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PROFILE

President of the National eHealth Authority (NeHA) of the Republic of Cyprus (Oct 2019 - Oct 2024) – Continues at NeHA as EU funded Project Coordinator. A Life Senior Member of IEEE, Fellow of BCS, and IEE, with 44 years of experience in information systems development. His expertise spans eHealth, computational and artificial intelligence, medical informatics, biosignal analysis, and brain activity modelling, with a focus on attention mechanisms. A former Professor of Computational Intelligence at the University of Cyprus, where he served as Vice-Rector (2002–2006), he is a founding member of the Cyprus Institute of Neurology and Genetics (CING), CYENS Centre of Excellence, and the CY-BIOBANK Centre of Excellence. With over 170 research publications, he regularly delivers invited keynote addresses on healthcare ecosystem implementation.

In 2006, he introduced and taught eHealth courses at graduate and postgraduate levels at the Department of Computer Science and the Medical School of the University of Cyprus. Over the past 15 years, he has led interdisciplinary research initiatives for establishing a national eHealth ecosystem, contributing to pioneering research that led to the **formation of Cyprus' eHealth law** in 2019 and subsequently contributed to the **European Health Data Space (EHDS)** regulation.

He served as advisor to the President of the Republic of Cyprus on eHealth strategy, proposing the national eHealth Law, contributing to the healthcare system reform and the introduction of the national health system. He has participated in European Commission initiatives to promote the Information Society, particularly the Euro-Mediterranean partnership, cross-border healthcare and eHealth programs. Since 2015, he has served as Cyprus' national representative in the EU **eHealth Network**. Currently, he represents Cyprus in the Global Digital Health Partnership (GDHP) and is the national expert in EHDS regulatory discussions at the Council of the European Union.

He coordinates 13 EU-funded projects, including the Joint Action **Xt-EHR Extended EHR@EU Data Space for Primary Use**, a foundational project under the EHDS Regulation involving all EU member states and Norway. This Joint Action aims to establish the implementation guidelines for the primary use of health data under the EHDS. Coordinates also the directly funded by the EU project **European Health Data Space for SecondaryUse@CY (CY-EHDS-2ND)** for establishing Cyprus connection with **HealthData@EU** and related services for the development of the EHDS for secondary uses of health data, facilitated by the **Health Data Access Body (HDAB)**.

Ultimately, his initiatives aim to advance healthcare services in prevention, early diagnosis, and primary care, fostering a **European Health Union** in a citizen-centred ecosystem where all Member States actively participate in an interoperable health data exchange environment for both primary and secondary uses, benefiting citizens across the EU.

Motto: Invest in health to avoid illness.

WORK EXPERIENCE

-President of the Board of Directors – Executive Director

National eHealth Authority (NeHA), Nicosia, Cyprus [Oct 2019 – Oct 2024]

Address: 67A Limassol Avenue, 2121, Aglantzia, Cyprus

<https://www.neha.org.cy/en/>

- Implement Cyprus' eHealth system at the national level and built a health ecosystem serving citizens and healthcare providers.
- Establish the National Contact Point (NCP) for eHealth, making Cyprus a member of the **MyHealth@EU** initiative for cross-border healthcare.
- Built and operated the national electronic health record (EHR) databank for all citizens.
- Establish and operated the **Health Data Access Body** (HDAB) of Cyprus for the secondary use of health data, as outlined by the EHDS Regulation.
- Coordinates EU-funded projects ensuring compliance with the EHDS Regulation, including **Xt-EHR for primary use of data** and **CY-EHDS-2ND for secondary use of data**.

-Counsellor to the President of the Republic of Cyprus

Presidential Palace, Nicosia, Cyprus [Apr 2016 – Feb 2023]

Address: Presidential Palace 1400 Nicosia, Cyprus

<https://www.presidency.gov.cy/>

- Served as the Presidential advisor on eHealth and healthcare system reform, including the introduction of a national health system (NHS).
- Drafted the **Cyprus eHealth Law**, debated and passed unanimously by Parliament in 2019.
- Proposed the National eHealth Strategy and oversaw healthcare system interoperability, enabling cross-border healthcare under the **MyHealth@EU** initiative.

