



The Iby and Aladar Fleischman
Faculty of Engineering
Tel Aviv University

Loving the problem
is the greatest way to
invent



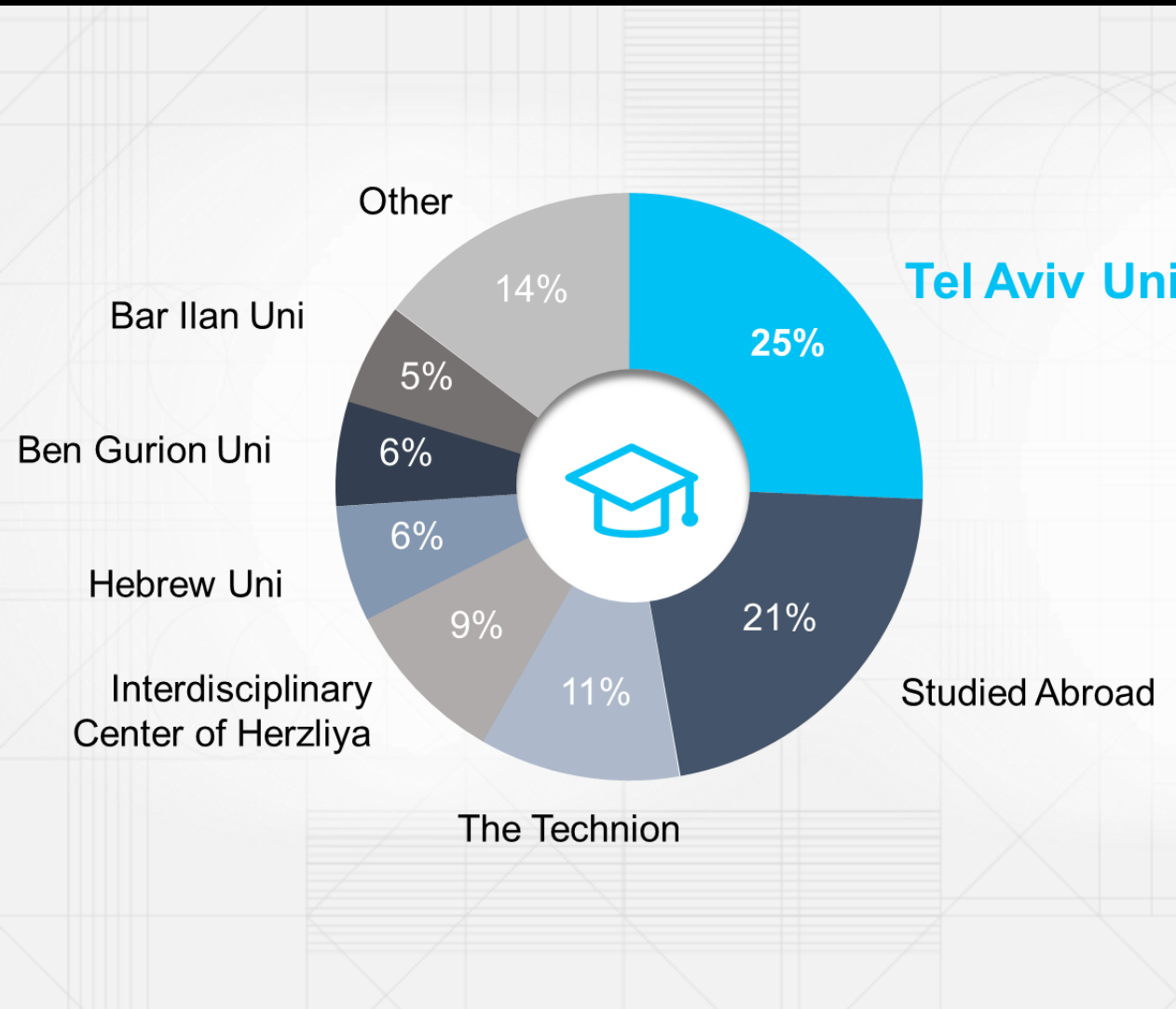
TEL AVIV UNIVERSITY
Pursuing the Unknown

●●● Tel Aviv-2nd Most innovative City (after SF)



