

UNISEC-Egypt Local Chapter Activity Report

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11th Annual UNISEC-Global Meeting, November 1-4, 2025, University of Tokyo, Japan

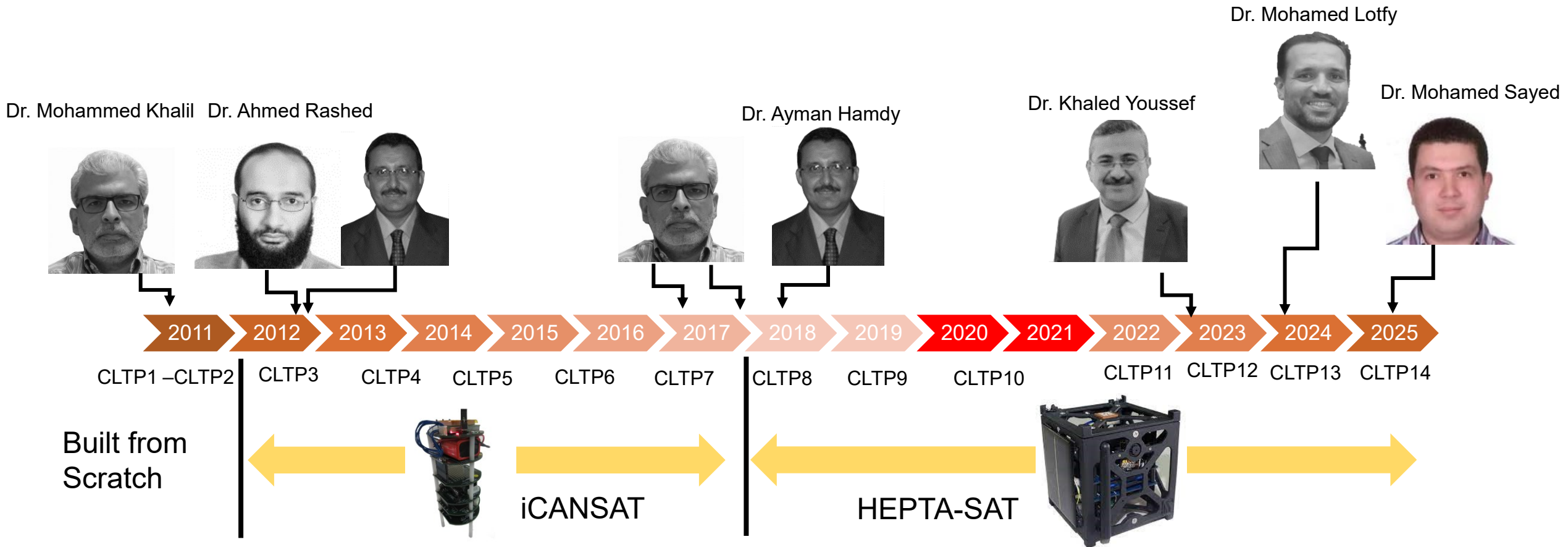
Agenda

- Background
- Activities
- Challenges and Future Plan

Background

- UNISEC-Egypt Acknowledged in 2014
 - Aerospace Engineering Department, Cairo University
 - Mechanical Engineering Department, Alexandria University
- Currently
 - Cairo University
 - Beni Suef University
 - Egypt-Japan University of Science and Technology
- Professors: 8+
- Students: 250+

Background- CLPT Participation History



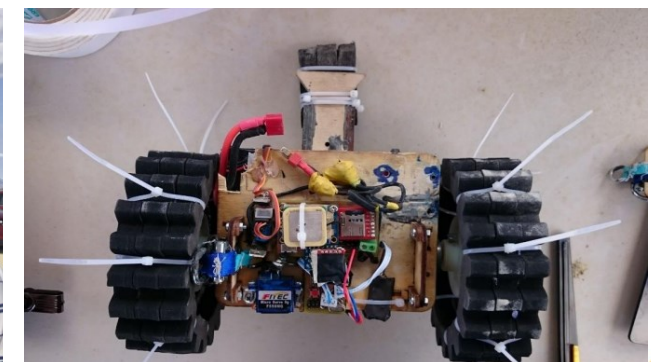
Background

- Establishment of Space System Technology Laboratory in 2011
 - Student-Based Laboratory supervised by Faculty
 - It Offers
 - CanSat/CubeSat Training Program (Annually)
 - Rover Training Program (Ad-Hoc)
 - Capstone Project related to Space Engineering
- FabLab



