

Critical Infrastructure Systems (CIS)

What are they?

- CIS are assets or systems, essential for the maintenance of vital societal functions



Electric Power Systems



Water Networks



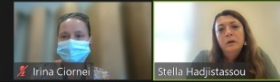
Telecommunications



Transportation Networks

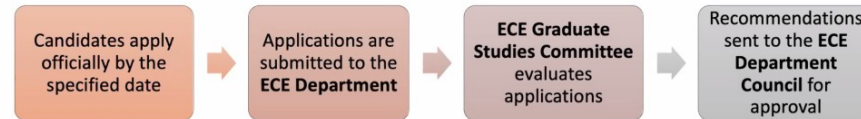


Emergency Response



Admission Process

- One admission period per academic year **in September**



- Requirements for admission:

- **Bachelor's degree** in an Engineering/Science discipline. Pre-requisite courses may apply, especially to non-ECE majors, which can be undertaken from the BSc-level programs of the ECE Department.
- **English** proficiency.

SCHOLARSHIP

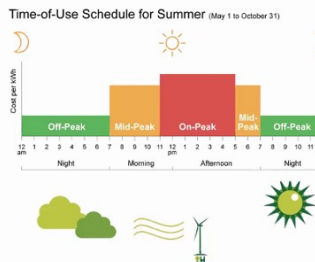
- Evaluation criteria: ✓ Academic background ✓ Research background
✓ Recommendation letters ✓ Additional qualifications



Demetrios Eliades

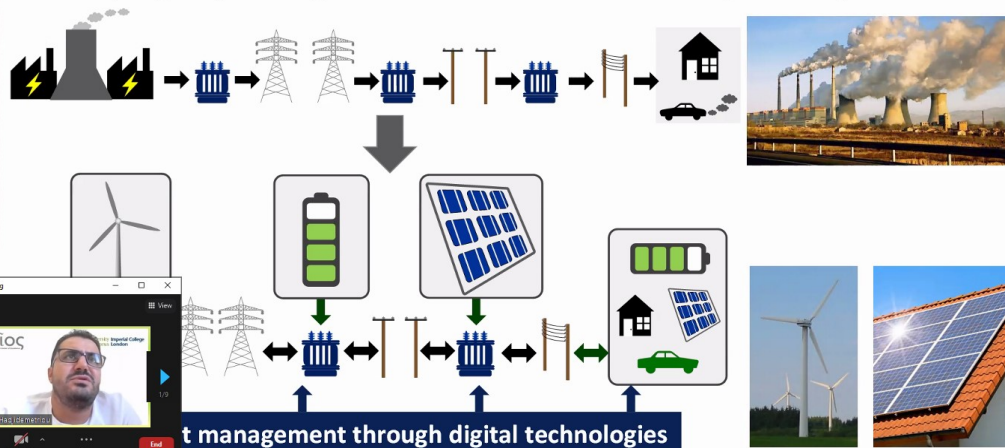
How can we increase energy efficiency?

- Measure energy usage in real-time
- Learn pump model dynamics using machine learning
- Detect anomalies in pump operation



Motivation

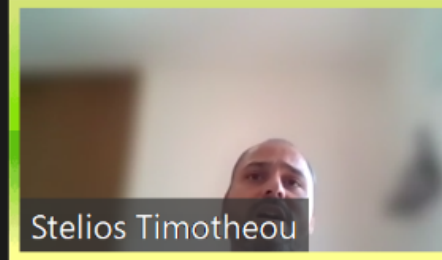
- Green, digital, intelligent and secure evolution of power systems



Educational Activities in ITS

Teaching Philosophy

- Apply meaningful rather than rote learning
 - Help students link traffic concepts with everyday-life examples
- Have learning transfer in mind
 - Help students to be able to transfer what they learn in other application contexts
- Teach state-of-the-art concepts and methods
- Use different audiovisual means to illustrate concepts
- Expose students to experts working in ITS
 - Traffic simulation, optimization, estimation
- Link theory to real-world problems