Loving the problem
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●●● Tel Aviv University – 25 % of Israeli Startups



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Tel Aviv University: Facts and Figures

1st

A choice of students and employers in Israel
Established 1956

150,000

Alumni

1,000

Senior faculty

30,000

Students, of whom 40% are
at the graduate level

400

Laboratories

3,500

Research projects annually

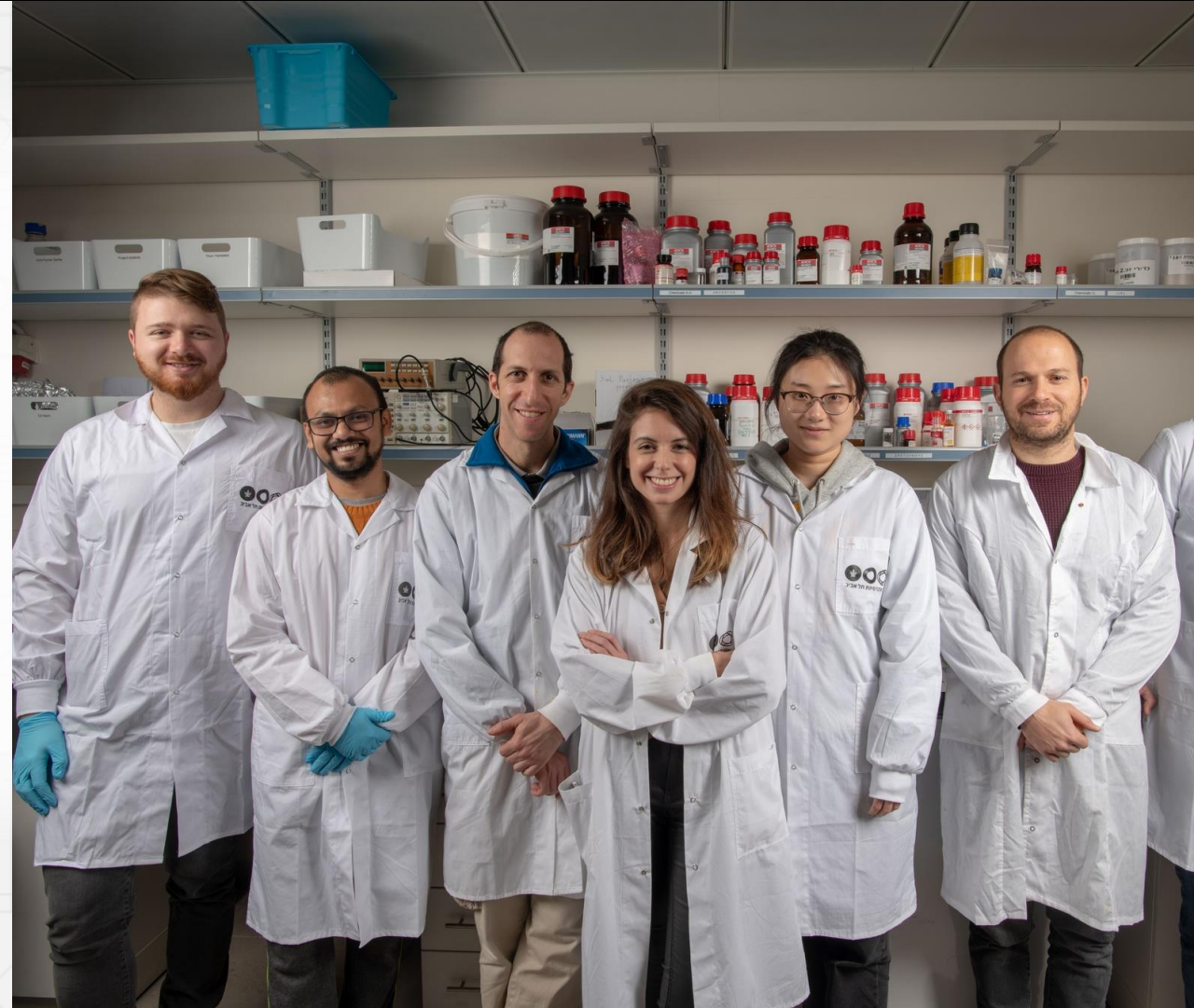
200

Acre campus



●●● Faculty of Engineering: Facts and Figures

4500	Students
1500	Graduate students
123	Faculty members
\$ 300	Million VC funding raised by faculty members
13,000	Alumni
100%	Alumni Recruitment
35	Industrial Affiliate Partners