Background

- Mission Idea Contest
 - MIC1, MIC2, MIC3, MIC5, and MIC6
- ARLISS
 - 2014, 2015, and 2019
- UNISEC-Global Meeting
 - 1st, 2nd, 3rd, 4th, 5th, 6th, 8th, 9th, and 10th
- UNISEC-Global Virtual Meeting
 - 27th Virtual Meeting on November 22, 2022
 - Contribute 49th Virtual Meeting, September 21, 2024
 - Moderate 50th Virtual Meeting, October 19, 2024



Space Engineering Programs in Egypt



- Until 2014
 - Aerospace Engineering, Cairo University



- As of 2023
 - Faculty of Navigation Science and Space Technology- Beni Suef University



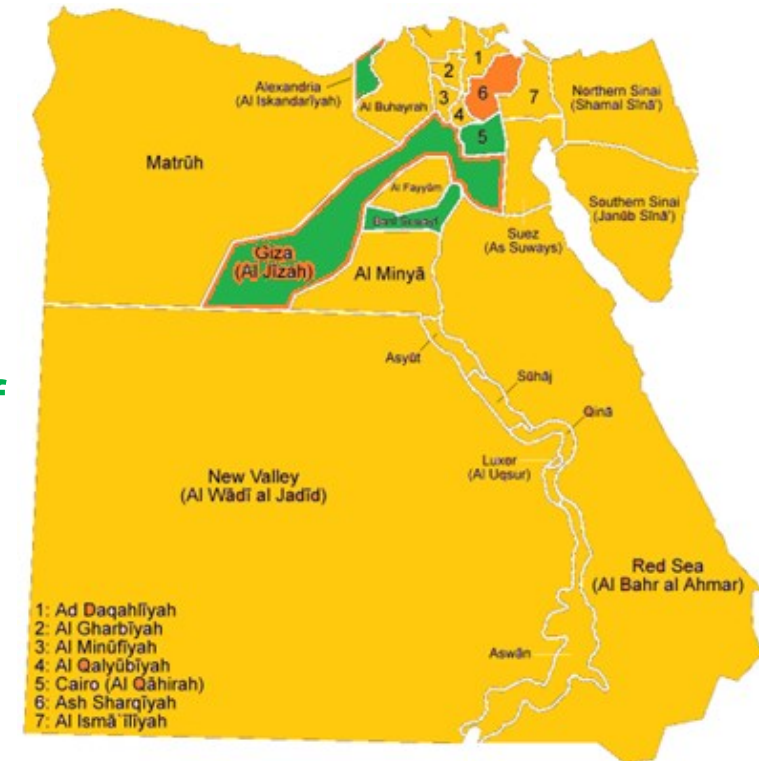
- As of 2024
 - Aerospace Engineering Program, Egypt-Japan University of Science and Technology (E-JUST) with partnership with Aeronautics and Astronautics Department of Kyushu University



