

Grand Challenges Scholar Program

WORKSHOP

UFMG

← EMBRAER

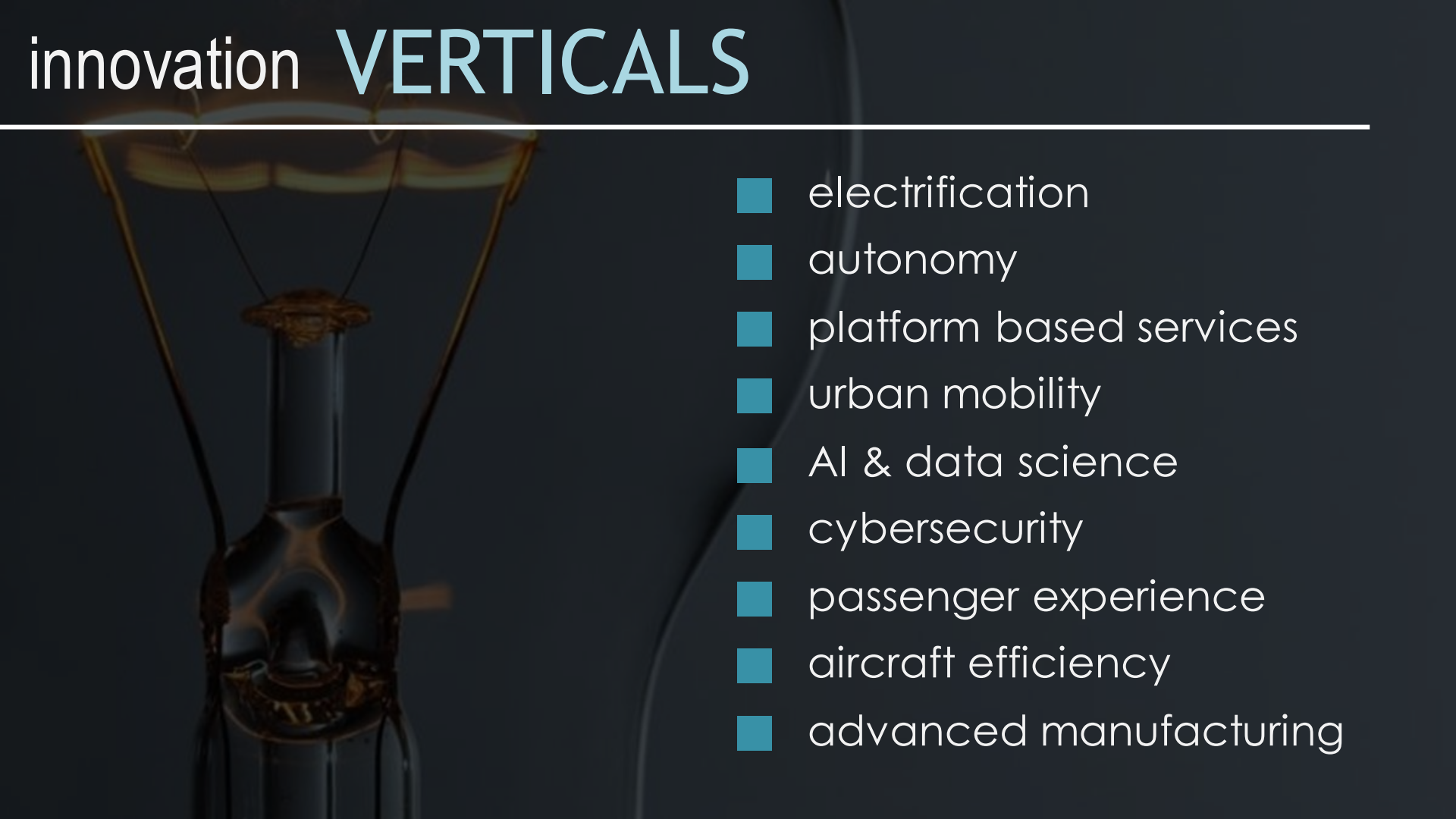
Andre Gasparotti

August/2019

GCSP value

- Awareness and stimuli to create a better world in the future
- Exercising new competences through challenge based learning

innovation VERTICALS

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- electrification
 - autonomy
 - platform based services
 - urban mobility
 - AI & data science
 - cybersecurity
 - passenger experience
 - aircraft efficiency
 - advanced manufacturing

urban MOBILITY

- New business models, technologies or products related to aircraft and services operating in urban and short distance intercity future environments. This vertical includes the eVTOL project, air traffic control, smart cities and other aspects.



PEE

Program Engineering Specialization

WE DEVELOP
GREAT HUMANS

Professional Master`s in
aeronautical engineering,
taught on company
premises.

More than **1,300** engineers
trained since **2001**.