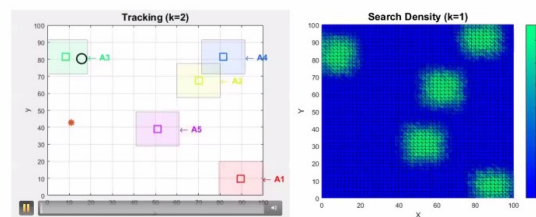


Stelios Timotheou

Shchasiانا Arhun

Shchasiانا Arhun

Distributed implementation



Irina Ciornei

Volodymyr Sistuk

Natalia Morkun

Olga Poliakovska

Hanna Hnatova

ANDRII HNATOV

Svitlana Gadetska

Svitlana Kostiuik

Natalia Rudenko

Stella Hadjstassou

Iryna Zavsiehdashnia

KOIOS
Research and Innovation Center of Excellence

Virtual Smart City KIOS CoE Testbed

Dr Artemis Kontou
Dr Philippos Isaia

University of Cyprus
Imperial College London

Co-funded by the Erasmus+ Programme of the European Union

CYBIPHYS

Philippos Isaia

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Nataliia Rudenko

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Svitlana Gadetska

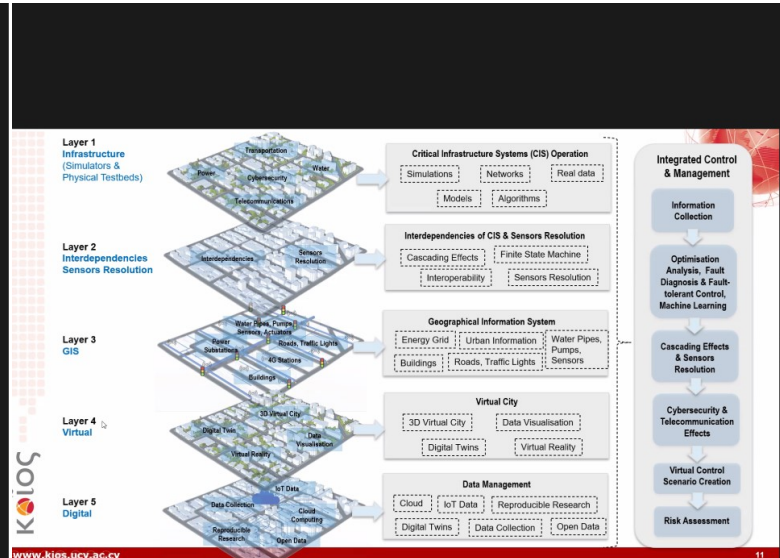
Svitlana Kostiuik

Iryna Zavsiehdashnia

Stella Hadjistassou

Volodymyr Sistuk

Ask to Unmute



Philippos Isaia

Oleksandr Drozd

Olga Poliakovska

Svitlana Kostiuik

Stella Hadjistassou

Renewable and Energy Storage Pilots

Pilot I – University of Cyprus active distribution grid

Pilot II – Renewable energy resources

Cutting-edge research solutions for monitoring and control the energy infrastructure and the renewable energy resources
KIOS Smart Grid Platform

Vitalii Tron

Lyudmyla Kruhle...

EMPOWER Project Paradigm

Empowering the Cyprus power system with sustainable and intelligent technologies

A strong interdisciplinary consortium with all the key stakeholder in Cyprus

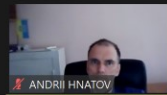
Iryna Zavsiehdashnia

Lyudmyla Kruhle...

Popular Landmarks: Choirokoitia

- The Neolithic Settlement of Choirokoitia (7th to 4th century BC) forms one of the most important and well-preserved prehistoric sites of that era;
- In 1998, it was added to UNESCO's World Heritage Sites;
- It forms one of the first sites where farmers settled into the island;
- It is located in the area of Larnaca, approximately 6km from the Southern Coast of Cyprus.

ΚΟΤΟΣ
24/09/2021
CybPhys
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Анатолій Пристуа

Introduction

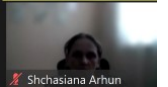
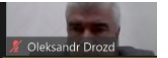
The Digital Methods Platform for Arts and Humanities (DiMPAH) aims, among its many Intellectual Outputs, to employ Augmented Reality technology in mobile apps development for enhanced learning experience in intercultural exchange.

AR in Educational Technology:

Education technology contributes to improving student engagement through web tools and AR experience, using mobile applications employing the following elements:

- Designing and projecting artificial 3D model elements, which are controlled using a programming language
- Employing objects and characters animation to the real world with audiovisual support
- Promoting interactivity between the user and the virtual elements/objects.

The applications design process follows the software development cycle: requirements analysis and research, development (design, animation, programming), implementation/testing and release/distribution process.



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