- Aerospace Engineering Program, Zewail City of Science and technology



- Aero-Spacecraft Engineering Program, Zagazig University

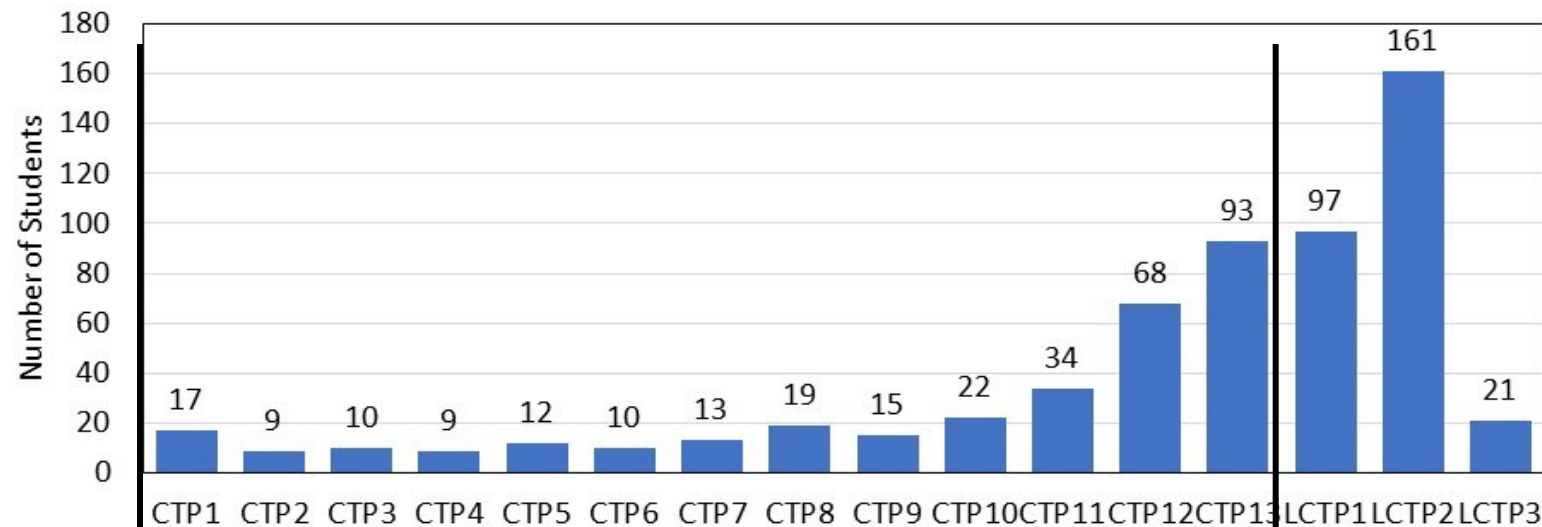


Current Year Activities

- Lean CubeSat Training Program LCTP3 at Cairo University
- Rover Challenge at Cairo University
- Participation in IOT Constellation Initiative
- Visiting of Japanese Delegations to E-JUST.
- E-JUST Signed MOU with UNISEC-GLOBAL, Space Data Ltd., and Ecology Café
- E-JUST Signed LOI for UNISEC-GLOBAL, University of Tokyo, and AreEdge Space Ltd.
- Japanese Professor Invitations
- Hepta-Sat Training Program at E-JUST

Activities: CanSat/CubeSat Training Program

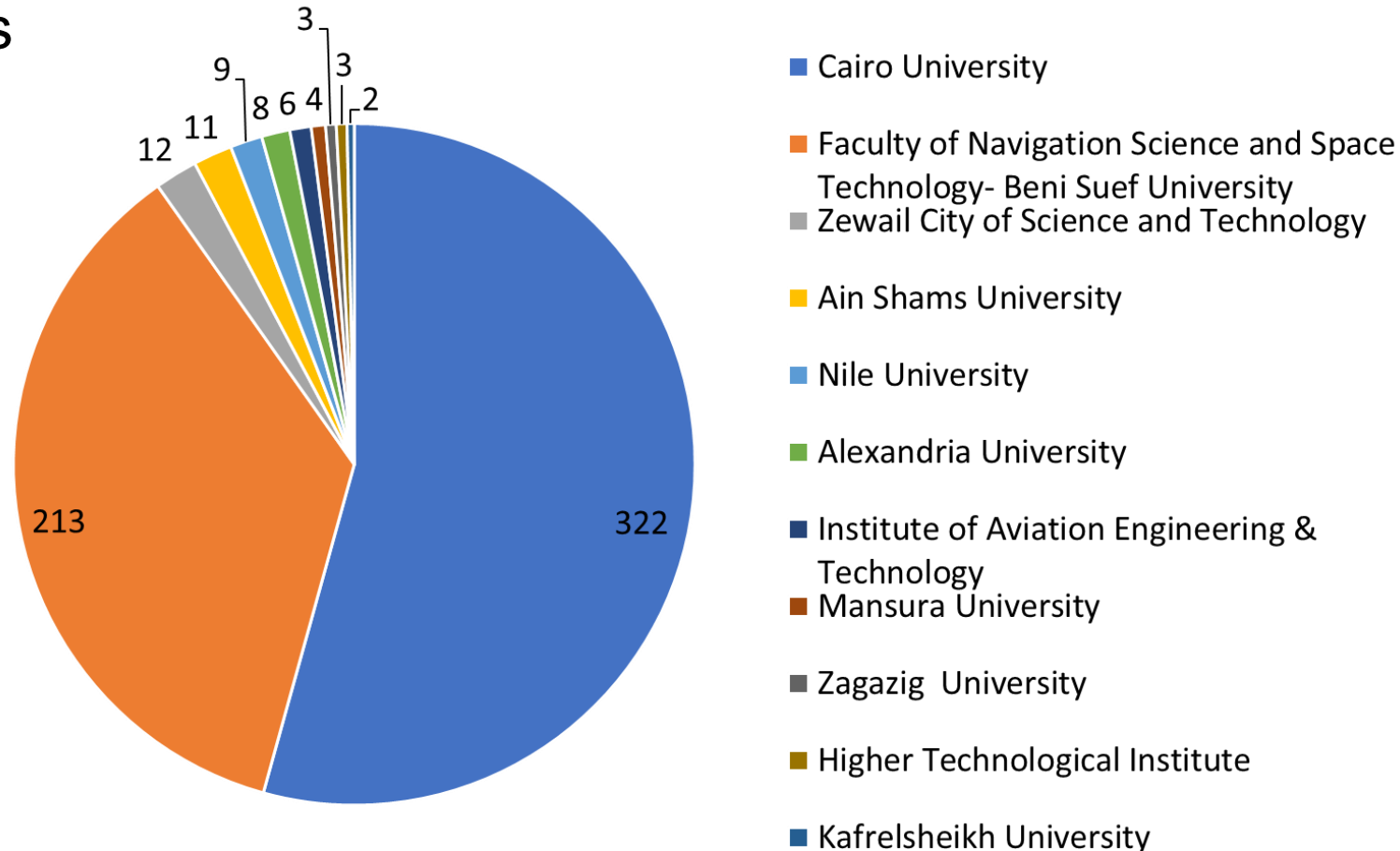
- Offered annually since 2011
- Since 2022, it has adapted a similar platform to Hepta-Sat



