

SMARTEX.AI

From a Physics student to a startup CTO:
Lessons learned

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1 ABOUT ME

2 ABOUT SMARTEX

3 YOUR NEXT STEPS



Topic #1

About me

- 27 year old
- From Penafiel, currently living in Gaia
- Portuguese & Congolese
- MSc Engineering Physics @ FCUP & FEUP
- Tech nerd, love for Industrial applications
- Co-founder and CTO at Smartex.ai

Pitch



16 year old me at Escola de Física 2011, amazed by Physics like you guys :)





LESSON LEARNED #1

WE ARE ALL THE SAME, EVERYWHERE!

Having 2 completely different backgrounds while growing up got me to understand this lesson early in my life. Took me a few years until I realized how important this is!





LESSON LEARNED #2

NO SHORTCUTS IN LIFE. WANT IT, GO GET IT!

And you have to strive to be the best at it - while being
humble enough to keep evolving.

This applies to our studies, sports and work.
There almost no mad genius - talent is overrated!



WHO WANTS TO PURSUE PHYSICS IN COLLEGE?

“

PHYSICS IS THE BEST MAJOR TO TAKE IF YOU DON'T
KNOW WHAT YOU WANT TO DO WITH YOUR LIFE.

RICHARD FEYNMAN

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WHY PHYSICS?



OPTIONALITY

Physics majors have a high degree of optionality, meaning that the areas that you can specialize in are diverse enough to be completely uncorrelated.

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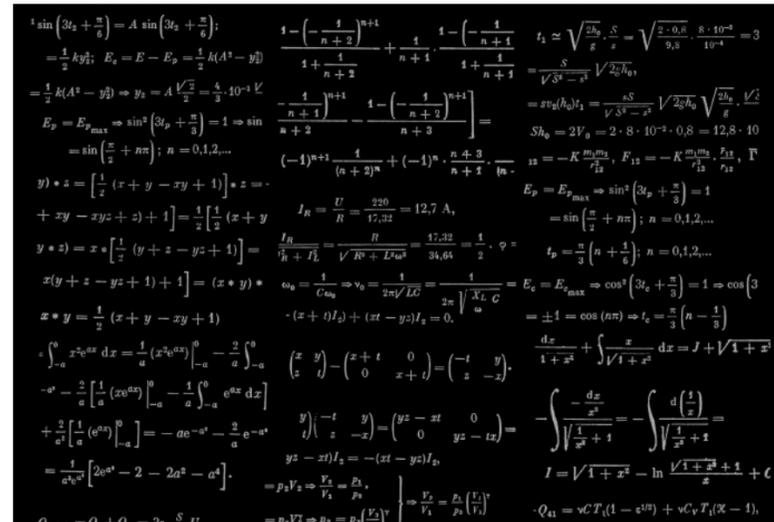
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SMALL TEAMS IS GOOD

Small work groups, from students to professors, mean deeper relationships. Which in turn mean a higher value future professional network.

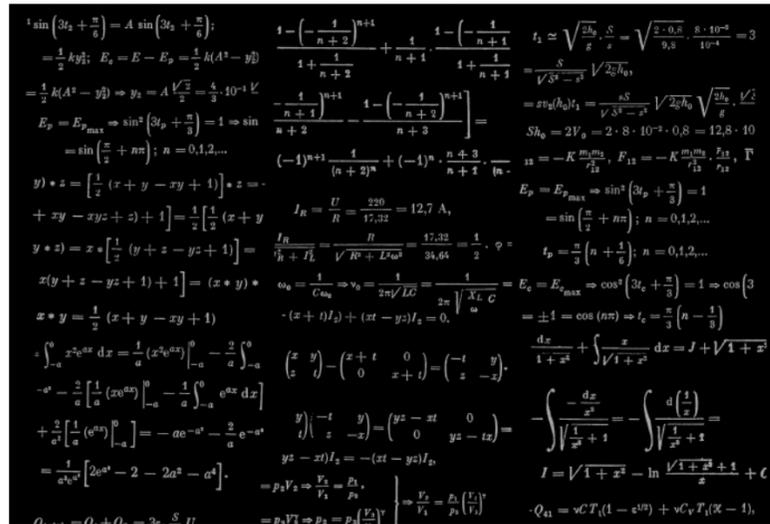
WHY NOT PHYSICS



IT MAY FEEL TOO THEORETICAL

The first years of Physics, which have a lot in common with other Engineering, are foundational and theoretical. But this might not be a problem for you.

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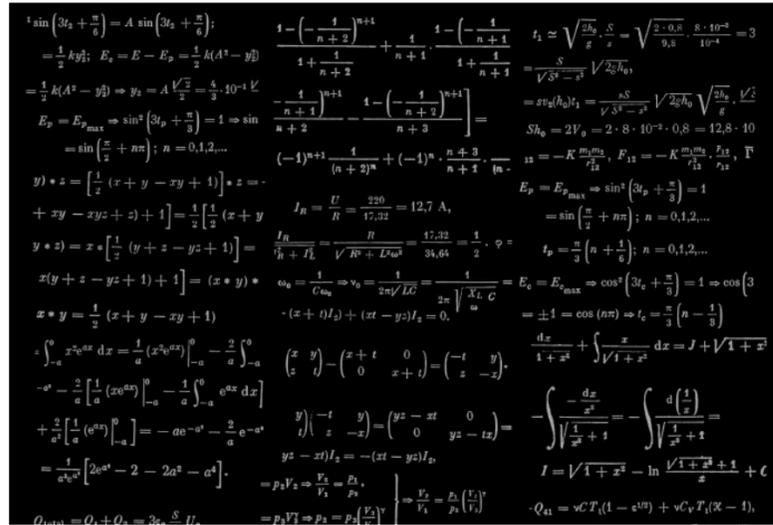
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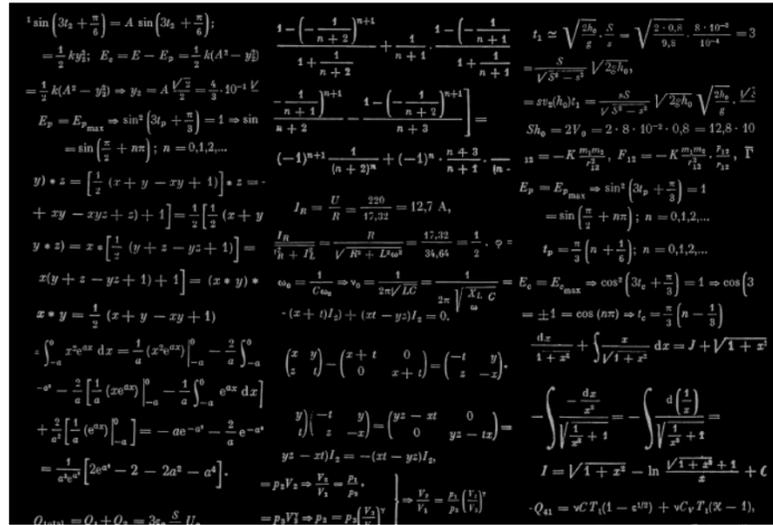
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The fact that the optionality at high may come at the cost that it feels harder to pick exactly what you like. Just try everything!