●●● Six academic units

- 3000 undergraduates
- 1500 graduates



Digital Sciences
for Hi-Tech



Material Science and
Engineering



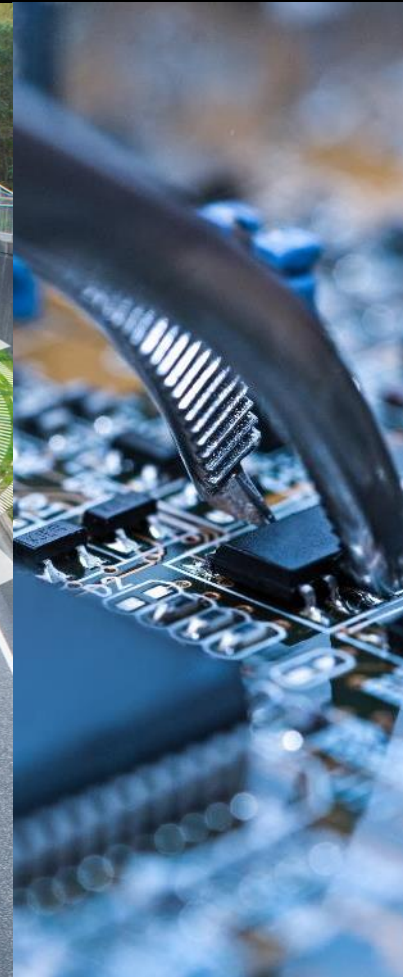
Biomedical
Engineering



Mechanical
Engineering



Industrial
Engineering



Electrical
Engineering

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●●● Research Priorities - Faculty of Engineering

AI, smart mobility and transportation, Big data Analytics

Renewable energy and water

Brain-machine technologies, electronic tattoos

IOT: sensors for air quality, health, motion, smart cities,

3D Printing, 2D Materials

Defense technologies: tunnel detection technologies, anti-missile airplane protection, structural protection of UAVs

●●● Innovation Leadership

Startup Genome

















<https://bit.ly/3oJIKTs>

Top 15 Universities producing highest count of founders



Stanford University is leading here too with 2000+ founder degrees.

PitchBook

2		University of California, Berkeley
3		Harvard University
4		Massachusetts Institute of Technology (MIT)
5		University of Pennsylvania
6		Cornell University
7		University of Michigan
8		Tel Aviv University
9		University of Texas
10		Yale University
11		University of Illinois
12		Technion - Israel Institute of Technology
13		Princeton University
14		University of California, Los Angeles (UCLA)
15		Columbia University
16		University of Wisconsin
17		Brown University

TAU #8th in World for Entrepreneurship

<https://bit.ly/3GHQcnf>

●●● Israel turns 70 - the leading inventions (@TAU)

Iron Dome
Developed
by Danny
Gold



Waze
Founded and
developed by
Ehud Shabtai
& Co-Founder
Uri Levine



USB flash drive
Developed by
Prof. Simon
Litsyn



**Check Point
Software**
Founded by
Gil shwed



●●● Developed by our Faculty



High capacity flash memories
Prof. Simon Litsyn



Cellphone lenses with extended depth of focus
Prof. David Mendlovic



AI tool that helps retailers uncover and fix the costliest execution problems in stores
Prof. Irad Ben Gal



