## **RECENT RESEARCH PROJECTS**

https://dossier-project.eu/



Domain Specific Systems for Information Extraction and Retrieval

Duration: 2019 - 2023 Funding: Marie Skłodowska-Curie, EU Horizon 2020 Scientist in charge:Michail Salampasis

/dsplab.feri.um.si/en/cost-ca18231-multi3generation/

Multi3Generation:Multi-task, Multilingual, Multi-modal Language Generation

Duration: 2019 - 2023 Funding: European Cooperation Soft carriage Return in Science and technology MC members: Michail Salampasis and Konstantinos Diamantaras

#### https://nlp-theatre.freecluster.eu/?i=1

NLP-Theatre : Innovative Applications of Natural Language Processing and Digital Media in Theatre and Performing Arts

Duration: 2019 - 2023 Funding: ESPA - 2014-2020, Action "Research-Create-Innovate" Scientist in charge: Konstantinos Diamantaras

#### https://www.fres-project.gr/

**FRES : Flexible REcommendation** Systems for Big Data

Duration: 2018 - 2022 Funding: ESPA - 2014-2020, Action "Research-Create-Innovate" Scientist in charge: Konstantinos Diamantaras

#### https://draive.gr/



draive: Putting the AI in drive

Duration: 2021 – Today Funding: Self-funding by ISLÁB and Students Machine Learning Team Scientist in charge: Konstantinos Diamantaras

The ISLAB's is mostly involved in the emerging and interdisciplinary field of Data Science that deals with vast volumes of data using modern tools and techniques to find unseen patterns, derive meaningful information, and make business decisions. Typically data science uses complex machine learning algorithms to build predictive models. Some areas that we conduct research and collaborate in research projects are: information retrieval, recommender systems, natural language processing and understanding, computation intelligence, semantic web, image and signal processing, knowledge management, pattern recognition and intelligent tutoting systems.

# **Contact Details**

Mailing Address: International Hellenic University epartment of Information and Electronic Engineering Box 141, GR - 57400, Thessaloniki, Greece

Contact Person Professor Michail Salampasis Tel: +30 2310 013061 Website: https://islab.iee.ihu.gr

Learning March 40 March 40 March 40 March 40 March 40 Securces	Semantic Model Www Deep Www	Www Vector Area User	Analysis Innovation Seek Data	Intelligence Information a Information Area Web Dataset Web Weber
Dutaset Retriévile Détean	Web	Victorial Model	Virtual Learning	Seek
Seek Anarysis Asperts	User Agenta Retrieval	Deep Data Research	Machine	Data Learning

**Research | Education | Innovation | Application** 

# THE INTELLIGENT SYSTEMS LABORATORY

The Intelligent Systems Laboratory (ISLAB, islab.ieee.ihu.gr) is one of the four research laboratories in the Department of Information and Electronic Engineering (www.iee.ihu.gr/en) at the International Hellenic University.

# The objectives of the lab:

- The implementation of national and international research programs
- The provision of high-quality M.Sc. and Ph.D. programmes
- The organization of scientific lectures, meetings, seminars, conferences, and other events related to Intelligent Systems and Data Science
- The publication of high-quality scientific papers and articles
- The promotion of cooperation with industry, public and private organizations to promote education and research in the scientific areas of the lab





### **PhD Candidates**

Ph.D. research programme: Interoperability enhancement in the «Internet of Things», through utilization of «Semantic Web» technology.

Charalampos C. Charalampidis B.Sc., M.Sc.



Ph.D. research programme: Explainable Machine Learning for Intelligent Systems

Pantelis I. Kaplanoglou B.Sc., M.Sc.

Ph.D. research programme:

recommendations"

"Graph-based Machine Learning

methods for providing personalized



Ph.D. research programme: Predicting Student Performance Using Machine Learning Methods and Recommending Educational Content

Marina Delianidi B.Sc., M.Sc.

Ph.D. research programme: Fault Detection in industrial processes with Deep Learning



**Georgios Gravanis** B.Sc., M.Sc.



Ph.D. research programme: Machine learning methods for Natural Language Processing and Generation

Alkis Katsalis B.Sc., M.Sc.

Ph.D. research programme: Computational Humor in Greek

Antonis Kaloniatis B.Sc., M.Sc., M.Sc.

Ph.D. research programme: Intelligent and Multilevel Patent Classification



Eleni Kamateri B.Sc., M.Eng., M.Sc.

Ph.D. research programme: End-to-End Neural Retrieval for Patent Prior Art Search



Ifigeneia Karaveli

B.Sc., M.Sc.

Vasilis Stamatis B.Sc., M.Sc.

### **Research Areas:**

Machine Learning, Explainable ML, ML Engineering, Deep Learning, Recommender systems, NLP, NLG, NLU, Graph Neural Networks, Knowledge Graphs, Computer Vision, Technology Enhanced Learning, Fault Detection, Information Retrieval, Industry 4.0,

XAI, Internet of Things, Semantic Web, Instrumentation, Industrial automation

### **Faculty members**



Dr. Katerina Asdre iee.ihu.gr/staff asdre-katerina





Prof. Michail Salampasis (Lab Director) www.salampasis.gr



Prof. Demosthenes Stamatis people.iee.ihu.gr /~demos\_

### **Research Collaborators**







Prof. Ph.D. George Stalidis

Ph.D. Dimitrios Tektonidis

M.Sc. Theodosios Siomos







M.Sc. Evgenia Papadopoulou

M.Sc. Konstantinos Christantonis

## **Machine Learning Team Students**

Makris Giorgos, Chasanidis Dimitrios, Mersinis Christos, Tsakiris Nikolaos, Toufexis Stefanos, Daras Ioannis, Karakasidis Dimitrios, Soulakis Giorgos, Agorastos Vasilis, Osmantzikidou Elli, Miaris Dionisios, Architektonidou Anna, Architektonidou Valentina, Artemiadis Moisis, Rigoutsou Leonarda