Nikos Kalogeropoulos



Laboratory Teaching Staff

School of Chemical Engineering- National Technical University of Athens

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EDUCATION

- Diploma in Physics/ National and Kapodistrian University of Athens
- Diploma in Chemical Engineering / National Technical University of Athens
- PhD / National Technical University of Athens / Development and evaluation of network methods for adapting the educational process

RESEARCH FIELDS

- > Analysis of complex systems & their behavior
- Educational Software
- Optimization of process operating conditions (with design side interest)
- Estimation of system state
- > Algorithms to observe current system state and forecast state
- Software Design and Implementation
- Web services
- Custom software development
- Smart Contracts

EDUCATIONAL EXPERIENCE

UNDERGRADUATE COURSES

- Computer Programming Basic Software Tools / National Technical University of Athens (NTUA), School of Chemical Engineering
- Applied Instructional Design in Science and Technology/ National Technical University of Athens (NTUA), School of Chemical Engineering
- Statistics_and_Design_of_Experiments/ National Technical University of Athens (NTUA), School of Chemical Engineering
- Technical Drawing/ National Technical University of Athens (NTUA), School of Chemical Engineering

GRADUATE COURSES

- Computer Programming Basic Software Tools / National Technical University of Athens (NTUA), School of Chemical Engineering
- Pedagogy II / National Technical University of Athens (NTUA), School of Chemical Engineering
- Statistics for Engineers / National Technical University of Athens (NTUA), School of Chemical Engineering
- Technical Drawing/ National Technical University of Athens (NTUA), School of Chemical Engineering

GRADUATE COURSES

- Εφαρμογή νέων εκπαιδευτικών τεχνολογιών στην εκπαιδευτική πράξη Ι / Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών, Τμήμα Χημείας
- New technologies application in educational practice I / National and Capodistrian University of Athens , Department of Chemistry
- Εφαρμογή νέων εκπαιδευτικών τεχνολογιών στην εκπαιδευτική πράξη ΙΙ / Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών, Τμήμα Χημείας
- New technologies application in educational practice II / National and Capodistrian University of Athens , Department of Chemistry
- ΕΡΓΑΛΕΙΑ ΑΝΑΠΤΥΞΗΣ ΕΚΠΑΙΔΕΥΤΙΚΟΥ ΨΗΦΙΑΚΟΥ ΥΛΙΚΟΥ / Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών, Τμήμα Χημείας

EdTech Tools for developing digital educational content / National and Capodistrian University of Athens,

ADDITIONAL INFORMATION

Department of Chemistry

1. EC funded Large-scale integrating project FP7FED4FIRE: Federation for FIRE (IP Project No. 318389) http://www.fed4fire.eu/, https://portal.fed4fire.eu/.Design/Implementation of a system for reservation of resources in federated experimental facilities.

Design/Implementation of a reputation service for federated experimental infrastructures (Ongoing) [Django/Python, Ruby, Sinatra, PostgreSQL, jQuery].

2. "PROTEAS Solar Polygeneration System: A potential option for energy saving and peak-load shaving" General Secretariat for Research and Technology, Program "SYNERGASIA 2011" (2013-2016)

Lead programmer [C#, PHP, MySQL]

 "Specification of digital educational platform, development and operation of digital knowledge base, digitization of educational resources and metadata, educational infrastructure for exemplary teaching and participatory web utilization. Computer Technology Institute, European Union, NSRF (2010-2014), Researcher - design and development of educational platform. .(<u>http://dschool.edu.gr/</u>)

Lead Architect for the design and implementation of the API for "micro - teaching (microsites process)". [Node.js, AngularJS, PHP,Drupla]]

4. "INPHOPAS-Integration of innovative solar PV-thermal systems in the retrofitting of the NTUA Chemical Engineering building complex", European Union, Program Thermie (1998-2001). Leading the development of the *Software for control and monitoring of PV systems in real time*.

Software team leader [C#, PHP, MySQL]

SELECTED PUBLICATIONS (link OF PUBLICATIONS)

- 1. Roulia, M.; Kontezaki, E.; Kalogeropoulos, N.; Chassapis, K. One Step Bioremediation of Olive-Oil-Mill Waste by Organoinorganic Catalyst for Humics-Rich Soil Conditioner Production. *Agronomy* **2021**, *11*, 1114. https://doi.org/10.3390/agronomy11061114
- 2. M. E. Kavousanakis, N. G. Kalogeropoulos, D. T. Hatziavramidis, "Computational Modeling of Drug Delivery to the Posterior Eye", Chemical Engineering Science, 108:203–212, 2014.
- N. Kalogeropoulos, E. Pavlatou, A. Boudouvis, J.A. Palyvos, I. Tzigounakis. Computer-Based Assessment of Student Performance in Programming Courses. Computer Applications in Engineering Education Comput Appl Eng Educ 21: 671–683, 2013.

- 4. I. Tzigounakis, A. Boudouvis, E. Pavlatou & N. Kalogeropoulos. A Modular Web-Based Course Management Environment for the Academic Teacher, Focused on User-Friently Methods. International Conference of Education, Research and Innovation (ICERI 2009), Madrid, 16-18 November 2009.
- 5. N. Kalogeropoulos, E. Pavlatou, A. Boudouvis & I. Tzigounakis. Development of a Computer-Based Assessment Tool for Undergraduate Programming Courses, International Conference of Education, Research and Innovation (ICERI 2009), Madrid, 16-18 November, 2009.