A global cybersecurity leader
Prof. Avishai Wool



Protecting airplanes against heat seeking missiles
Prof. Ady Arie



Signal processing for flash memories
Prof. Ehud Weinstein



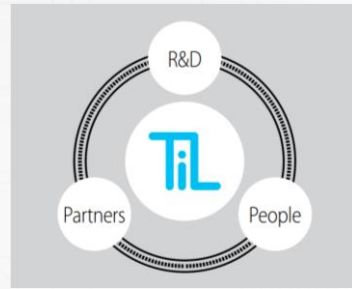
Barcode scanners
Prof. Emanuel Marom

●●● Tel Aviv University: Innovation Leadership

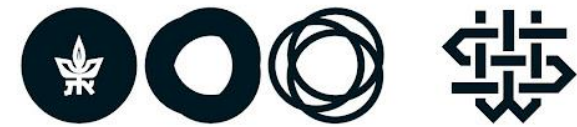
Innovation



INDUSTRIAL AFFILIATES PROGRAM
Tel Aviv University



Entrepreneurship

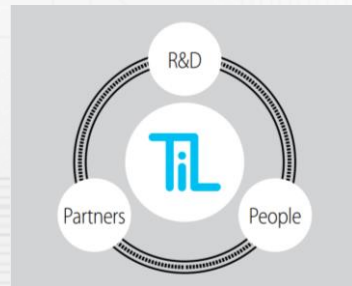


Entrepreneurship Center
Tel Aviv University & Shenkar

Internal



RAMOT TEL AVIV
UNIVERSITY



TAUVENTURES
BY TEL AVIV UNIVERSITY

External

●●● TAU Innovation Labs - About



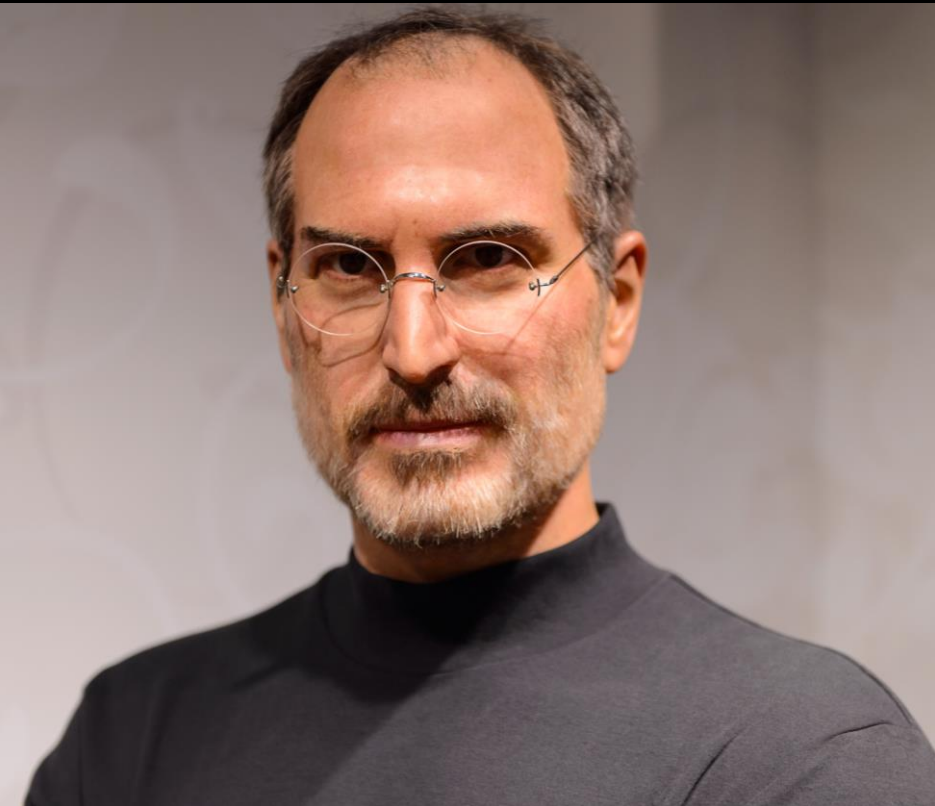
- Tel Aviv University is launching the Center for Innovation Laboratories, which will focus on the development of groundbreaking research with potential applicability in the next 3-7 years.
- The selection of research topics will be carried out in consultation with industry and public bodies (e.g. hospitals) who will expose the researchers to their actual needs and pains.
- The center's financial approach is based on the industry taking on a significant part of the funding of the research, out of foresight and in a format that involves "club membership" that confers product development rights.
- Unconventional thinking when it comes to IP rights: Under the new model, all donors supporting the research will receive the rights to use the products of the research.