PEE engineering specialization program

Phase 1 - Fundamentals

- Complexity (Context)
- ITA classes (Theory)
- Embraer (Application)

Phase 2 - Specialization

- Tracks
- Social & Technical Integration
- Thesis selection

Phase 3 - Integration

- Lifecycle design: personas, value proposition, concept, pre design, business
- Teamwork (multidisciplinary teams)

Phase 4 – Master's Thesis

- Theme
- Industrial & Academic supervisors
- M.Sc. Diploma

class 23



- Turbo-prop
- Twin Aisle
- Competitive with Boeing 737 9 max

class 24



- Maritime border control
- Satellite control

class 25



 ATLAS



- Hybrid electric
- Vertical, short & conventional take off



 colibri



A hand is shown in the upper left, placing a puzzle piece onto a larger puzzle. The puzzle pieces are dark green with a subtle pattern. The background is a dark, muted green.

SKILLS

Engineers

EXPECTATION

seek **BALANCE**

SOFT SKILLS

theoretical basis – creativity – adaptability –
business view – entrepreneurship – curiosity -
experimentation – communication – empathy –
ethics – boldness

TECHNOLOGICAL SPECIALIZATION

SKILLS

theoretical basis – creativity – adaptability – business view –
entrepreneurship – curiosity – experimentation – communication
– empathy – ethics – boldness

challenge based learning
STIMULATED by environment

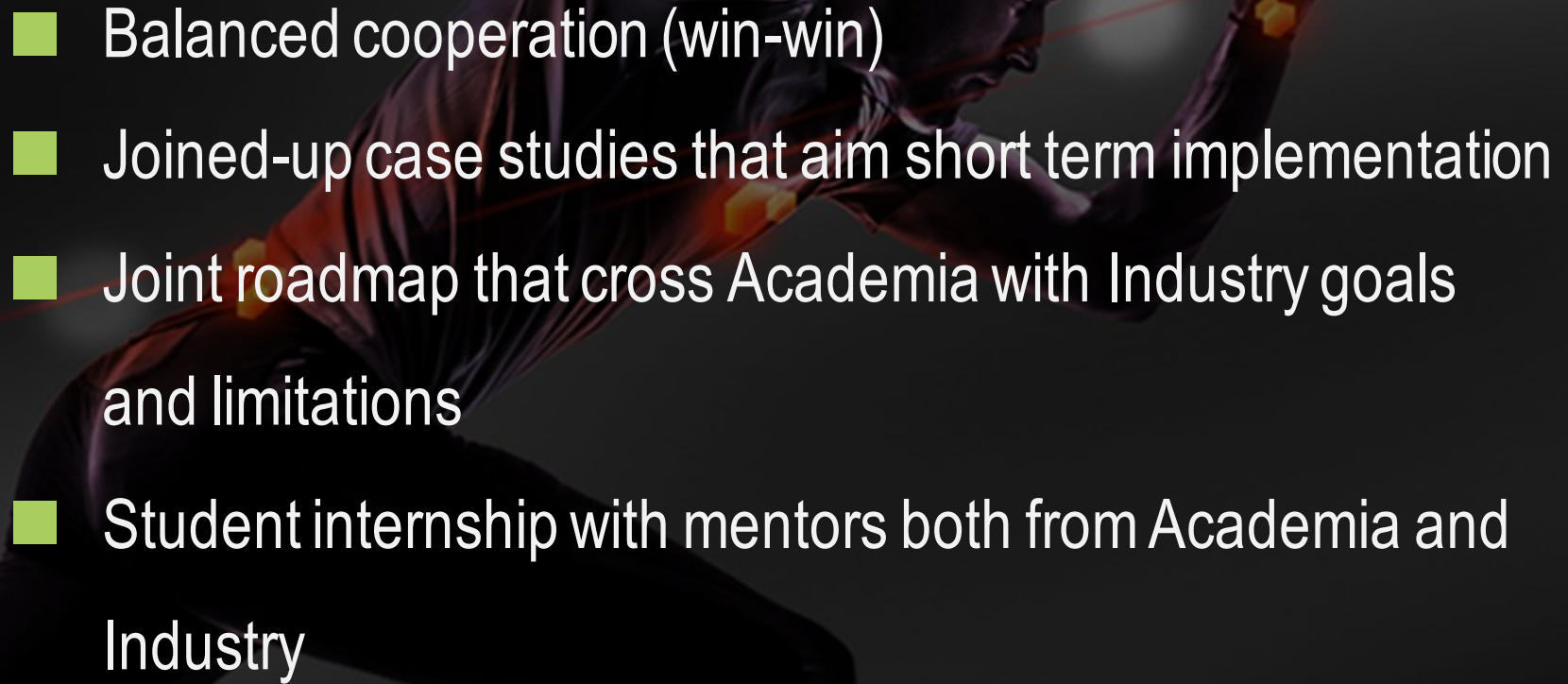
fast prototyping, radical collaboration & co-creation, making
connections among unusual subjects, discovery skills based
on business awareness, multidisciplinary & multicultural teams,
making decisions with uncertainty, high impact results

LAB

A hand is shown in the upper left, placing a puzzle piece onto a larger puzzle. The puzzle pieces are dark green with a lighter green pattern. The background is a dark, muted green.

Industry & Universities

COOPERATION

- 
-
- Balanced cooperation (win-win)
 - Joined-up case studies that aim short term implementation
 - Joint roadmap that cross Academia with Industry goals and limitations
 - Student internship with mentors both from Academia and Industry



VIDEO



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THANK YOU

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