הפקולטה להנדסה
ע"ש איבי ואלדר פליישמן
אוניברסיטת תל אביב

הפקולטה להנדסה
מרחיבים את
גבולות האפשר

NEWSLETTER

June 2026

At Tel Aviv University's Faculty of Engineering, cutting-edge research meets real-world innovation. Explore breakthrough technologies, strategic industry partnerships, and exclusive collaboration opportunities.

Join us in shaping the next generation of engineers. Stay connected, lead innovation, and build the future with us!

Faculty of Engineering - Industry Liaison Office

MAPPING PAIN IN 3D: WHERE BIOMEDICAL ENGINEERING MEETS PATIENT CARE

In a special episode of **Tel Aviv 360** ahead of **the Faculty of Engineering Day 2026**, Prof. Mickey Scheinowitz of the School of Biomedical Engineering, speaks with Dr. Ifat Sandler, Director of the Pain Rehabilitation Unit at **Loewenstein Rehabilitation Medical Center (Clalit Health Services)**, and with Amit Bezalel and Shahar Gutman, fourth-year Biomedical Engineering students.

At the heart of the episode is a project born from a real clinical need: patient have to describe the location and intensity of their pain using two-dimensional body charts and manual markings. Amit and Shahar developed a digital system that allows patients to mark pain on a three-dimensional body model, document pain intensity, track changes over time, and provide healthcare professionals with clearer and more accurate information.

The project demonstrates the practical connection between engineering and medicine: on one side, a need arising directly from clinical practice at Loewenstein Rehabilitation Medical Center; on the other, an innovative technological solution developed as part of the students' undergraduate studies at Tel Aviv University.

Come discover the Pain Mapping Project and many other innovative projects at the Faculty of Engineering Day 2026!

For the full podcast, click here.

Coming Up on Faculty Day June 22, 2026

June 22, 2026 | 9:00 AM–7:00 PM
Tel Aviv University Campus

View the Full Schedule and Event Details
Click Here

Featured in Geektime, Tel Aviv University's Faculty of Engineering Day 2026 celebrates innovation, entrepreneurship, and engineering excellence. The event brings together pioneering research, award-winning student projects, and leading technology companies, offering a unique glimpse into the future of engineering and its impact on society. This recognition underscores the Faculty's position as a hub for cutting-edge innovation and talent development in Israel and beyond. Read the full Geektime article here and join us for the Faculty Day experience!

FACULTY DAY 2026 SPONSORS

The Faculty of Engineering is proud to present the sponsors of Faculty Day 2026!

TEL AVIV TECH | RAFAEL | ELBIT | INTEL | HP | NOVA | Samueli Foundation

Join us and meet their representatives at our flagship event as part of the Engineering Village—a unique space that brings together students, alumni, faculty members, and industry leaders.

We are grateful to our partners for their trust, support, and commitment to advancing the next generation of engineers. The connection between academia and industry is a key driver of innovation, growth, and opportunity.

Faculty of Engineering Day
Monday, June 22, 2026 | 9:00 AM–7:00 PM
Tel Aviv University Campus

Join us for a day filled with inspiration, featuring outstanding projects, engaging lectures, innovative technology showcases, an aerospace panel discussion, and a special alumni event.
This is an excellent opportunity to connect with the community, explore cutting-edge research and engineering applications, and meet the people pushing the boundaries of what's possible.

🔗 View the full schedule and event details

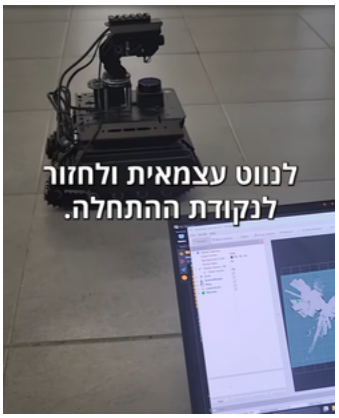
הפקולטה להנדסה
ע"ש איבי ואלדר פליישמן
אוניברסיטת תל אביב