●●● Thinking out of the box- Crazy Research

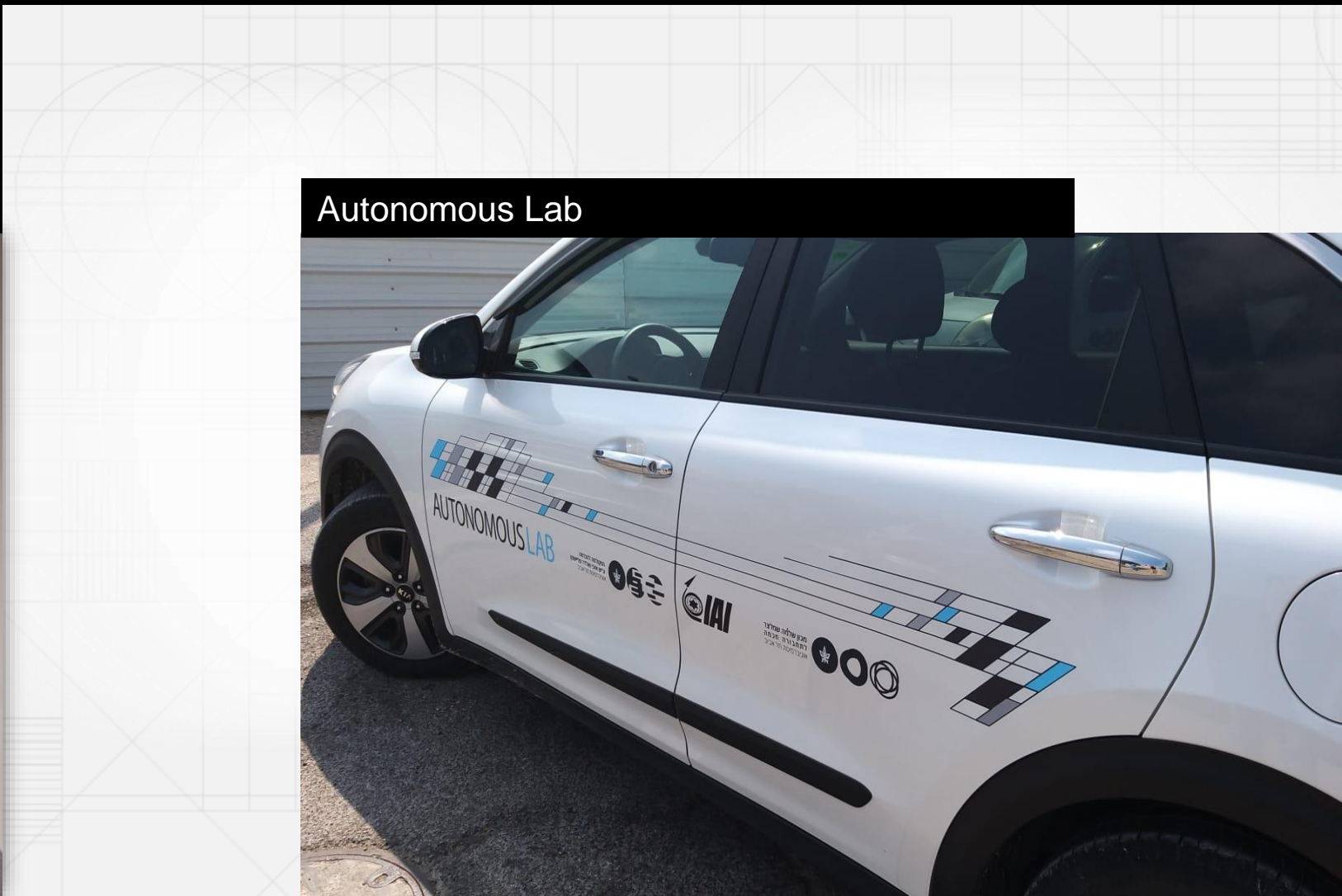
- Stochastic thermodynamics applied to cancer – [Dr. Gili Bisker](#)
- The role of mechanics in the emergence of plant roots systems – [Dr. Ayelet Lesman](#)
- Electric propulsion with high efficiency without any moving parts – [Prof. Avi Seifert](#)
- Nanobotanics and metamaterials – [Prof. Pavel Ginzburg](#)
- Novel jellyfish-based materials – [Prof. Shachar Richter](#)
- A robotic model for Autism Spectrum Disorder – [Dr. Goren Gordon](#)
- Moth-inspired odor-mediated navigation in turbulent flows – [Prof. Alex Liberzon & Dr. Gregory Zilman](#)
- Cooling with light – [Prof. Koby Scheuer](#)
- Listening to plants and asking them how they feel – [Prof. Yossi Shacham](#)

●●● Engineering & Liberal arts

Steve Jobs: “It is in Apple’s DNA that technology alone is not enough - it’s technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing.”

