Sioux Technologies | Hot-or-Not

The Future of System Engineering

Methods & Skills

Wednesday November 11, 2020

16:30 hrs opening by Arend-Jan Beltman, Sioux

please turn your camera **OFF**

please **MUTE** your microphone, to prevent background noise

please **OPEN** the chat, so that if you have any questions during the presentation you can write your question in the chat, and we get back to you.
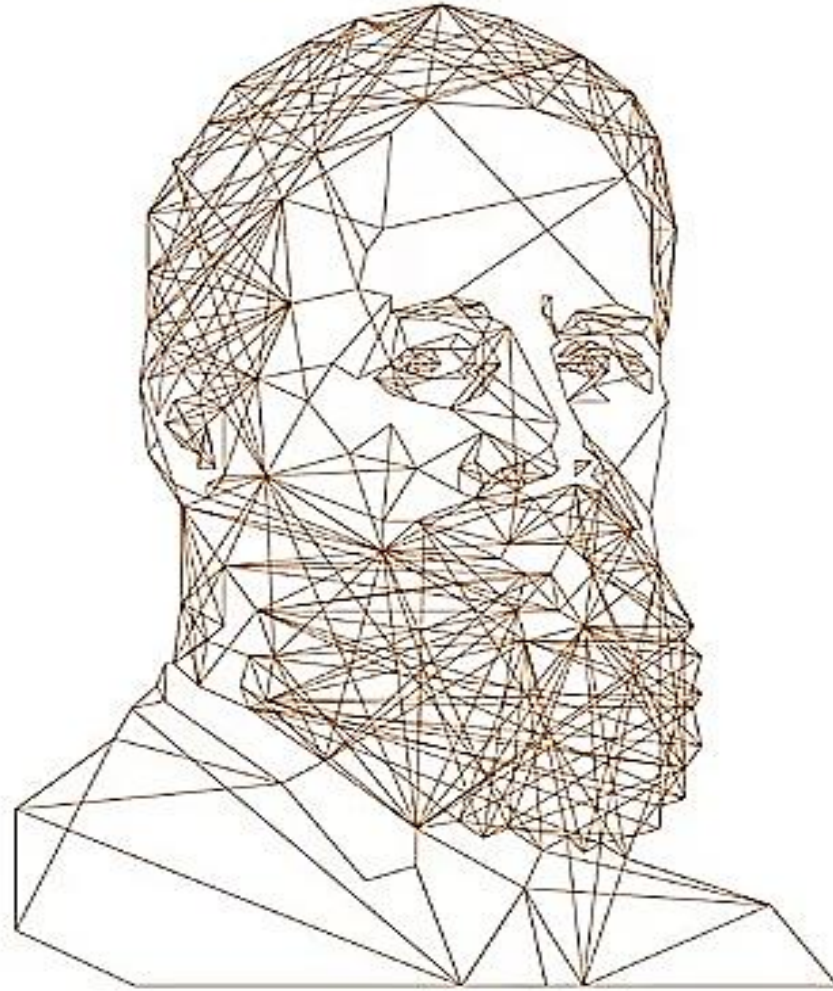
Or **raise your hand** if you have any questions during the presentation, and we will give you the stage!
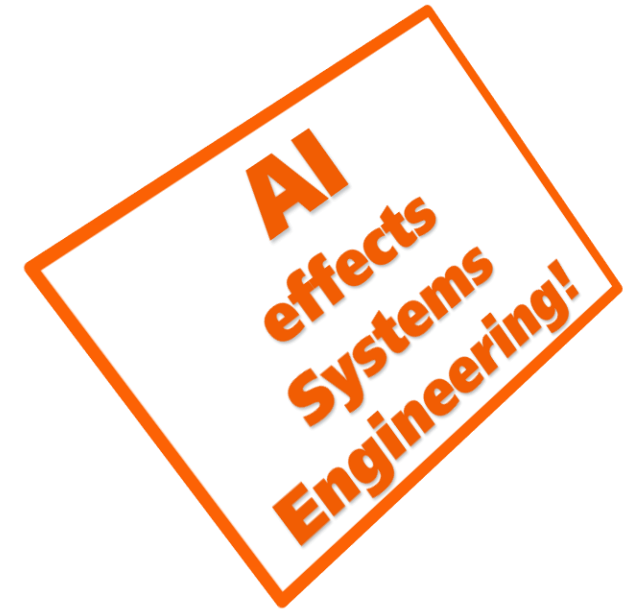
Agenda