Lean CubeSat

Activities: CanSat/CubeSat Training Program

- As of 2025, training was offered to 624 students from 11 Egyptian Universities



LCTP3 (2025)

- Venue: Cairo University
- Date: August 2025
- Number of Participants: 21 Students

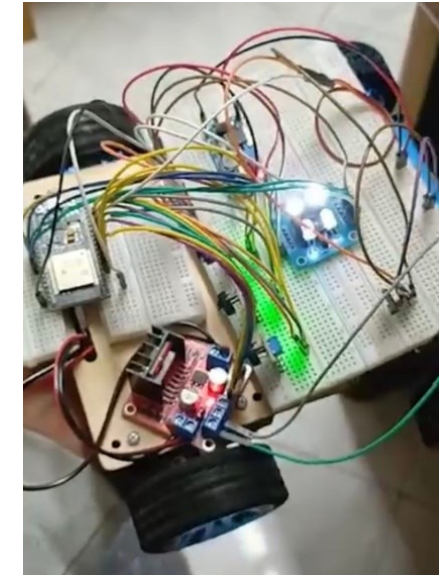
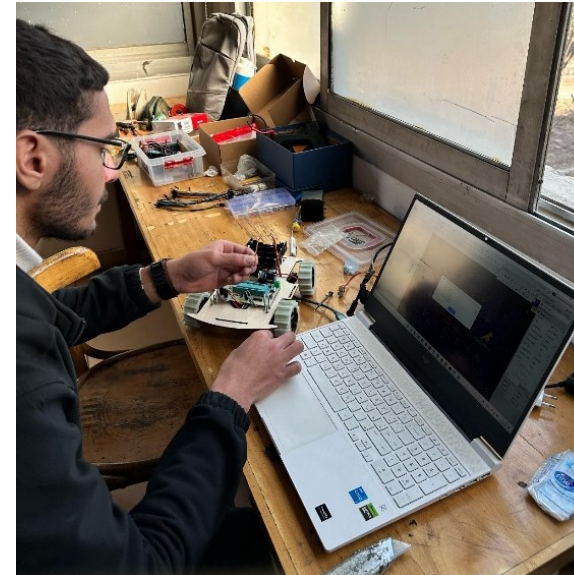