-National Expert in EHDS Regulation

Council of the European Union, Brussels, Belgium [Apr 2022 – Dec 2024]

- Served as the national expert representing Cyprus at the Council of EU (Working Party on Public Health). The Working Party of experts supported by the Working Party of Attaches met physically with an intensive schedule where the EHDS Regulation was discussed article-by-article until December 2024
- Active participation in the discussions and consensus building on the EHDS Regulation through detailed article-by-article reviews involving the Commission, and the Parliament representatives.

-Member of the Board of Directors

CYENS – Centre of Excellence, Nicosia, Cyprus [Jun 2018 – Jun 2020]

Address: Plateia Dimarcheias, 1016 Nicosia, Cyprus

<https://cyens.org.cy/>

- Founding member and contributor to the Centre of Excellence CYENS, focusing on **immersive technologies and regional knowledge transfer**.
- CYENS is a joint venture of three public universities, the University of Cyprus, Cyprus University of Technology, and the Open University of Cyprus, and two international partners, Max Planck Institute for

Informatics, and University College London. CYENS is **funded by Horizon 2020 TEAMMING**, and the Government of the Republic of Cyprus and is coordinated by the Municipality of Nicosia.

-Professor of Computational Intelligence and eHealth

Department of Computer Science and eHealth at the School of Medicine

University of Cyprus, Nicosia, Cyprus [Dec 1991 – Aug 2020]

Address: 1 Panepistimiou Avenue 2109 Aglantzia, Nicosia, Cyprus

<https://www.ucy.ac.cy/>

- First academic in the Department of Computer Science at the newly established University of Cyprus.
- Served as department head, Senate member, Council member, and Vice-Rector (2002–2006), overseeing significant growth, external competitive funding, and governance reforms.
- Initiation of the eUniversity by the Vice Rector as a strategic objective of the University.
- Established the Computational Intelligence and eHealth Labs and introduced eHealth courses in both the Department of Computer Science and the School of Medicine.

-Professor of Computer Information Systems & Distinguish Visiting Professor

University of Indianapolis, Indianapolis, Indiana, USA [Aug 1989 – Dec 1995]

Address: 1400 East Hanna Avenue, Indianapolis, Indiana 46227, USA

<https://www.uindy.edu/>

- Professor of Computer Information Systems and coordinator of the CIS program.
- Conducted interdisciplinary research with neurologists from the Indiana University Hospital, Indiana University and Neurologists from the Cyprus Institute of Neurology and Genetics in the area of *Computer-Aided Diagnosis of Neuromuscular Disorders Based on EMG and Muscle Biopsy findings*.
- Computational models were developed using and programming from first principles artificial neural networks. Artificial Intelligence in medical diagnosis attracted international attention those days with our group among the pioneers in the field.

-Director of the Computational Intelligence Department

Cyprus Institute of Neurology and Genetics (CING), Nicosia, Cyprus [Oct 1985 – Oct 2006]

Formerly MDRTC

Address: Leoforos Aerodromiou, 1683, Nicosia, Cyprus

<https://www.cing.ac.cy/>

- Co-founder of the Cyprus Institute of Neurology and Genetics that initially started as a charity organization known as the Muscular Dystrophy research Trust of Cyprus.
- With a generous funding from the USA through UNHCR and the government of Cyprus support, CING has become a leading research and tertiary medical institute specializing in neurological, neuromuscular, and genetic disorders.
- The **Computational Intelligence Department** worked across the various departments and carried out interdisciplinary research in medical diagnosis and prognosis of disorders by applying the pioneering at those days AI techniques of artificial neural networks and genetics-based machine learning.
- *Quantitative Immunohistochemical Assessment of Prognostic Factors in Carcinoma of the Breast* is another area where the Computational Intelligence Department had significant international contribution.

-Postdoctoral Research Fellow

Queen Mary University of London, London, UK [Jan 1981 – Dec 1984]

Artificial Intelligence Group under F.J. Evans and E.H. Mamdani

Address: Mile End Road, London E1 4NS, UK

<https://www.qmul.ac.uk/>

- Graph theoretic approach for the analysis of large-scale systems. Conducted AI and fuzzy logic research for large-scale systems analysis and design under renowned academics late F.J. Evans and late E.H. Mamdani.