16:30 - 16:45 hrs   Opening by Arend-Jan Beltman, Sioux Technologies

16:45 - 17:30 hrs   Keynote by Georgo Angelis, TU/e EAISI

17:30 - 18:00 hrs   Dialogue session
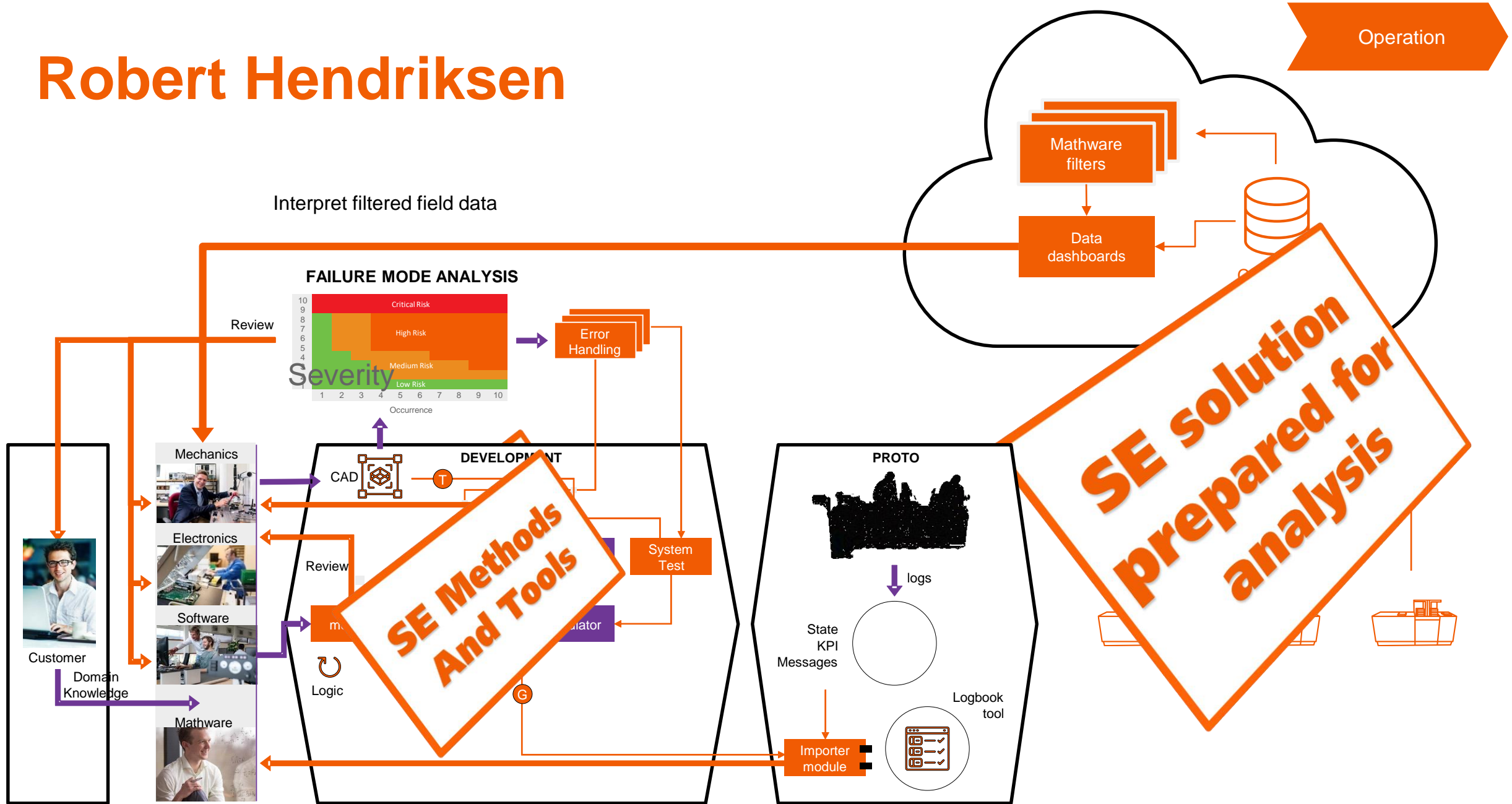
Jim Stolze

Algoritmisering, wen er maar aan!