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MARKET IS STILL GETTING TO KNOW YOU

Despite the rising market demand, there are still less connections to the business world than other majors. Go get it yourself!

Topic #2
About Smartex

SMARTEX.AI



Pitch

\$100B+ is lost by textile & garment manufacturers every year due to **defective** production

1T+ liters
of wasted water
every year

10B+ Kgs
of CO₂ emissions
every year

100B+ kWh
of energy wastage
every year

- human inspection



– zero
traceability



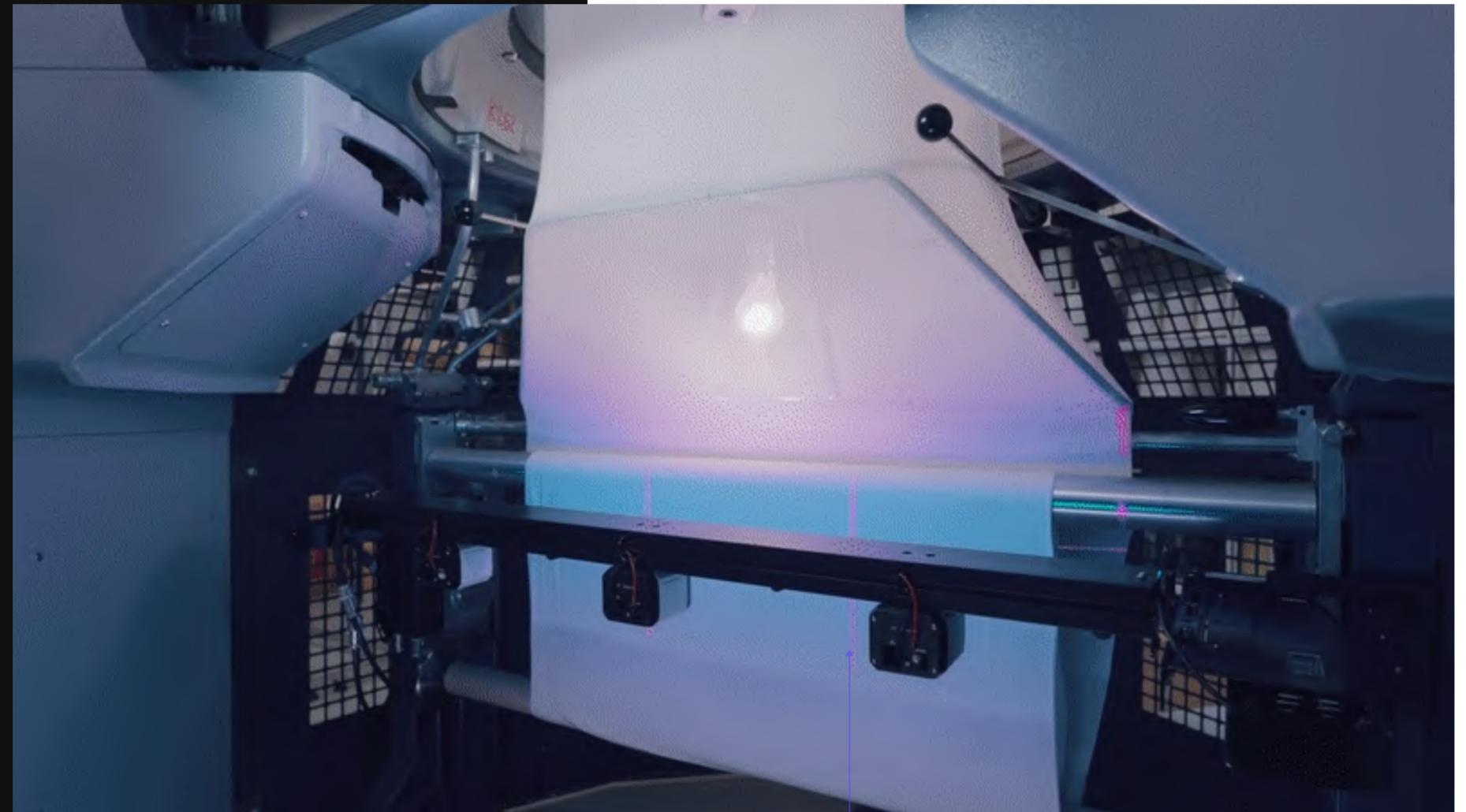
solution

0% TEXTILE WASTE

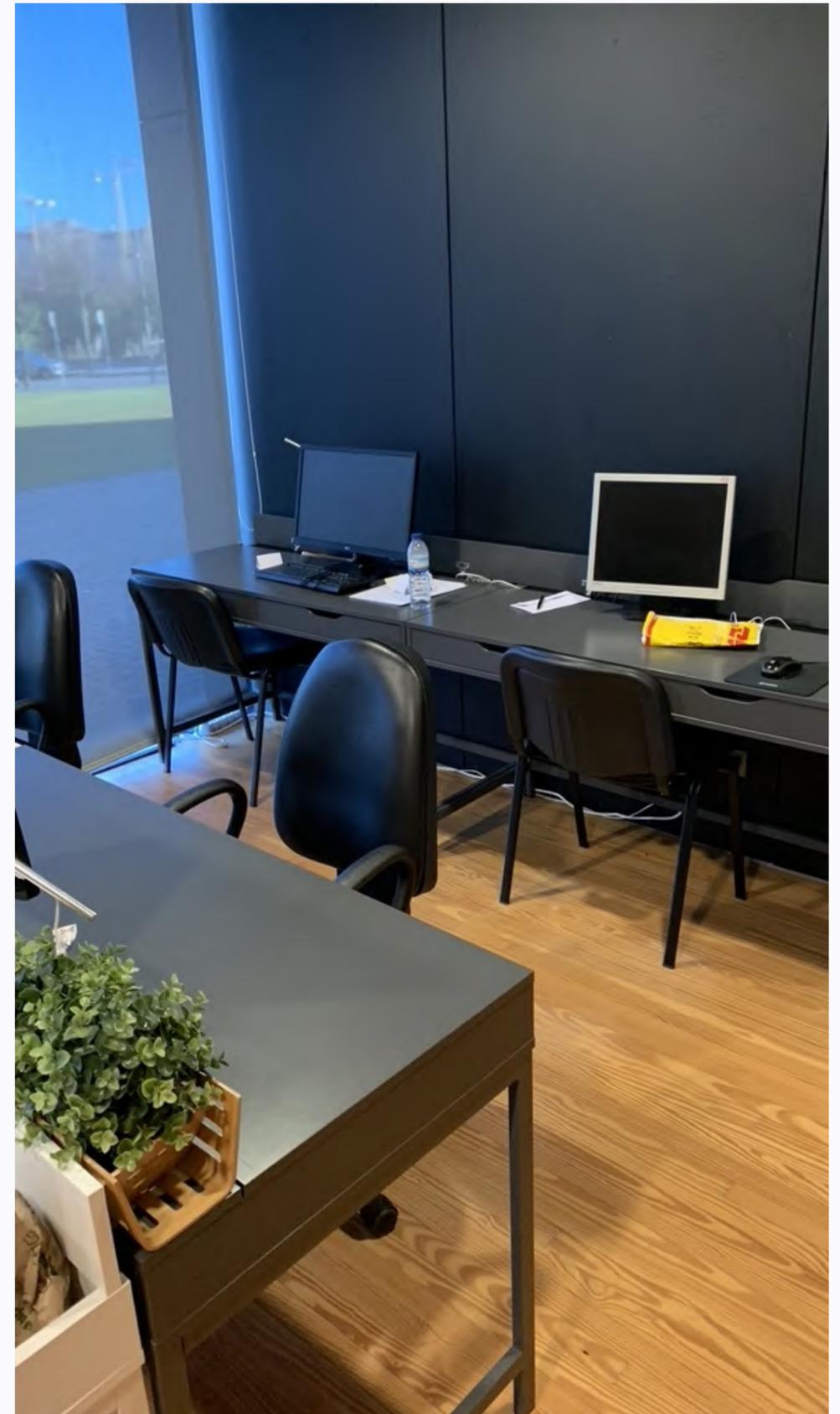
> PLUG&PLAY CAMERA SYSTEM

> MACHINE LEARNING

> TRACEABILITY PLATFORM

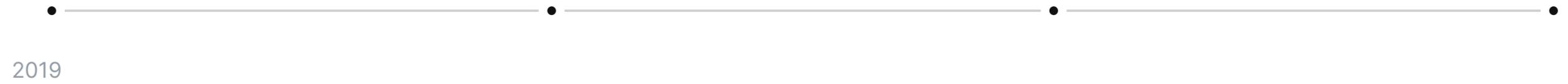


📷 cameras



ROADMAP

2019-2022



2019

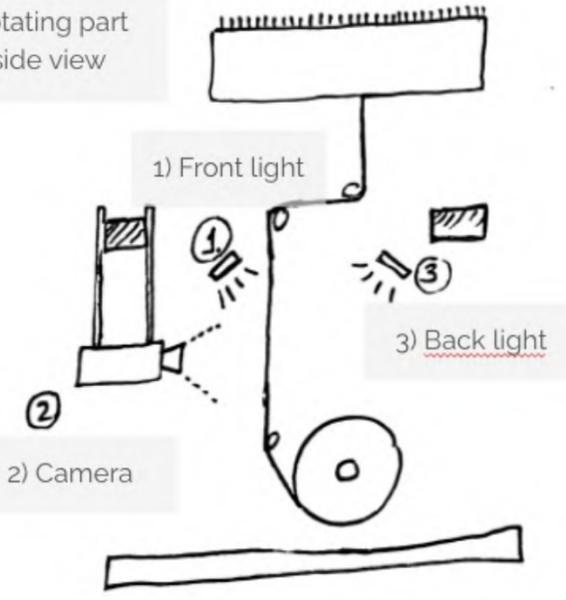