AUTONOMOUS NAVIGATION WITHOUT GPS: MEET THE UGV BEAST

Join us at the Faculty of Engineering Day to discover a project developed by Mika Sela and Omer Haled, students at the School of Electrical and Computer Engineering, under the supervision of Arkady Rafalovich.
The team developed an autonomous navigation system based on LiDAR sensing for an unmanned ground vehicle capable of independently exploring unfamiliar environments, mapping terrain, collecting information, and returning safely to its starting point without GPS or communication with a base station.
Inspired by the need to gather intelligence in high-risk environments such as tunnels, confined spaces, and GPS-denied areas, the project demonstrates how robotics and intelligent navigation can help keep people out of harm's way while enabling critical exploration and data collection missions.
Combining robotics, sensor data processing, environmental mapping, and real-time decision-making, this project showcases the power of engineering to create autonomous systems capable of operating where humans cannot.

Click here to watch the video

Coming Up at Faculty of Engineering Day June 22, 2026



GET A SNEAK PEEK AT TAUVERIL!

Meet the outstanding teams behind TAUverIL, **Tel Aviv University's Mars Rover project**, as they gear up for #ERC2026!

Follow their journey for exciting updates, behind-the-scenes moments, and milestones on the road to the European Rover Challenge.
And don't miss the chance to meet the teams in person at Faculty Day 2026, dedicated this year to the fascinating world of Aerospace and Space Exploration!

See you there!

MEET PAINDICATOR: A SMARTER WAY TO MAP PAIN

Amit Bezalel and Shahar Gutman, students at the School of Biomedical Engineering, under the supervision of Prof. Mickey Scheinowitz, developed PAINDICATOR—an innovative pain-mapping system created in collaboration with **Loewenstein Rehabilitation Medical Center, part of Clalit Health Services.**

The system was developed in response to a clinical need identified by the Pain Rehabilitation Unit at Loewenstein, with the goal of improving and streamlining pain assessment through digitization. Instead of describing pain verbally and marking it on a paper chart, patients can directly indicate the location and intensity of their pain on a three-dimensional model of the human body.

The information is stored digitally and presented to healthcare professionals in a clear and organized format, alongside data from previous visits. This enables continuous monitoring of changes in pain patterns, identification of trends over time, and better-informed clinical decision-making. In addition, the system improves communication between patients and healthcare providers by allowing individuals to express their pain experience more accurately and clearly.

The project combines clinical needs assessment in collaboration with the medical center, user interface design for both patients and healthcare professionals, software development in Python, work with 3D anatomical models and anatomical mapping, and the design of a preliminary clinical study to evaluate the system's usability and effectiveness compared with current pain assessment methods.

Throughout the development process, the system was presented to patients and medical professionals, who provided positive feedback regarding its ease of use, the accuracy of pain mapping, and its potential contribution to the treatment process.The students worked closely with the Pain Rehabilitation Unit at Loewenstein Rehabilitation Medical Center throughout the project, aiming to create an innovative technological solution that addresses a real clinical need and enhances the patient care experience.

This project, along with many others, will be showcased at the Faculty of Engineering Day Capstone Project Exhibition! The full video

Our Website | 03-6408530 | Tel Aviv University, Tel Aviv 6997801, Israel

ARE YOU LOOKING FOR YOUR NEXT BREAKTHROUGH COLLABORATION? COME EXPERIENCE IT LIVE.

On June 22, the Faculty of Engineering at Tel Aviv University opens its doors for Faculty Day — a unique opportunity to witness cutting-edge, multidisciplinary projects developed by our researchers, students, and industry partners.

This year's theme: Aviation & Space ✈️🛸 — but the innovation on display spans the full engineering spectrum: from biomedical devices, to robotics, smart materials, sustainable energy, and beyond.

If you lead or work within an innovation center, technology incubator, or R&D hub in Israel, this is the event to be at. Meet the minds behind tomorrow's technologies — before they reach the market.