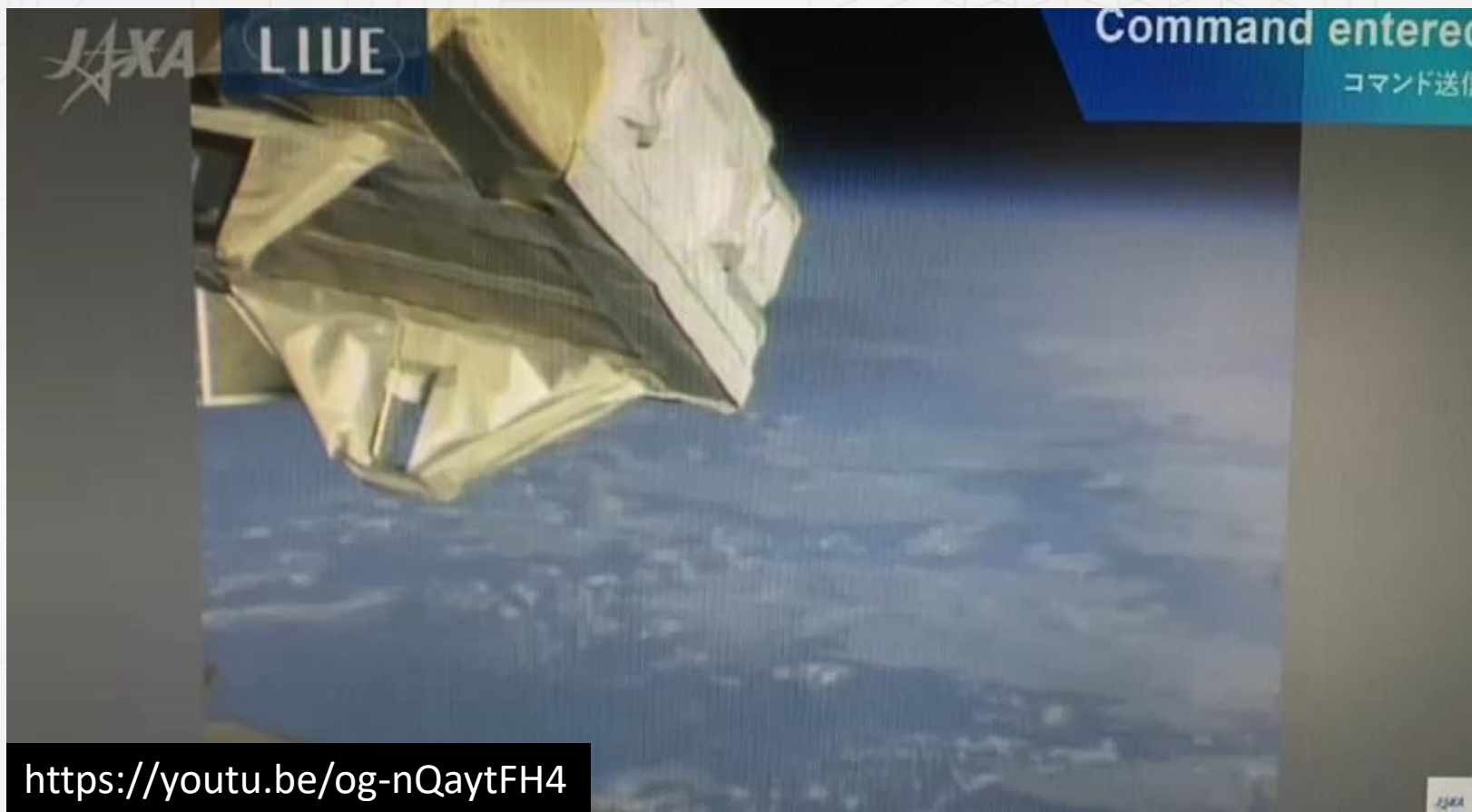


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TAU SAT1



The first nanosatellite designed, built and tested independently in academia in Israel." TAU-SAT1 is a research satellite, and will conduct several experiments while in orbit. Among other things, Tel Aviv University's satellite will measure cosmic radiation in space

●●● Research in Universities or Industry?