EDUCATION AND TRAINING

B.Sc. Electronic Engineering

Queen Mary University of London/Engineering, London, UK [1978]

M.B.A. Master in Business Administration

University of Indianapolis/School of Business, Indianapolis, Indiana, USA [1988]

Ph.D. Doctor of Philosophy

Queen Mary University of London/Engineering, London, UK [1981]

Certifications

Life Senior Member of IEEE – by invitation [2017]

SenMIEEE – by application and evaluation [1985]

Fellow of British Computer Society (FBCS) – by application and evaluation [1989]

Fellow of IEE (FIEE) – by recommendation and evaluation [1988]

Chartered Engineer (CEng) – by evaluation [1981]

LANGUAGE SKILLS

Mother tongue(s):

Language Greek

Foreign language English

LISTENING: 10/10 READING: 10/10 WRITING: 10/10

SPOKEN PRODUCTION: 10/10

SPOKEN INTERACTION: 10/10

PUBLICATIONS

Selected recent scientific publications (from a total of approximately 170)

- [Emerging Mobile Health Systems and Services](#) 2024
T Solomou, CN Schizas, CS Pattichis
- [Biobank. cy: the Biobank of Cyprus past, present and 0 future](#) 2024
EM Loizidou, M Kyratzi, MA Tsiarli, AC Kakouri, G Charalambidou, et al.
Scientific Reports 14 (1), 28517
- [Empowering Citizens Through Translated Patient Summary Access and Sharing in Digital Health Ecosystems](#) 2024
T Solomou, IC Canciu, M Christodoulou, P Savva, C Yiasemi, Z Antoniou, et al.
Studies in Health Technology and Informatics 316, 497-501
- [Integrating Chatbot Functionality in a Patient Summary Based Healthcare System](#) 2024
A Vasili, E Schiza, CN Schizas, CS Pattichis
Studies in health technology and informatics 316, 296-300
- [The International Patient Summary: Proposal for a National Implementation for Cyprus](#) 2022
A Neocleous, M Papaioannou, P Savva, F Miguel, A Panayides, et al.
2022 E-Health and Bioengineering Conference (EHB), 1-5
- [A Prototype of the National EHR system for Cyprus*](#) 2021
M Papaioannou, A Neocleous, P Savva, F Miguel, A Panayides, et al.
2021 43rd Annual International Conference of the IEEE Engineering in Medicine
- [Integration of biobanks in national eHealth ecosystems facilitating long-term longitudinal clinical-omics studies and citizens' engagement in research through eHealthBioR](#) 2021
A Antoniadou, M Papaioannou, A Malatras, G Papagregoriou, H Müller, et al.
Frontiers in Digital Health 3, 628646
- [Autonomous Health Monitoring and Assistance Systems using IoT](#) 2021
G Azzopardi, D Karastoyanova, M Aiello, CN Schizas
Frontiers Media SA
- [Teaching and integrating eHealth technologies in undergraduate and postgraduate curricula and healthcare professionals' education and training](#) 2021
EC Schiza, M Foka, N Stylianides, T Kyprianou, CN Schizas
Digital Innovations in Healthcare Education and Training, 169-191
- [Modular domain-to-domain translation network](#) 2020
S Karatsiolis, CN Schizas, N Petkov
Neural Computing and Applications 32, 6779-6791
- [Conditional generative denoising autoencoder](#) 2019
S Karatsiolis, CN Schizas