Faculty of Engineering, Tel Aviv University | June 22, 2026

Tag a colleague in innovation who should be in the room. 👇

More info - Link

On geek time - Link

MEET OUR JUDGES

We are excited to welcome our alumni and industry partners as **judges** in our evaluation panels of this year's Faculty Day.

Meet Shir Berson
Shir is a graduate of the Digital Sciences Program and, since completing her degree, has built an impressive career at one of the industry's leading companies. Today, she serves as a Business Operations Manager at **monday.com.**

The connection between academia and industry leaders is at the heart of our program, and we are confident that the experience, insights, and professional perspective Shir brings will provide tremendous value to the students presenting their final projects.

We look forward to seeing you at Faculty Day!

NEXT STOP: THE MOON

We had the pleasure of hosting a special lecture led by **Dr. Shay Monat** – a graduate Mechanical Engineering degrees at Tel Aviv University, an International Space University (ISU) alumnus, and currently a project manager leading the establishment of the Technion's hypersonic wind tunnel.

The lecture drew a large audience of students, alumni, and guests, who joined us for a fascinating journey into the era of New Space. Together, we explored how lunar missions are transforming from ambitious visions into reality and uncovered the engineering challenges driving today's race to the Moon and beyond.

LEADING THE FUTURE OF VLSI EDUCATION

We are proud to celebrate Prof. Eran Socher, Head of the School of Electrical and Computer Engineering at Tel Aviv University, for his outstanding leadership in establishing and advancing our VLSI program.

Prof. Socher's vision and dedication have shaped a world-class program that bridges fundamental research and cutting-edge industry practice — equipping the next generation of engineers with the skills to lead in an era of rapid technological change.

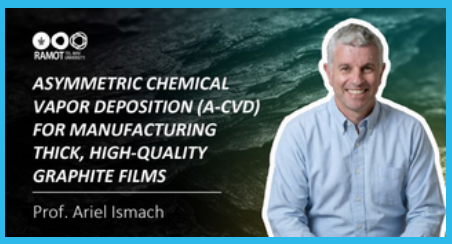
His recent appearance on the Hard Reset podcast — the flagship podcast of the Hardware Engineering Israel community — is a wonderful example of his commitment to knowledge-sharing beyond the classroom: from the physics of the electromagnetic spectrum to the evolving expectations of engineering students in the age of AI.

We are fortunate to have Prof. Socher's expertise and leadership driving our program forward.

🎧 Listen to Episode 94 here: **https://lnkd.in/din-sGn4**

FROM LAB TO INDUSTRY: REVOLUTIONIZING HEAT MANAGEMENT WITH A-CVD

Prof. **Ariel Ismach** developed Asymmetric Chemical Vapor Deposition (A-CVD), a novel process that enables the scalable production of thick, high-quality graphite films with exceptionally high thermal conductivity. By overcoming the thickness limitations of conventional CVD methods, the technology supports advanced thermal management solutions for electronics, AI infrastructure, energy systems, and high-temperature industrial applications.



BRIDGING ACADEMIA AND INDUSTRY THROUGH INNOVATION

Concluding an Intensive Week of Innovation at Tel Aviv University's School of Electrical and Computer Engineering

We wrapped up an extraordinary week! Our newly launched Sprint Course (an intensive, concentrated one-week project, hackathon style) has successfully brought together advanced academic training and real-world technological challenges in a powerful new format.
Over the past five days, teams of talented undergraduate students - supported by professional mentors - have transformed ideas into proof-of-concept projects across cutting-edge domains:

- Laser-based material characterization
- 3D scanning
- Audio based triangulation and signal processing
- Autonomous robotics for detection and navigation
- Optical (IR) image transmission systems

Special thanks to representatives from **KLA** - Nir Turko and Orca-ai - Roy Frumkis who served as judges for the final project evaluations. Their technical expertise and real-world perspective provided invaluable feedback to our students and elevated the entire experience.

This pilot program is designed to run twice yearly as a core component of our curriculum. We're building engineers who don't just master theory—they learn to innovate under real constraints.