Leven, werken en geld verdienen met kunstmatige intelligentie

AI effects Systems Engineering!

Robert Hendriksen

Interpret filtered field data

Mathware filters

Data dashboards

FAILURE MODE ANALYSIS

Critical Risk

High Risk

Medium Risk

Low Risk

Severity

Occurrence

Review

Error Handling

DEVELOPMENT

Mechanics

CAD

T

Electronics

Review

System Test

Software

Logic

G

Customer

Domain Knowledge

Mathware

SE Methods And Tools

PROTO

logs

State
KPI
Messages

Logbook tool

Importer module

SE solution prepared for analysis

Prof. Jan Bosch
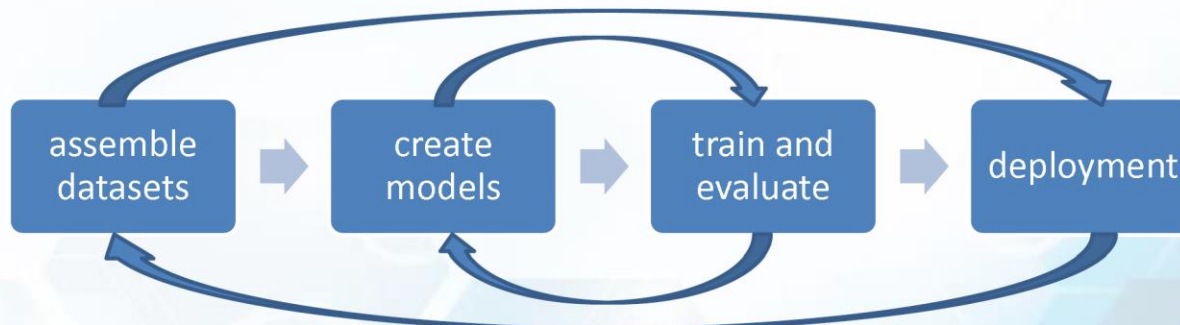
What is Systems Engineering?

Definition of Competence:

"Demonstrates
skills 1 **methods**
to handle **technology**
and m 3 ge the **domain(s)** 2
specific **complexity** with
appropriate **tools**" 4