IEEE Transactions on Neural Networks and Learning Systems 31 (10), 4117-4129

- Measuring the impact of blockchain on healthcare applications 2019
C Loizou, D Karastoyanova, CN Schizas
Proceedings of the 2nd International Conference on Applications of Intelligent Systems
- Proposal for an ehealth based ecosystem serving national healthcare 2018
EC Schiza, TC Kyprianou, N Petkov, CN Schizas
IEEE journal of biomedical and health informatics 23 (3), 1346-1357
- Two-stage approach for risk estimation of fetal trisomy 21 and other aneuploidies using computational intelligence systems 2018
AC Neocleous, A Syngelaki, KH Nicolaides, CN Schizas
Ultrasound in Obstetrics & Gynecology 51 (4), 503-508
- Universal electronic Health Record (U-EHR): A global medical database management system 2018
GZ Panos, EC Schiza, I Aristide, C Paraskevi, G Pavlides, CN Schizas
APPIS
- Marker selection for the detection of trisomy 21 using generalized matrix learning vector quantization 2017
AC Neocleous, C Neocleous, CN Schizas, M Biehl, N Petkov
2017 International Joint Conference on Neural Networks (IJCNN), 3704-3708
- The use of e-Registries in building and upgrading services 2017
M Angastiniotis, Z Antoniou, EC Schiza, CP Pattichis, CN Schizas
haematologica 102 (s1), 44-48
- Cognitive computing for supporting eHealth 2017
CN Schizas
Health and Technology 7 (1), 11-12
- Introductory editorial to the special issue on systems medicine for the delivery of better healthcare services 2017
A Antoniadis, CS Pattichis, CN Schizas, PD Bamidis
Health and Technology 7, 1-2
- Deployment of generic cross border eHealth services in Cyprus 2017
Z Antoniou, AS Panayides, MS Neofytou, I Constantinou, K Neokleous, CN Schizas
IEEE Communication Society eHealth Technical Committee Newsletter
- Cognitive Computing for Medicine-CoCoMed 2017
EC Schiza, N Petkov, CN Schizas
COCOMED (Cognitive Computing for Medicine), 8TH-12TH January
- Intelligent noninvasive diagnosis of aneuploidy: raw values and highly imbalanced dataset 2016
AC Neocleous, KH Nicolaides, CN Schizas
IEEE Journal of biomedical and health informatics 21 (5), 1271-1279

- Variable Target Values Neural Network for Dealing with Extremely Imbalanced Datasets
 S Karatsiolis, CN Schizas
 XIV Mediterranean Conference on Medical and Biological Engineering and Computing

2016
- Non-invasive Trisomy 21 Diagnosis Using Fuzzy Cognitive Maps
 M Papaioannou, C Neocleous, CN Schizas
 XIV Mediterranean Conference on Medical and Biological Engineering and Computing

2016
- Prenatal diagnosis of aneuploidy using artificial neural networks in relation to health economics
 AC Neocleous, CK Neocleous, N Petkov, KH Nicolaidis, CN Schizas
 XIV Mediterranean Conference on Medical and Biological Engineering and Computing

2016
- Data protection issues of integrated electronic health records (EHR)
 EC Schiza, GJ Fakas, CS Pattichis, N Petkov, CN Schizas
 XIV Mediterranean Conference on Medical and Biological Engineering and Computing

2016
- Fuzzy cognitive models in studying political dynamics: The case of the Cyprus problem
 C Neocleous, C Schizas, C Yenethlis
 Nicosia: University of Cyprus

2016
- Medical content searching, retrieving, and sharing over the internet: lessons learned from the mEducator through a scenario-based evaluation
 A Antoniadis, I Nicolaidou, D Spachos, J Mylläri, D Giordano, E Dafli, et al.
 Journal of medical Internet research 17 (10), e229

2015
- Electronic health record application support service enablers
 MS Neofytou, K Neokleous, A Aristodemou, I Constantinou, Z Antoniou, et al.
 2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)

2015
- First trimester noninvasive prenatal diagnosis: a computational intelligence approach
 AC Neocleous, KH Nicolaidis, CN Schizas
 IEEE Journal of biomedical and Health informatics 20 (5), 1427-1438

2015
- eHealth Services for the European Reference Network on Rare Anaemias (eENERCA).
 ZC Antoniou, EC Schiza, KC Neokleous, M Angastiniotis, CS Pattichis, CN Schizas
 ICIMTH, 153-156

2015

JOB-RELATED SKILLS

Organisational and managerial skills

- Director of eHealth Laboratory
- Director of Computational Intelligence Laboratory
- University Departmental Head
- University Vice-Rector
- Board of Directors Member in Public Telecommunications Company
- Board of Directors Member in Research and Innovation Centre
- Chairperson of a non-profit non-governmental organization (NGO)

Communication skills

- Delivered over 100 keynote speeches (scientific, policy, public, philosophical).
- Mass media appearance, articles, radio, television.
- Preparation of scientific reports, project and business deliverables.
- Preparation of organization annual reports.

