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Institute of
Accelerating
Systems &
Applications -
IASA
www.iasa.gr



FACILITATE-AI

**GUIDELINES FOR FACILITATING THE LEARNING OF ARTIFICIAL INTELLIGENCE
BY SCHOOL STUDENTS OF GRADES 7-12**



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Team Structure

- Project Co-ordinator: Prof. Evangelos Gazis, Prof. Experimental Particle Physics at National Technical University of Athens (NTUA), IASA, CERN
- Project Principal Investigator: Dr. Eleni Adamidi, PhD Electrical & Computer Engineering, NTUA, IASA, CERN User



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- The Institute of Accelerating Systems and Applications (IASA) is a unique institution founded by the cooperation of the two oldest and famous universities in Greece:



[National & Kapodistrian University of Athens \(NKUA\)](#)



[National Technical University of Athens \(NTUA\)](#)



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- The Institute is affiliated with 6 university departments:

| NKUA | NTUA |
|-------------|--|
| Medicine | Electrical & Computer Engineering |
| Physics | Chemical Engineering |
| Informatics | Applied Mathematical & Physical Sciences |



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Activities

IASA is open to researchers from the international community and access. It is determined purely on scientific merit.

IASA is currently engaged in Research projects in the following areas, with more than **50 EU projects**, currently, in operation:

- Nuclear and Particle physics
- Nuclear medicine and imaging
- Accelerator Science & Engineering
- Automated Control
- Scientific Computing
- Environmental Physics
- Microwave Engineering
- Telecommunications
- **Science for Education and Society**
- **Outreach of Science and Engineering**
- **Knowledge & Technology Transfer**



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Recent AI-related activities

- **Recent AI-project, NTUA**

Aspires to discover novel biomarkers with high prognostic value regarding the onset and the progress of COVID-19 by analyzing cough, voice and speech (clinical pilots and crowd-source) with explainable AI methods.

- **Recent publication**

“Eleni S. Adamidi et al., Artificial intelligence in clinical care amidst COVID-19 pandemic: A systematic review, Computational and Structural Biotechnology Journal, Vol. 19, 2021, Pages 2833-2850, ISSN 2001-0370, <https://doi.org/10.1016/j.csbj.2021.05.010>.”



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IASA Experience and Contribution

A long experience since 2000, on transferring Nuclear and Particle physics research results to High School Teachers (HST) and High School Students (HSS), Lectures, seminars, training summer schools for HST, CERN Masteclasses, summer schools for HSS in cooperation with:

- CERN-Education Division,
- Greek Ministry of Education,
- Filekpedeftiki Etaireia,
- Aikaterini Laskaridis Foundation,
- Perimeter Institute, Toronto, Canada,
- Hellenic Society for the Study of the High Energy Physics –EESFYE,
- Hellenic Physics Society-EEF



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IASA Experience and Contribution

| EESFYE/EEF | AIK. LASKARIDIS FDN |
|--|--------------------------------------|
| 2000-2019 | 2017-18 & 2018-19 |
| More than 150 lectures to high schools in Greece | 15 lectures to high school in Attica |

| HST Training at CERN? | HS students Summer School for CERN? |
|---|---|
| 2007-2019 [More than 1'000 HSTs have been trained] | NTUA-Lavrion Cultural & Technological Park, 2018 20 students, 8 Lecturers, EESFYE, EEF |
| | Arsakeion School, Ekali, 2019 40 students, 8 Lecturers, EESFYE, FE |
| To be continued on the next years | Arsakeion School, Ekali, 2021 40 students, 8 Lecturers, EESFYE, FE |

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Thank you for your attention



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