Knowledge

Skill Ability

Competency
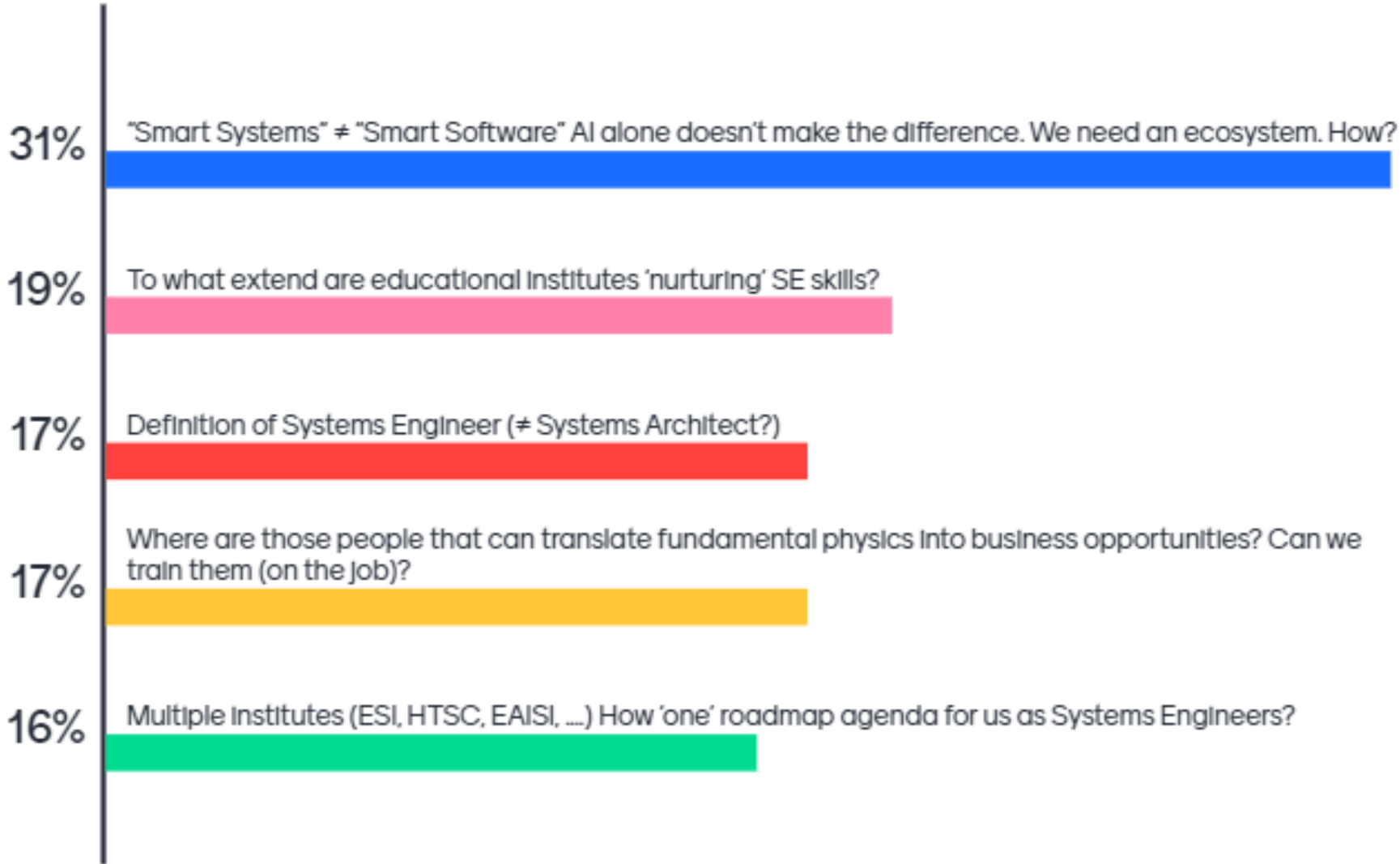