FOUNDED SMARTEX.AI

Main developments done in Shenzhen,
China

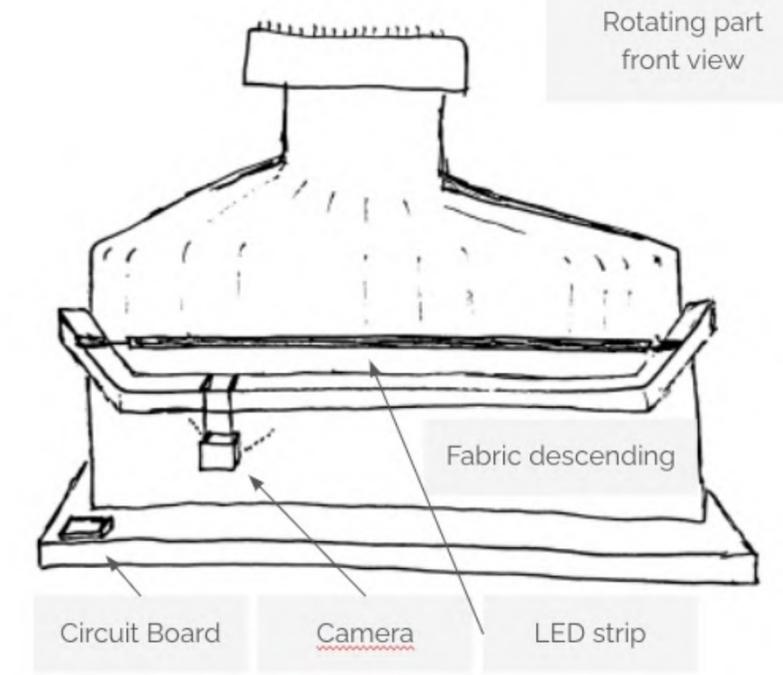
Technical Sketch

Circular Knitting Machine with **SMARTEX**

Rotating part
side view



Rotating part
front view



HAX

SMARTEX.AI IN SHENZHEN

HAX, 2019

From first scrappy prototypes to sellable product

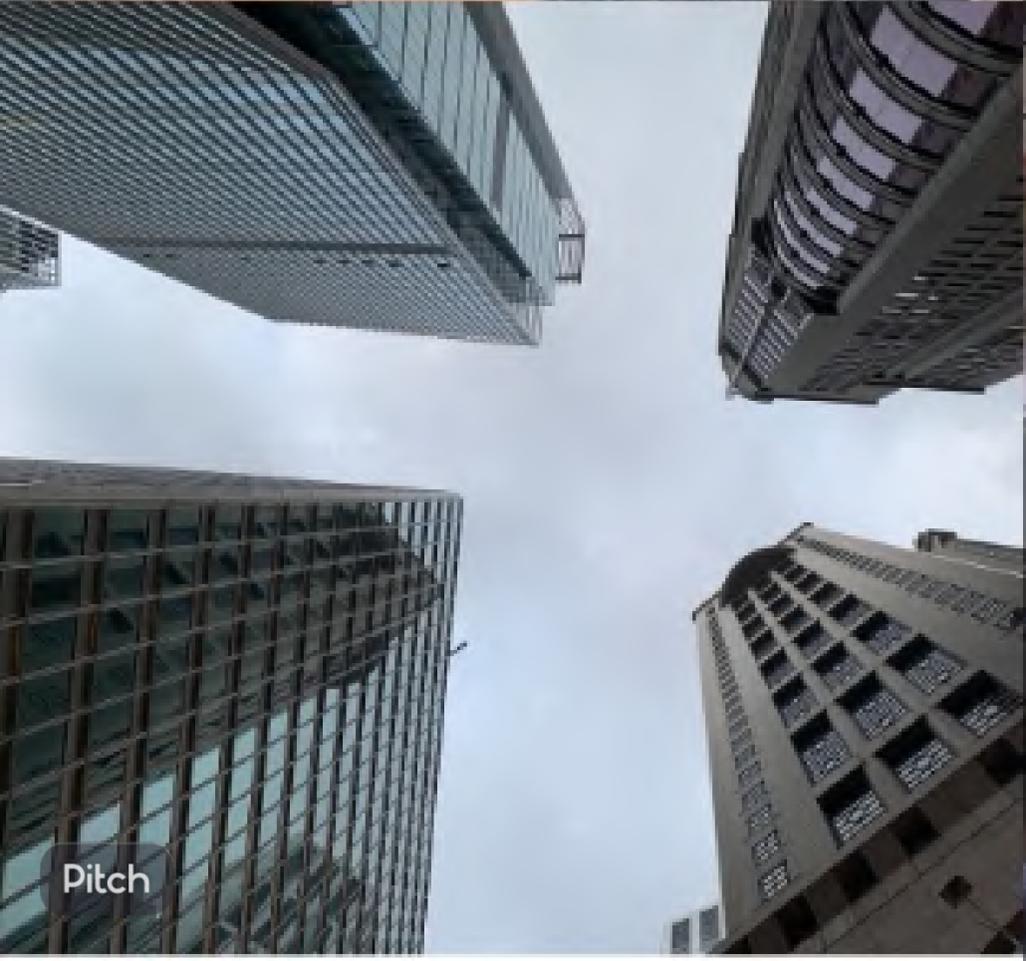
HAX accelerator - first investors in Smartex.ai