EU proposal evaluation and writing

- EU Expert in proposal evaluation for funding since 1991
- Scientific proposal preparation for funding since 1989

EU FUNDED PROJECT PREPARATION/COORDINATION – In Progress

Funded project coordination with a total amount raised since 1989 that exits 150 million euros in total. Currently coordinating and participating in the following EU funded competitive projects:

1. Extended EHR@EU Data Space for Primary Use (Xt-EHR)

Proposal ID: 101128085

Call: EU4H-2022-JA-IBA / Joint Actions 2022

Topic: EU4H-2022-JA-09 Type of Action: EU4H-PJG / EU4H Project Grants

2. European Health Data Space for Secondary Use @ CY (CY-EHDS-2ND)

Proposal ID: 101129405

Call: U4H-2022-DGA-MS-IBA2

Topic: EU4H-2022-DGA-MS-IBA-4 / EU4H-PJG

3. Excellence Hub - Strengthening the South-East Europe Smart Health Regional Excellence and Boosting the Innovation Potential (VELES)

Proposal ID: 101087483

Call: HORIZON-WIDERA-2022-ACCESS-04 / (Excellence Hubs)

Topic: HORIZON-WIDERA-2022-ACCESS-04-01 / HORIZON-CSA

4. Deployment of generic cross border eHealth services in Cyprus (NCPeH)

Call: Investment 6(C1.1I6): Recovery & Resilience Plan for CY

Project Code: Investment 6 (C1.1I6)

5. Enabling Patient Access to their Health Data (PATHED)

Proposal ID: 01084817

Call: **EU4H-2021-DGA-MS-IBA / (Direct grants to Member States' authorities)**
Topic: **EU4H-2021-DGA-MS-IBA-02 / EU4H-PJG**

6. Joint Action on strengthening eHealth including telemedicine and remote monitoring for health care systems for cancer prevention and care (eCAN)

Proposal ID: **101075326**

Call: **EU4H-2021-JA-IBA / (Joint actions)**

Topic: **EU4H-2021-JA-05** Type of Action: **EU4H-PJG**

7. PilOTs for European digiTal Identity wALlet (POTENTIAL)

Call: **DIGITAL-2022-DEPLOY-02**

Type of Action: **DIGITAL-SIMPLE**

Proposal number: **101102655**

8. Expanding the European EHRxF to share and effectively use health data within the EHDS (xShare)

Call: **HORIZON-HLTH-2023-IND-06**

Type of Action: **HORIZON-RIA**

Number: **101136734**

9. European Digital Vaccination Card (EUVAC)

Call: **EU4H-2023-DGA-MS-IBA**

Type of Action: **EU4H-PJG**

Number: **101183190**

10. Second Joint Action Towards the European Health Data Space (TEHDAS2)

Call: **EU4H-2023-JA-3-IBA**

Type of Action: **EU4H-PJG**

Number: **101176773**

11. Intelligent Implementations of the European EHR Exchange Format (i2X)

Call: **DIGITAL-2024-CLOUD-AI-06**

Type of Action: **DIGITAL-SIMPLE**

Current Phase: **Kick off February 2025**

Number: **101195323**

12. Person-centred health management through access to their health data using EUDI Wallet services (MyHealth@MyHands)

Call: **DIGITAL-2024-CLOUD-AI-06**

Type of Action: **DIGITAL-SIMPLE**

Current Phase: **Kick off January 2025**

Number: **101195425**

13. Joint Action eCAN Plus – continuation of the eCAN

Call: **EU4H-2024-JA-IBA-02**

Topic: **EU4H-2024-JA-IBA-02**

Type of Action: **EU4H-PJG**

Current Phase: **Kick off June 2025**

Number: **101219434**