ICMTC - Satellite Challenge



Rover Challenge at Cairo University

- 20th July 2025
- Number of Participated teams 6



Visiting of Japanese Delegations to E-JUST



April 22, 2025

Visiting of Japanese Delegations to E-JUST



April 27, 2025

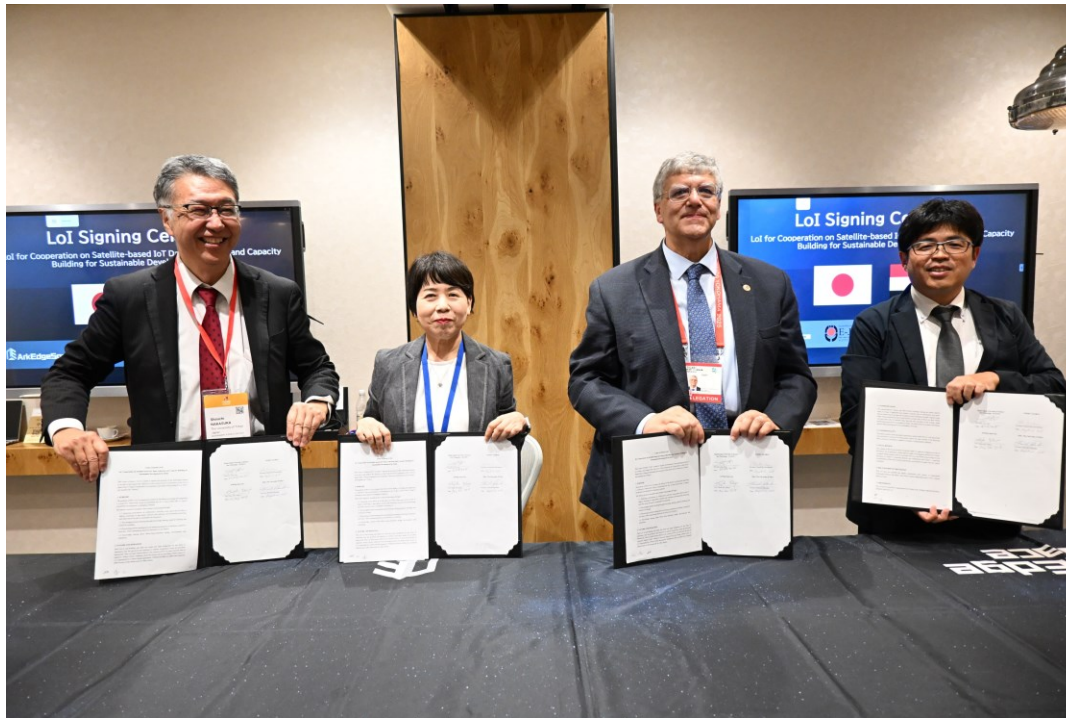
E-JUST Signed MOU with UNISEC-GLOBAL, Space Data Ltd., and Ecology Café

April 27, 2025



E-JUST Signed LOI for UNISEC-GLOBAL, University of Tokyo, and AreEdge Space Ltd.

August 21, 2025, During TICAD9

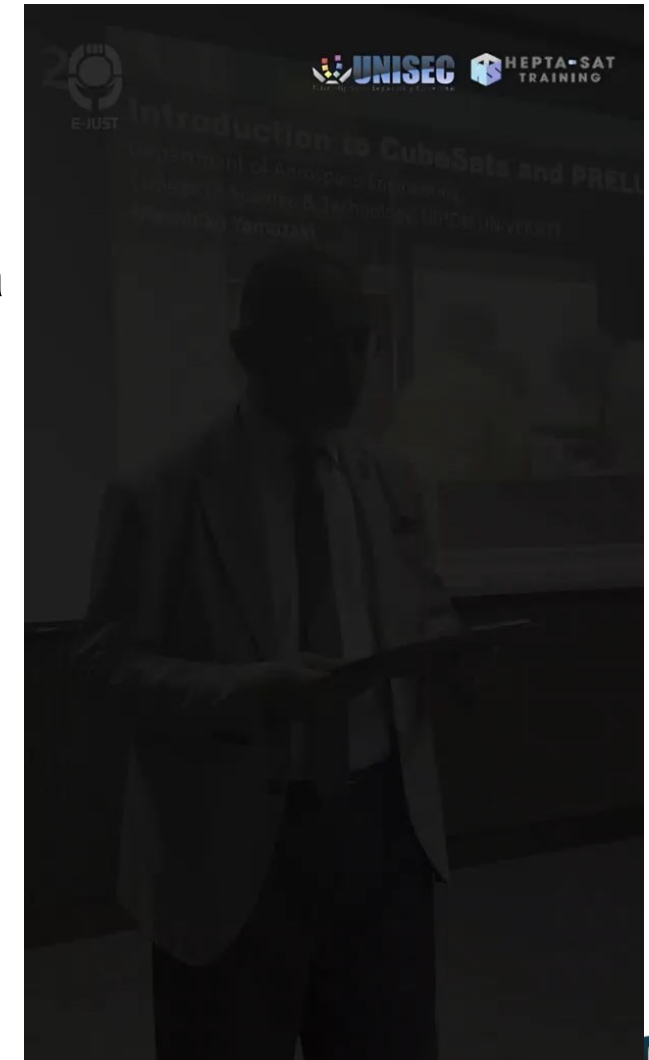


JICA Support

- JICA Project A
 - Japan–Africa Collaborative Nanosatellite Network: Localizing Satellite Innovation to Tackle Sustainable Development Challenge
 - E-JUST, Wasada University, Stellenbosch University (UoT and ArkEdge Space Ltd. as advisors)
- JICA Project B
 - Feasibility Study on the Development of a Digital Twin-Based Satellite Development and Utilization Platform
 - E-JUST, Nihon University, UNISEC-JAPAN, and Space Data Ltd.