We're actively seeking industry partners to join us in future iterations. Whether you'd like to propose a challenge, mentor a team, or participate in project evaluation, let's connect.

LAUNCHING THE FUTURE OF SPACE: TEL AVIV UNIVERSITY OPENS A NEW SPACE ENGINEERING CENTER

Tel Aviv University has officially launched a new Space Engineering Center within the Faculty of Engineering, marking a significant step forward in Israel's space research and innovation ecosystem.

The Center brings together five leading researchers and students from a wide range of scientific and technological disciplines, working on cutting-edge challenges including satellite design and 3D printing of space structures, advanced materials for space environments, inertial navigation systems, communication and signal-processing algorithms for space applications, spacecraft operating systems, hyperspectral sensing, and post-quantum cryptography.

The Center is led by Prof. Meir Ariel, alongside distinguished researchers Prof. Slava Krylov, Prof. Ofer Amrani, Prof. Ronen Varker, and Dr. Lior Medina.

Through close collaboration with Israeli industry leaders and government agencies, the Center is advancing the development of next-generation Israeli space technologies. To date, its researchers have designed, built, and launched 23 nanosatellites for scientific research.
Beyond research, the Center is deeply committed to education and outreach. Through programs across Israel—particularly in social and geographic peripheral communities—it is establishing research and development hubs in schools, enabling talented young students to participate in and contribute to national space initiatives.

OUTSTANDING STUDENTS, ONE SHARED COMMITMENT TO EXCELLENCE – THANK YOU, NVIDIA ISRAEL

The Faculty of Engineering at Tel Aviv University celebrated 175 outstanding students at the annual Dean's Honor Roll Ceremony, recognizing their exceptional academic achievements during the 2024–2025 academic year.

The event was opened by Prof. Noam Eliaz, Dean of the Faculty of Engineering, who congratulated the honorees and highlighted the Faculty's commitment to excellence, innovation, and leadership in engineering education.
We were also honored to host Tamir Azarzar, Senior Vice President of Silicon Development at NVIDIA Israel, who shared words of encouragement and congratulated the students on their achievements. We thank **NVIDIA** Israel for its ongoing support of academic excellence and diversity in technology.

The ceremony also featured an inspiring lecture by Prof. Ram Zamir on the intersection of music, science, and technology, offering a glimpse into the exciting world of Music Tech.

Congratulations to all of this year's awaradess! Your dedication, talent, and hard work continue to inspire us and shape the future of engineering.

BUILDING CONNECTIONS, SHAPING CAREERS: OUR MENTORING PROGRAM IS UNDERWAY

The Faculty of Engineering Alumni Association recently held the official kickoff event for the second semester Mentoring Program! ✨

The program launched with an inspiring gathering of mentors and mentees, all eager to learn, grow, and build meaningful connections between academia and industry.
The event featured engaging roundtable discussions, along with short talks by Matan Cohen and Shahaf Gino from the School of Electrical and Computer Engineering, who shared their personal experiences and valuable insights from the program.

A special thank you to all of our students, mentors, and alumni who dedicate their time and expertise to supporting the next generation of engineers. We wish all participants a meaningful and rewarding journey filled with learning, new connections, and professional growth.

Click here

POWERING THE FUTURE OF VLSI: THANK YOU, INTEL ISRAEL

Strong partnerships are built over time 🤝
We are grateful to Intel Israel for their continued partnership with the Faculty of Engineering at Tel Aviv University, and for their recent contribution supporting the VLSI Lab, headed by Zvika Webb.

This contribution, including new servers that will serve our students, strengthens the lab's capabilities in advanced VLSI design - both analog and digital, and enhances hands-on learning opportunities.
In collaboration with leading industry partners, such as Intel, the Advanced VLSI Lab provides fourth-year undergraduate students with a unique opportunity to gain practical experience, working alongside experts and presenting innovative projects-some of which progress to the tape-out stage.

EXPLORING INNOVATION WITH APPLE AT TEL AVIV UNIVERSITY

We had the pleasure of hosting an **Apple** Spotlight Day at the Faculty of Engineering!