14h long days, every day

World electronics center - very rapid product iteration

LOTS of support of HAX staff & community





ROADMAP

2019-2022

2019

FOUNDED SMARTEX.AI

Main developments done in Shenzhen, China

2020

PRODUCT DEVELOPMENT

Pilots with partners and factories in Italy, Portugal and Turkey



KERING
BALENCIAGA GUCCI

FASHION
FOR
D

TOMMY HILFGEI
PVH CALVIN KLEIN



CHANEL



PRODUCT DEVELOPMENT

PORTO, 2020

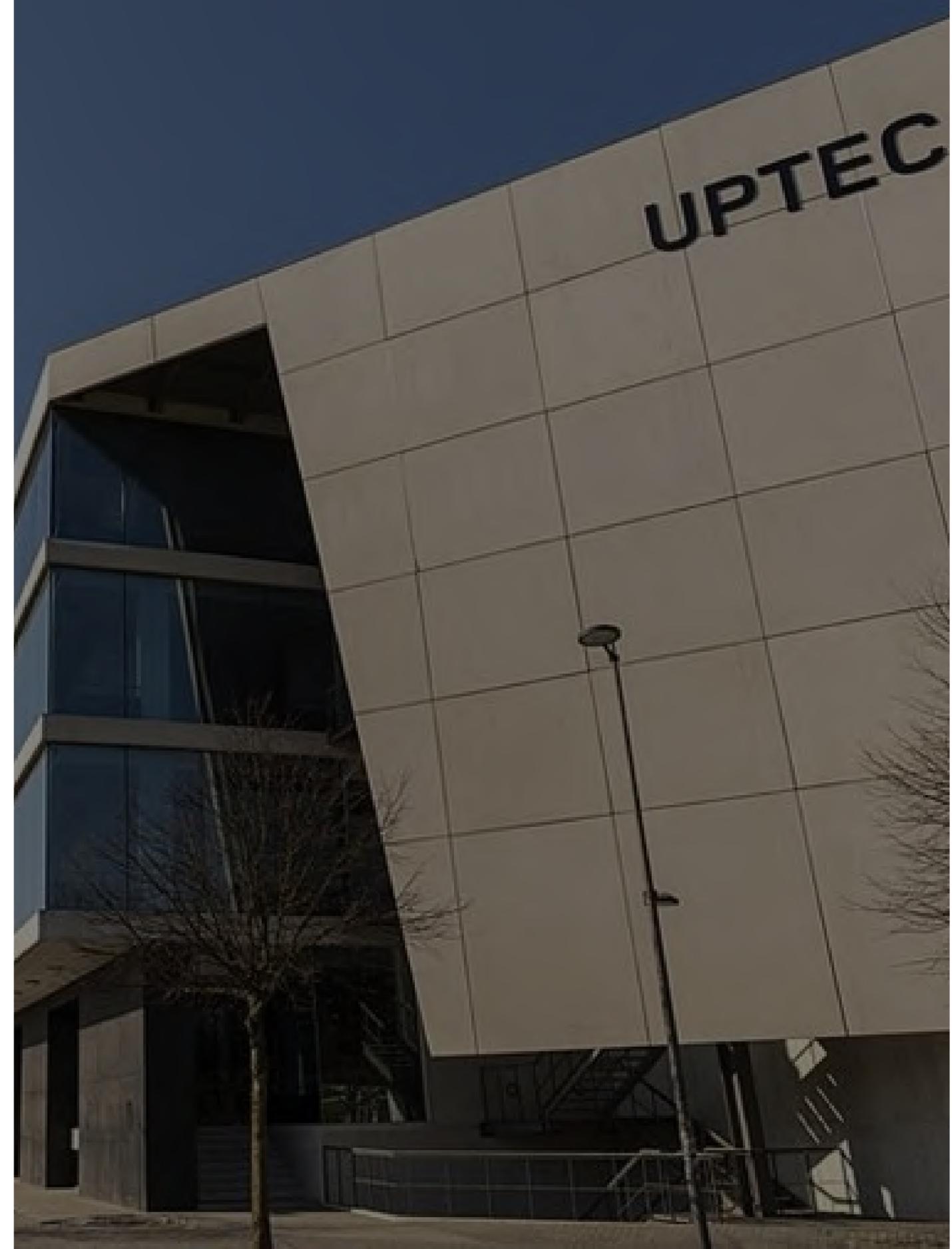
Seed round of \$2.6M to start manufacturing and sales

First hires (and fires)

Covid hit - everything shutdown

Extreme focus on product & customers feedback

Not much community events



ROADMAP

2019-2022



FIRST SALES

EUROPE & TURKEY, 2021

Manufacturable & repeatable product now

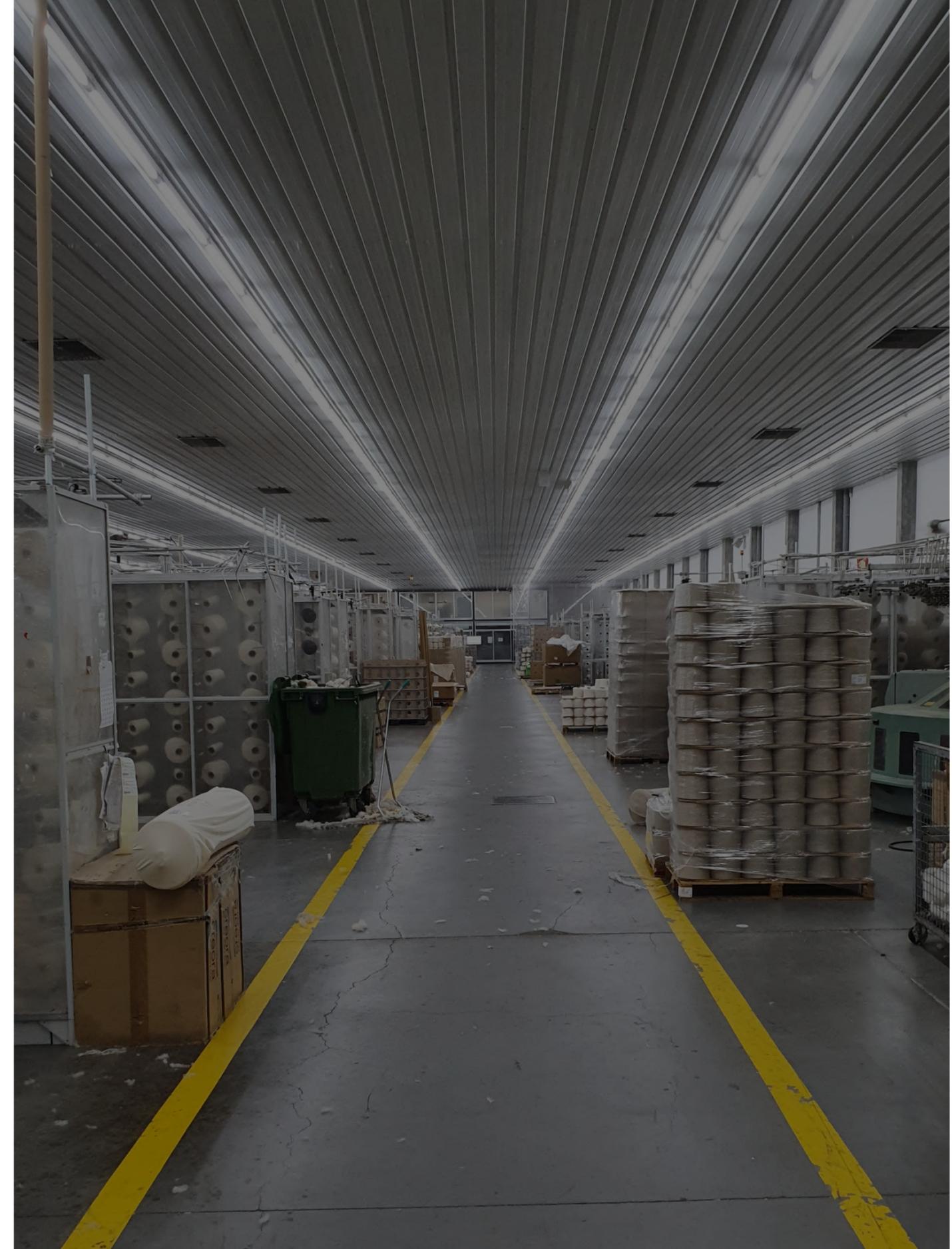
Went from 0 to 1 in a year - product-market fit