Hepta-Sat Training Program at E-JUST

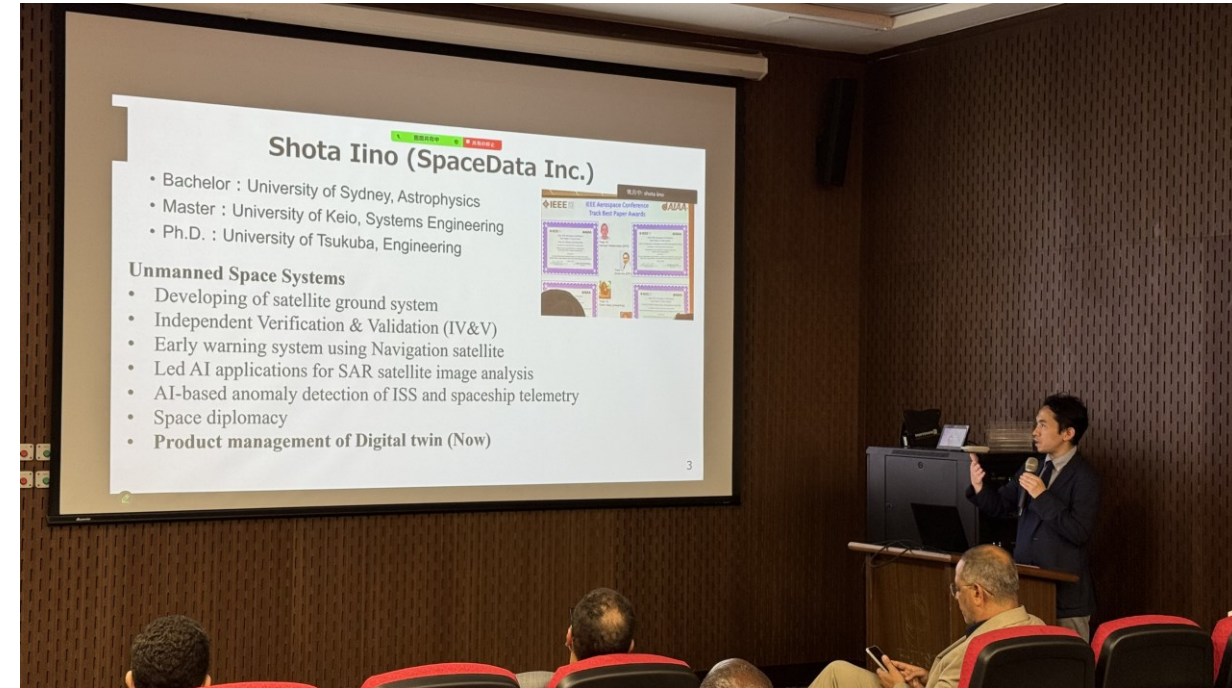
- September 8-10, 2025
- Venue: E-JUST
- Number of participants 10 including 4 participants from Rwanda



Japanese Professors Invitation



Dr. Masahiko Yamazaki (Associate Professor, Nihon University) shared insights through his lecture “Development of a 6U CubeSat, PRELUDE, for Observing Ionospheric Disturbances Preceding Major Earthquakes.”



Dr. Shota Iino (SpaceData Inc.) delivered a lecture on “From Satellite Data to Real-World Applications — Exploring Digital Twin Opportunities.”

Japanese Professors Invitation



JSPS/STDF Funded HEPTA-Sat Workshop in 2026

- UNISEC-Egypt & E-JUST
- Date: TBD (March 2026)
- Expected Number of Participants: 20 Professionals (Egyptian & Africans)

Challenges and Future Plan

- Challenges
 - Lack of funding
 - There is no dedicated administrative staff
 - Brain drain
- Future Plan
 - Invite Zewail UST and Zagazig University to Join UNISEC-Egypt.
 - JSPS/STDF Funded HEPTA-Sat Workshop in 2026
 - Hold UNISEC-Egypt general meeting sometime next year

Thank you