Students had the opportunity to meet with **Apple** recruiters, connect with company employees, and learn more about career opportunities and life at **Apple**.
The event also featured a fascinating talk on "Eye Tracking Technologies and Applications" delivered by Sagi Rosen, Senior Engineer at **Apple**, who shared insights into the cutting-edge technologies shaping the future of human-computer interaction.

A big thank you to Apple and to everyone who participated in making this event such a valuable and inspiring experience.We look forward to future collaborations and opportunities to connect our students with industry leaders.

Click here to read more

EXPLORING SEMICONDUCTOR INNOVATION WITH NOVA LTD

It was a pleasure to host a guest lecture at the Faculty of Engineering, Department of Physical Electronics.

Dr. **Itai Epstein** hosted Dr. **Maor Asher** (**Nova Ltd.**), who delivered an insightful talk on: "Exploring Semiconductor Materials from the Surface to the Depths Using Raman Spectroscopy."

The lecture presented how Raman spectroscopy can be adapted for depth-selective analysis in advanced semiconductor devices, using different laser wavelengths to probe both surface and deeper layers - addressing key metrology challenges in modern, multilayered structures.

Thank you, Dr. Epstein and Dr. Asher for sharing your expertise and strengthening the connection between academia and industry!

WHEN ENGINEERING MEETS MEDICINE: THE "AHLA RECOVERY" HACKATHON OF THE MASKILLIM PROGRAM CONNECTED STUDENTS WITH REAL HOSPITAL CHALLENGES

How can we help preserve the physical and cognitive abilities of older adults during hospitalization? This was the central question of the "AHLA Recovery" hackathon, a joint initiative of the School of Biomedical Engineering at the Faculty of Engineering, Wolfson Medical Center, and the Medical Center's Research and Innovation Authority.

Over the course of five days, 16 biomedical engineering students worked in five teams to develop innovative solutions to real clinical challenges that arise during the hospitalization of older patients. The teams focused on topics such as maintaining physical function and mobility, preventing cognitive decline, reducing loneliness, encouraging physical activity, and improving the overall hospitalization experience. From the very beginning of the process, students were exposed to real-world needs as medical teams from Wolfson Medical Center presented the daily challenges they face in hospital wards. Later, the students visited the hospital, met with patients and staff members, and gained firsthand insight into the complexities of the hospital environment.

The hackathon serves as an excellent example of the power of applied innovation born from collaboration between academia and the healthcare system. Beyond developing tangible solutions, the process enabled students to tackle real-life challenges with a direct impact on patients' lives, while exposing medical teams to fresh and creative ways of thinking.

The hackathon's closing event took place on Thursday, June 4, during which the teams presented the solutions and prototypes they had developed. Projects with the greatest potential will be considered for further development through capstone projects, hospital pilot programs, or continued support from the Medical Center's Research and Innovation Authority.The first-place award was presented to the CareConnect team, which developed a dedicated application designed to connect patients remotely with their family members. The app aims to reduce loneliness while encouraging physical activity. Team members included Ta'ala Gashan, Hanan Abu Nassar, Dror Sandrov, and Bar Kol.

Speakers at the event included Dr. Yuval Dadon, Deputy Director General of Wolfson Medical Center; Prof. Noam Eliaz, Dean of the Faculty of Engineering; Prof. Karen B. Avraham, Dean of the Faculty of Medical and Health Sciences; and Prof. Uri Nevo from the School of Biomedical Engineering.

The collaboration between the School of Biomedical Engineering, Wolfson Medical Center, and the Research and Innovation Authority demonstrates how the intersection of engineering, medicine, and creative thinking can generate innovative solutions to significant healthcare challenges and improve the quality of life of many patients. Congratulations to all the organizers and participants who made this initiative a success.

FROM CAMPUS TO NVIDIA: ALUMNI EXPLORING THE FUTURE OF INNOVATION

How do you turn academic excellence into industry impact?