Business & team growth

Met a lot of founders from the Porto ecosystem

Lot advice on company building, engineering, sales, etc

Also started giving back to the community



ROADMAP

2019-2022



NEW MARKETS & PRODUCTS

WORLD, 2022

Almost 3x the team in the last 6 months

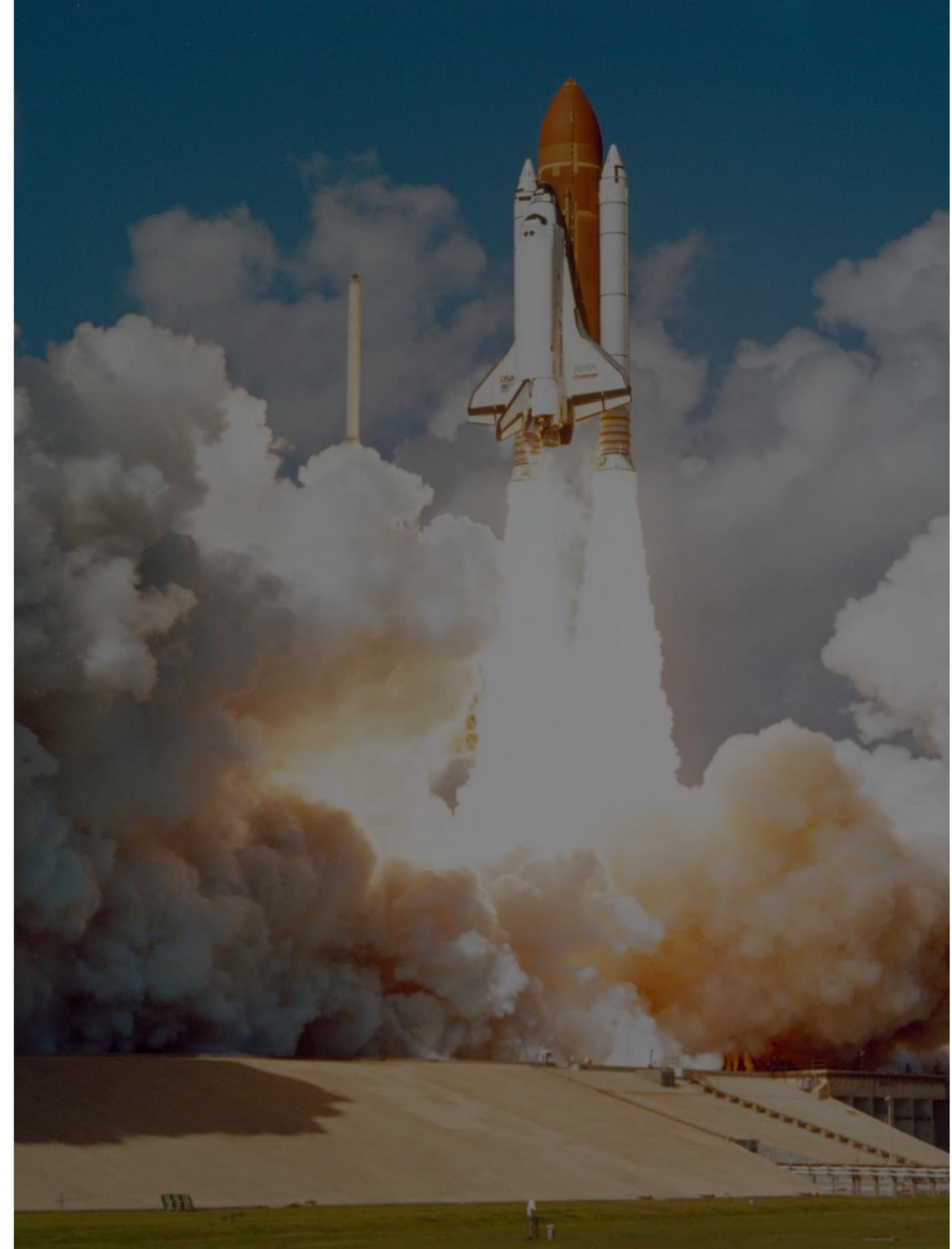
Developing new products to assess new clients needs