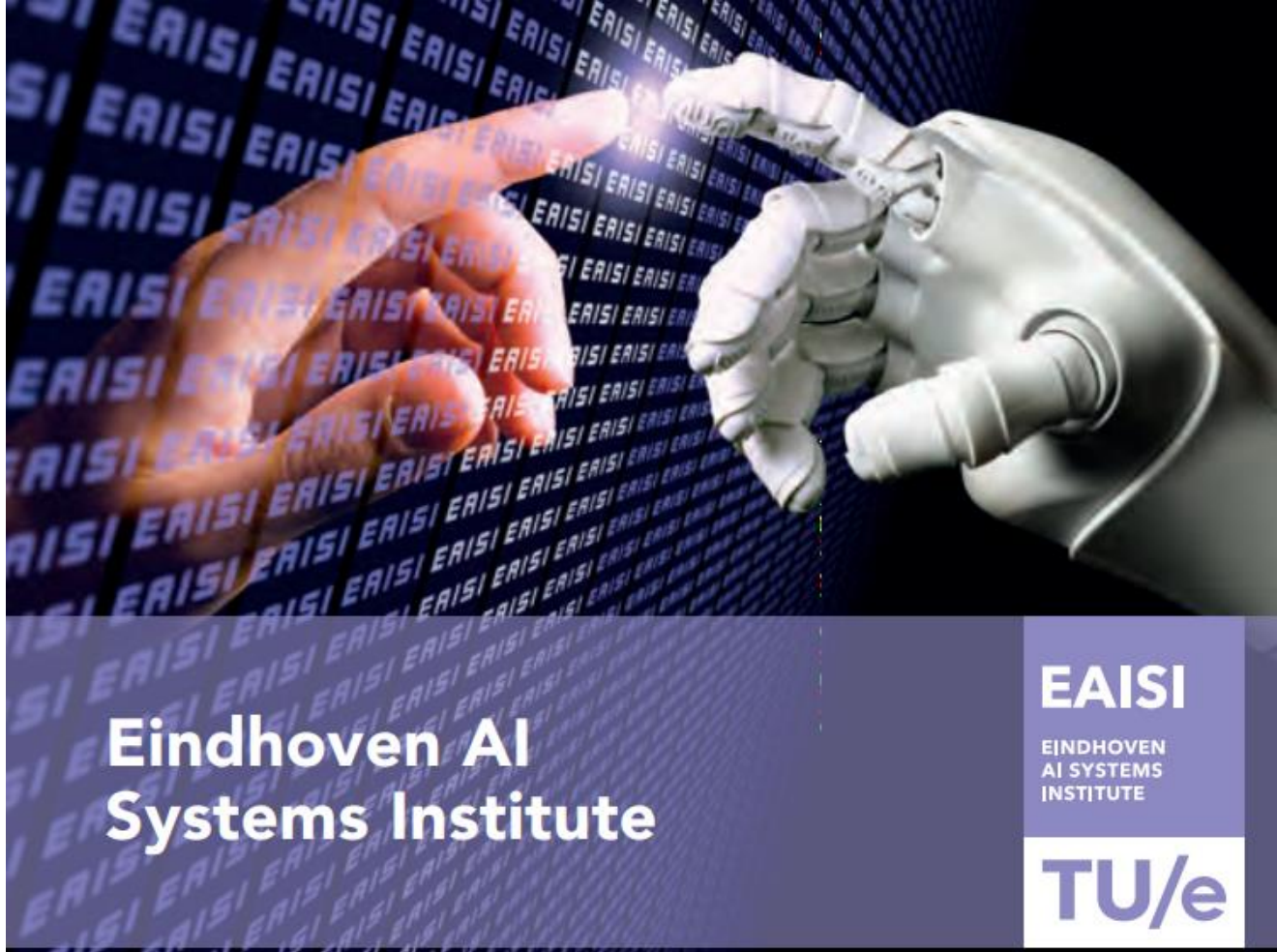
Session on:
Methods & Skills