At a recent event in the Tel Aviv University Alumni Organization's "When Academia Meets Industry" series, alumni stepped inside NVIDIA for an inspiring behind-the-scenes look at one of the world's leading technology companies.

Participants heard from **Omri Geller, NVIDIA Vice President,** TAU Engineering alumnus, entrepreneur, and member of the Alumni Organization's Advisory Board, who shared his remarkable journey from university classrooms to the forefront of the global AI revolution.

They also gained practical career insights from **Hagar Israeli of NVIDIA Israel's Talent Acquisition team**, who offered valuable tips on standing out in interviews and navigating today's competitive job market.

Beyond the inspiring talks, the event created meaningful connections between alumni, industry leaders, and future opportunities—demonstrating the power of the Tel Aviv University network and the value of lifelong learning.

A special thank you to NVIDIA for hosting us and to all the alumni who joined us for an evening of inspiration, networking, and innovation.

APPLE EXCELLENCE AWARDS: EMPOWERING TOMORROW'S TECH LEADERS

As part of an ongoing tradition, we are proud to continue empowering the future generation of the Israeli high-tech industry ץ

We recently gathered at **Apple's** offices in Herzliya for the annual Excellence Awards ceremony, an initiative that has become a meaningful tradition since 2017. The program recognizes outstanding undergraduate and graduate students and reflects Apple's deep commitment to academic excellence and long-term investment in the academic ecosystem.

The event was held in the presence of Rony Friedman, CEO of Apple Israel; Prof. Slava Krylov, Vice Dean for Research and Industry Relations, **The Faculty of Engineering, Tel Aviv University** and Hagai Itkin, Chairman of TAU Industry Relation Center.

The ceremony was enriched by an inspiring lecture from Asaf Yasur, whose remarkable personal journey of resilience, perseverance, and Paralympic achievement left a profound impact on everyone present.

FROM CAMPUS TO MARS: THE TAU ROVER STORY

Proud to support the next generation of space engineers!

The European Rover Challenge (ERC) is one of the world's leading student space robotics competitions, bringing together university teams to design, build, and operate Mars-like rovers in realistic mission scenarios. The competition pushes students to integrate mechanics, electronics, software, autonomy, communications, and systems engineering — while working under real-world constraints and intense collaboration.

At Tel Aviv University, the TAU Rover team embodies exactly what engineering education should be about: hands-on learning, creativity, perseverance, and teamwork. Building a rover is far more than a technical exercise — it is an opportunity for students to experience multidisciplinary engineering at its best, where success depends not only on knowledge, but also on collaboration, leadership, problem-solving, and resilience.

We are especially proud to have been supporters of the Space Rover project and to witness how far the team has come. From early ideas and prototypes to a highly capable rover developed through countless hours of dedication, the progress has been truly inspiring.

The students - lead by Lior Korobeynikov , mentors - especially Danny Berko , and everyone involved have built something remarkable together. We are excited to continue being part of this journey and are keeping our fingers crossed that the TAU Rover will be selected to participate in the upcoming ERC competition.

Good luck to the entire team — your hard work already makes us proud.

The full video
https://www.tauveril.com/

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הפקולטה להנדסה ממריאה!

הפקולטה להנדסה שמחה ונרגשת להזמינכם/ן לאירוע הגדול של השנה!

יום הפקולטה 2026
בסימן תעופה וחלל

22.6.26

9:00-19:00

יום מלא בחדשנות עם התעשייה | תצוגת פרויקטים, הרצאות העשרה, מיצגים טכנולוגיים מעוררי השראה, כיבוד ואירוע בוגרים*

מחכים לכם/ן ליום של חוויה, ידע וחיבורים חדשים
אל תפספסו!

לפרטים נוספים לחצו כאן

*אירוע הבוגרים יתקיים בין השעות 19:00-16:00
ובהרשמה מראש עבור בוגרי הפקולטה להנדסה

intel RAFAEL Elbit Systems תל־אביב טק TEL AVIV TECH hp NOVA Samueli FOUNDATION