Speeding up & scaling in existing markets

Opening new flagship markets

Even more advice on company building, engineering, sales, etc

Even more giving back to the community



waste prevented so far:

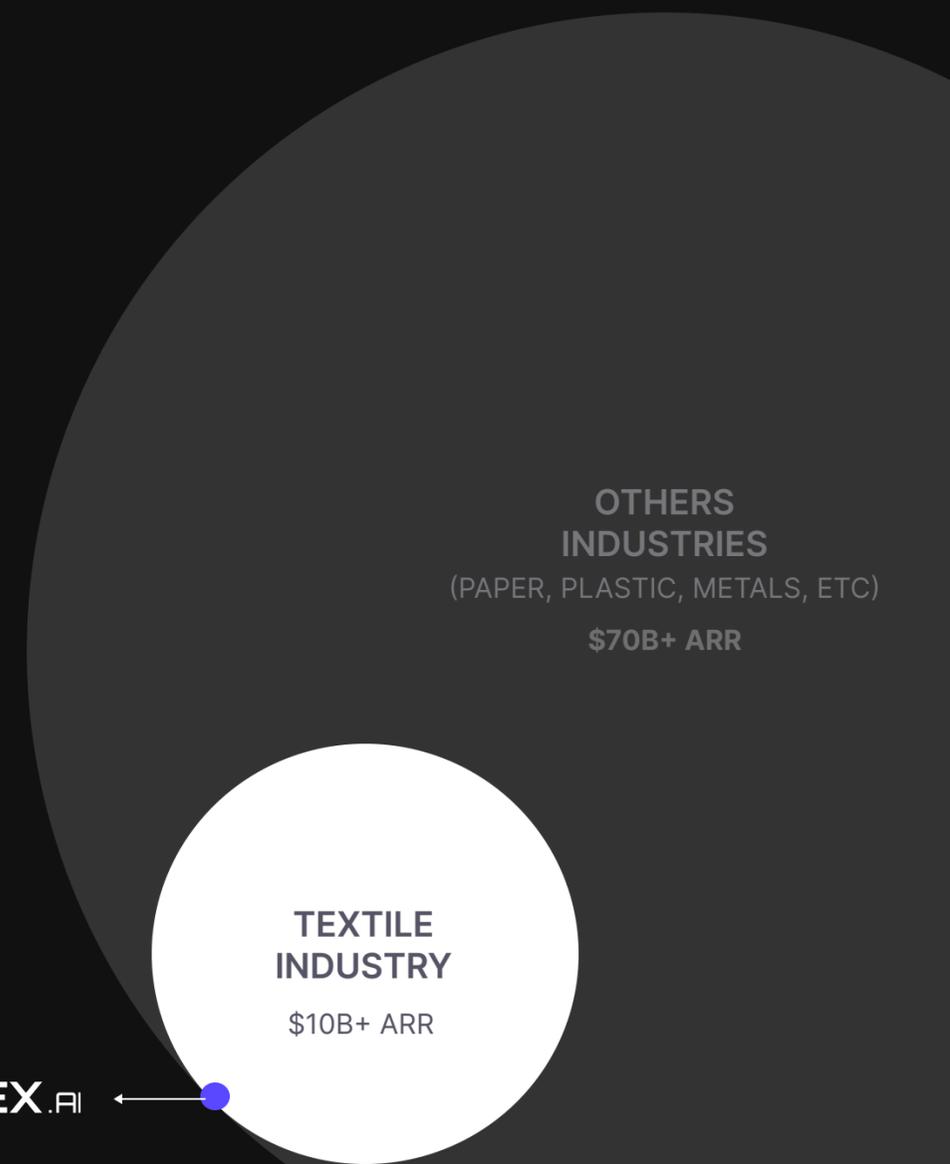
🚰 Water: **24 000 000 L**

👕 Fabrics: **215 000 kg**

⚡ Energy: **2 000 000 kWh**

🌱 CO2 emissions: **480 000 kg**

...and we're just getting started!



SMARTEX.AI ←

OUR HOME:

UPTEC



- Main specie: **Physics (FCUP)**
- Main faculty: **FEUP**
- Nationalities: **11**
- Patents: **6** and counting
- Headcount: **85** (~65 in tech)





