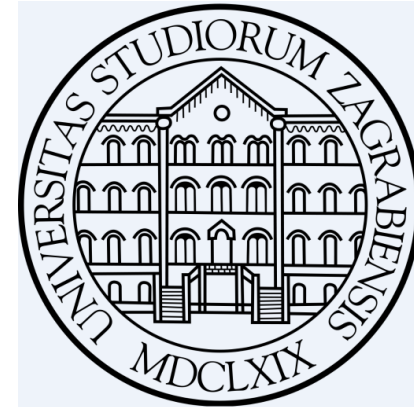
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Applied Sciences
Western Switzerland

Professor Luc Stoppini



Faculty of Engineering /
Dept. of Electronics and
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Professor Douglas Mota
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Faculty of Electrical
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