- In some fields industry is leading
- Teaching helps research
- Basic engineering research is essential
- Collaborate with industry!



●●● Faculty of Engineering Samueli Broadcom Building

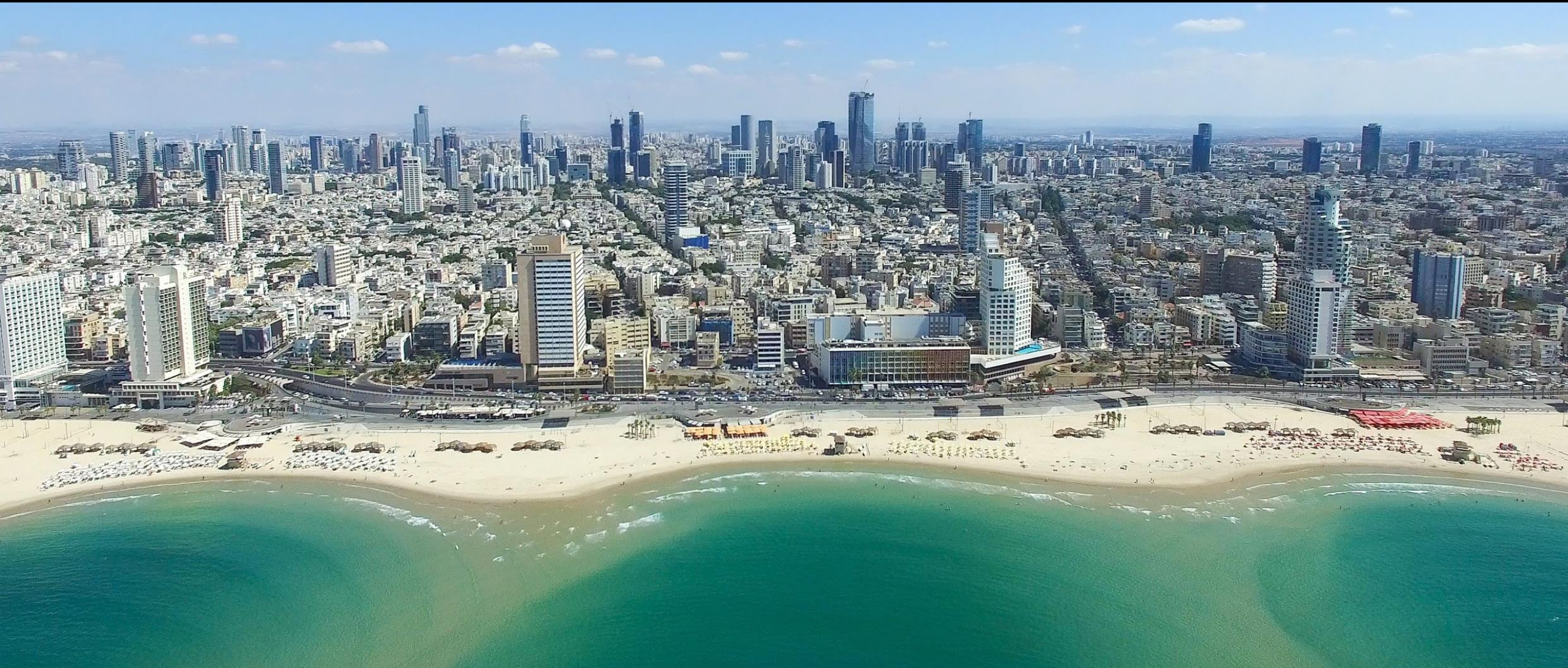
All the R&D of
Broadcom Share a
building with school
of Engineering!

●●● Faculty of Engineering – Start Up Companies Building

An 11 Stories building will house
School of Engineering and university
originated startups!



●●● Hope to see you soon in Tel Aviv



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