Areas of development & hiring

Hardware

Software

Electronics

Industrial

Optics

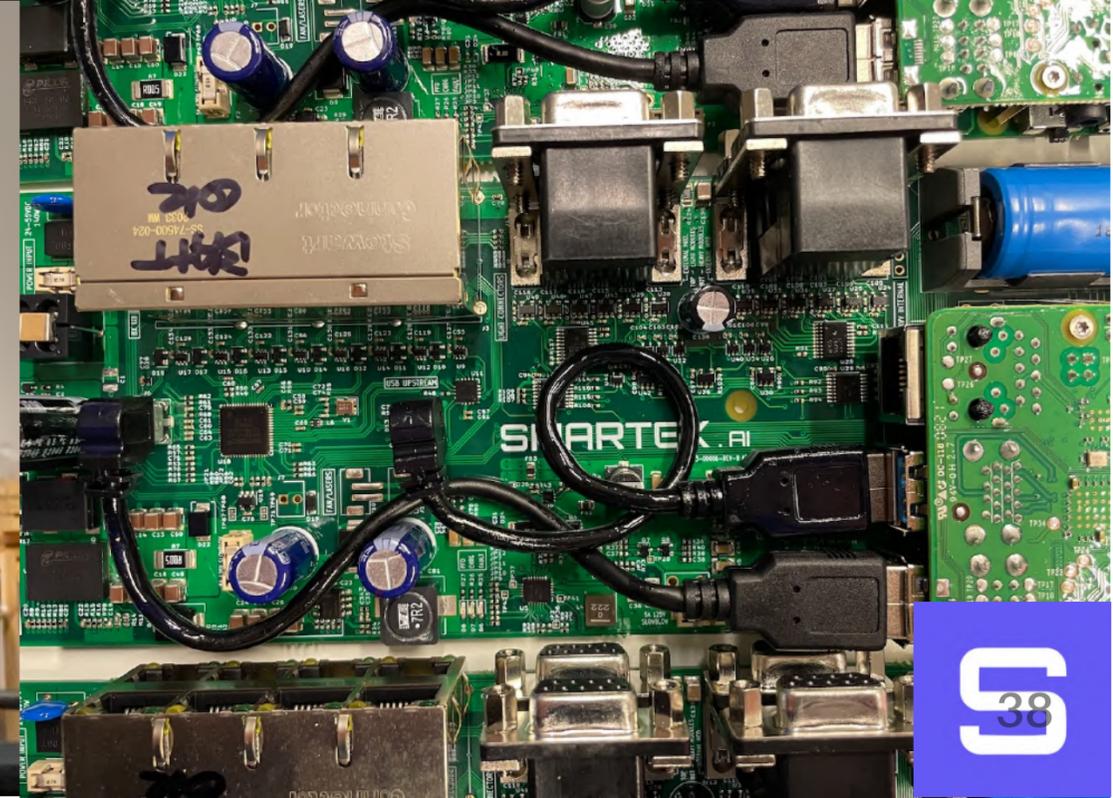
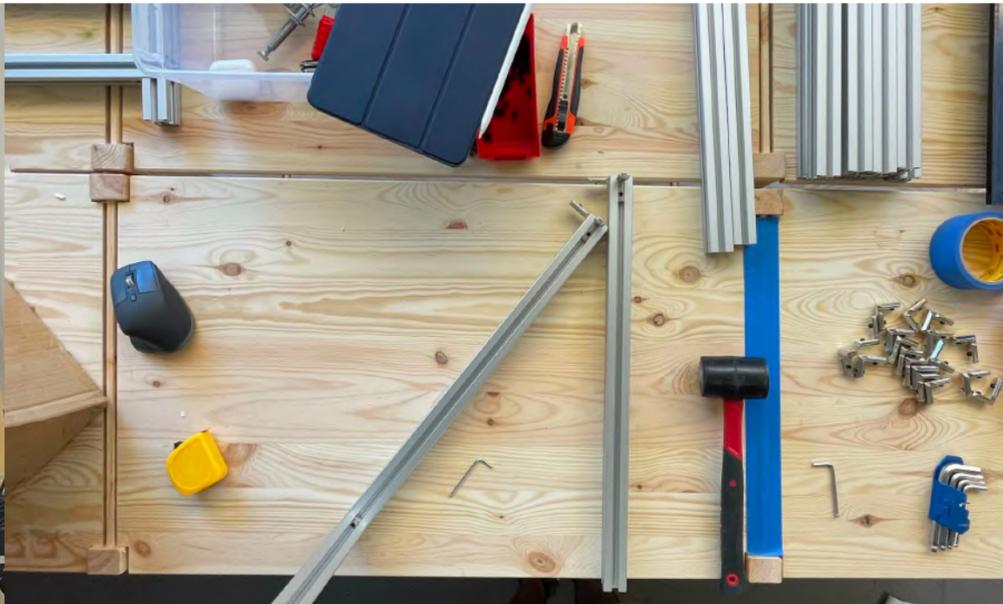
Design

Artificial Int.

Machine Learn.

Big data

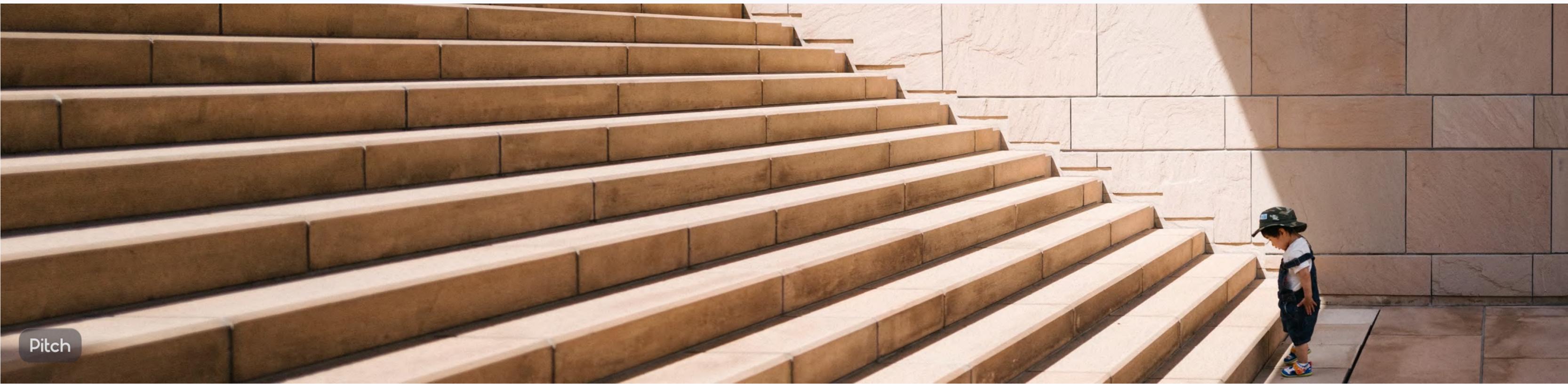
Networks



Topic #3

Your next steps

SMARTEX.AI



“

THE ONLY FAILURE IN YOUR 20'S IS INACTION.
THE REST IS TRIAL AND ERROR.

“

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THE REST IS TRIAL AND ERROR.

TONY FADELL
FATHER OF THE IPHONE AND OUR MENTOR



THANK YOU!
WHEN DO YOU APPLY FOR SMARTEX?

contact
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