Topics for session on Methods & Skills

1. Definition of Systems Engineer (≠ Systems Architect?)

2. To what extend are educational institutes 'nurturing' SE skills?

3. Where are those people that can translate fundamental physics into **business** opportunities? Can we train them (on the job)?

4. "Smart Systems" ≠ "Smart Software" AI alone doesn't make the difference. We need an ecosystem. How?

5. Multiple institutes (ESI, HTSC, EAISI, ….) How 'one' roadmap agenda for us as Systems Engineers?
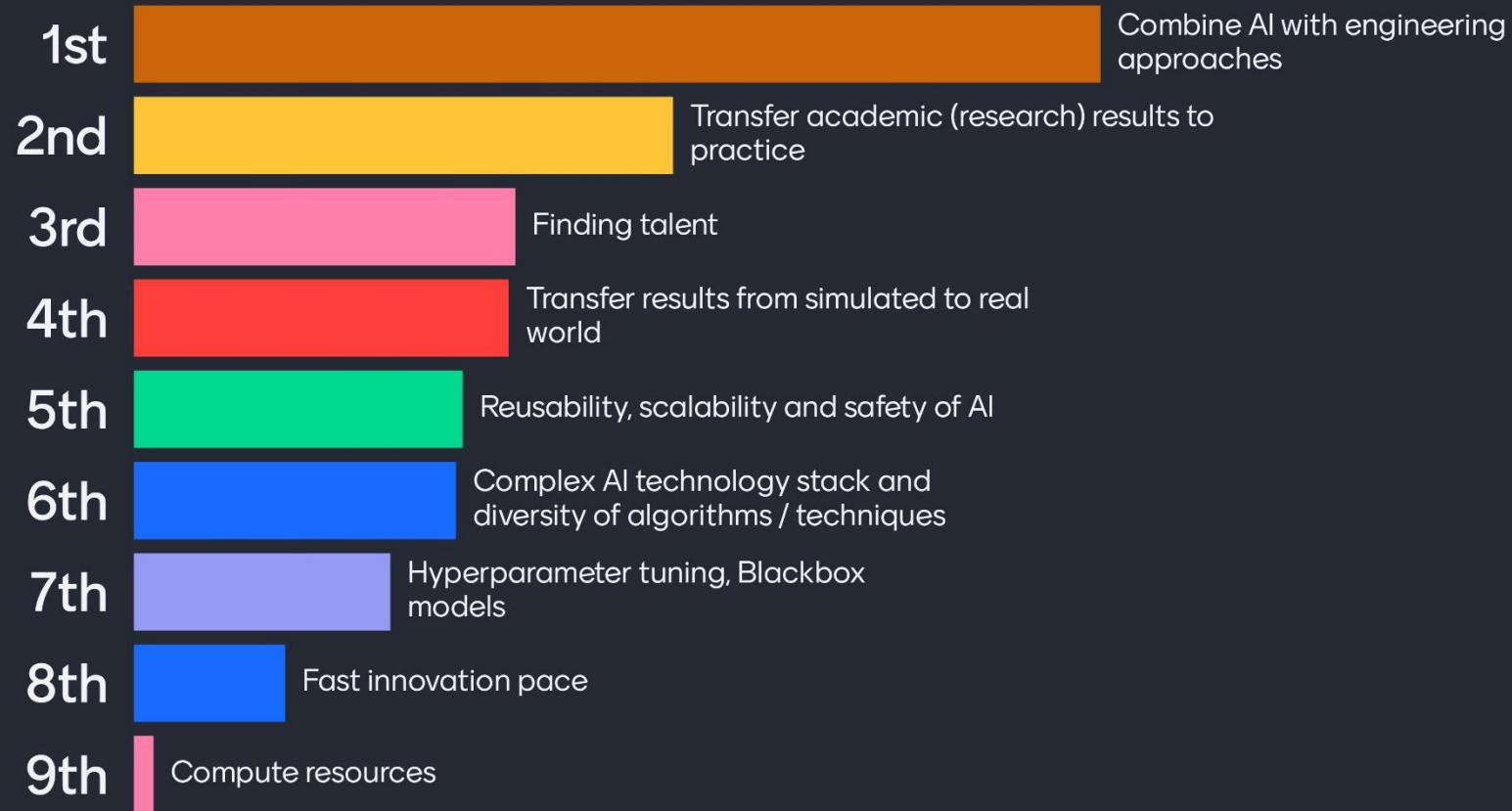
6. **??**

Methods & Skills

31% "Smart Systems" ≠ "Smart Software" AI alone doesn't make the difference. We need an ecosystem. How?

19% To what extend are educational institutes 'nurturing' SE skills?

17% Definition of Systems Engineer (≠ Systems Architect?)

17% Where are those people that can translate fundamental physics into business opportunities? Can we train them (on the job)?

16% Multiple institutes (ESI, HTSC, EAISI, ...) How 'one' roadmap agenda for us as Systems Engineers?

Georgo Angelis

Eindhoven AI Systems Institute

EAISI
EINDHOVEN AI SYSTEMS INSTITUTE
TU/e

"AI FOR THE REAL WORLD"

Dialogue session
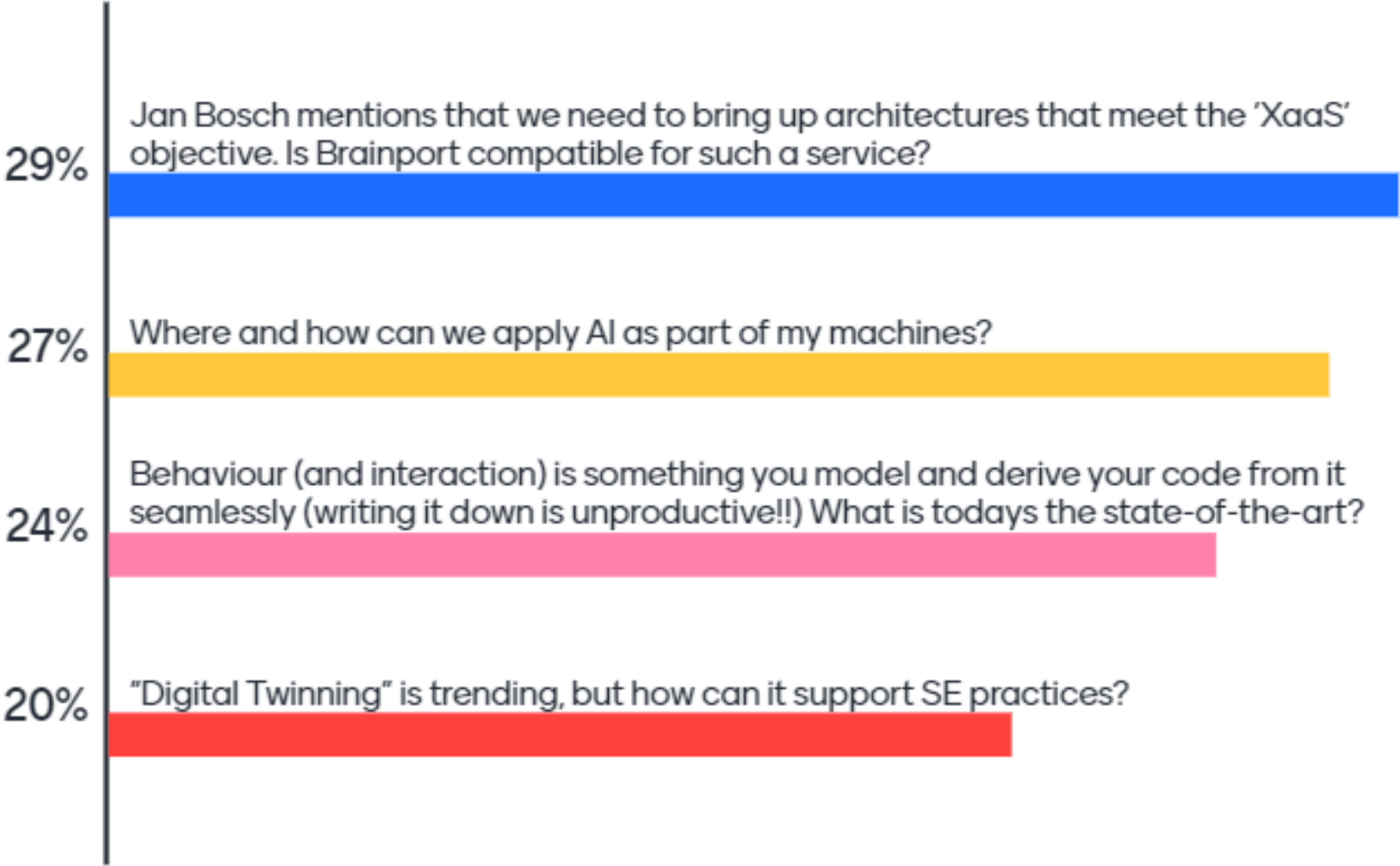
- Discussion about questions
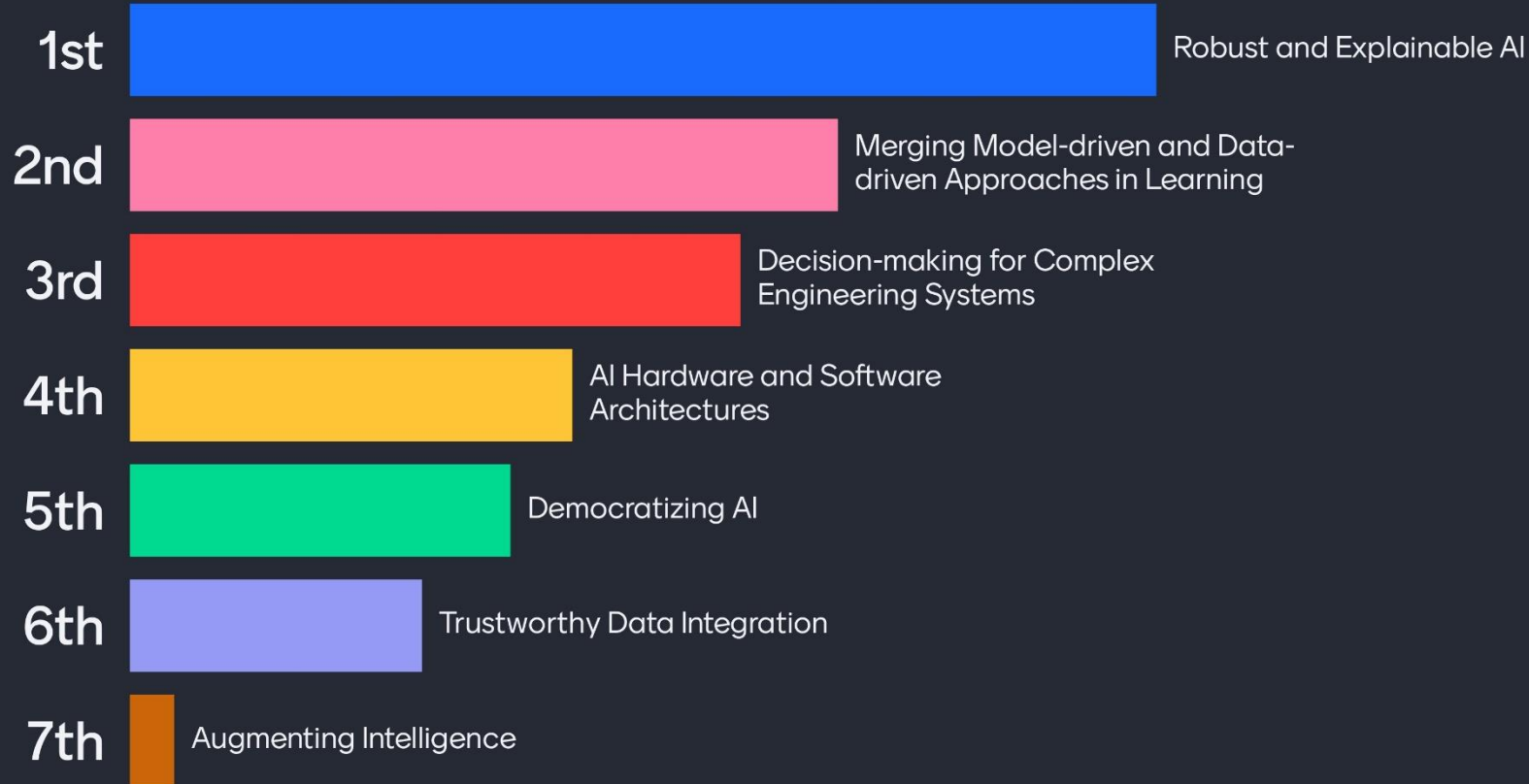
Save the date
theme session:

✓ 11 Nov 2020   Methods & Skills

■ 10 Feb 2021   Technology & Trends

■ 14 Apr 2021   Management

■ 09 Jun 2021   Tools

Technology & Trends
10 Feb 2021

29% — Jan Bosch mentions that we need to bring up architectures that meet the 'XaaS' objective. Is Brainport compatible for such a service?

27% — Where and how can we apply AI as part of my machines?

24% — Behaviour (and interaction) is something you model and derive your code from it seamlessly (writing it down is unproductive!!) What is todays the state-of-the-art?

20% — "Digital Twinning" is trending, but how can it support SE practices?

Source of
your technology

www.sioux.eu