

CODESKILLS 4ROBOTICS

Net Media Lab Mind-Brain R&D
Presentation of Activities

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I.I.T. - **N C S R** "Demokritos"

<http://imm.iit.demokritos.gr/>

10 MARCH 2021



DEMOKRITOS



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National Center for Scientific Research "Demokritos"
Agia Paraskevi, Athens, Greece



1961

Today

Greece's largest multidisciplinary Research Center
with approximately 1200 employees

**60 YEARS DEVOTED TO RESEARCH
EDUCATION AND INNOVATION**

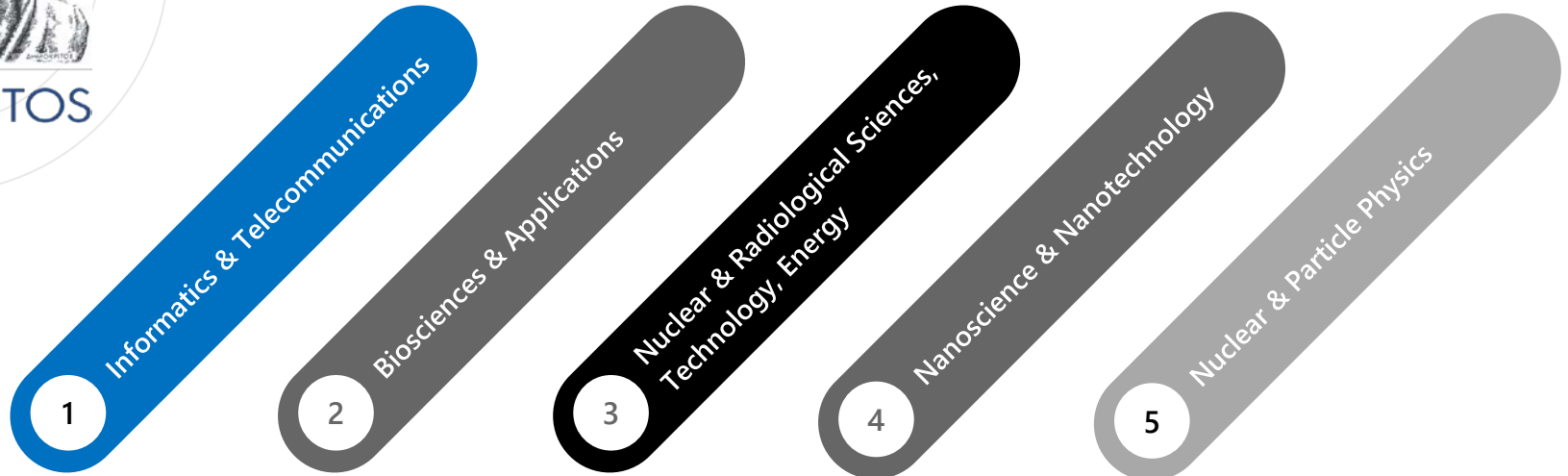
<http://www.demokritos.gr/>

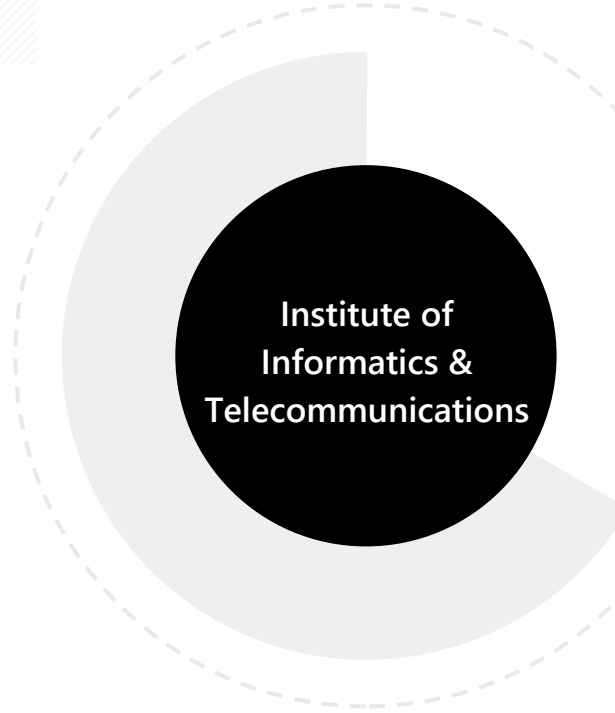
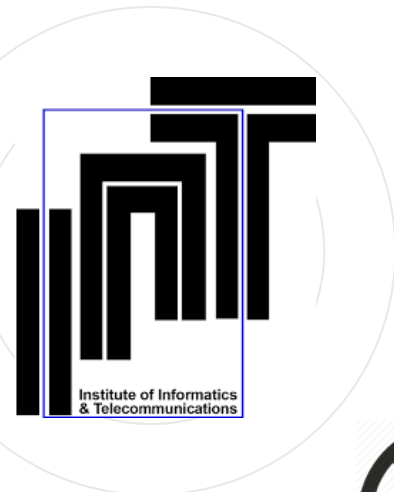


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5 Research Institutes





- Wireless Networks
- Information Systems
- Web Apps
- Internet of Things
- Cloud Computing

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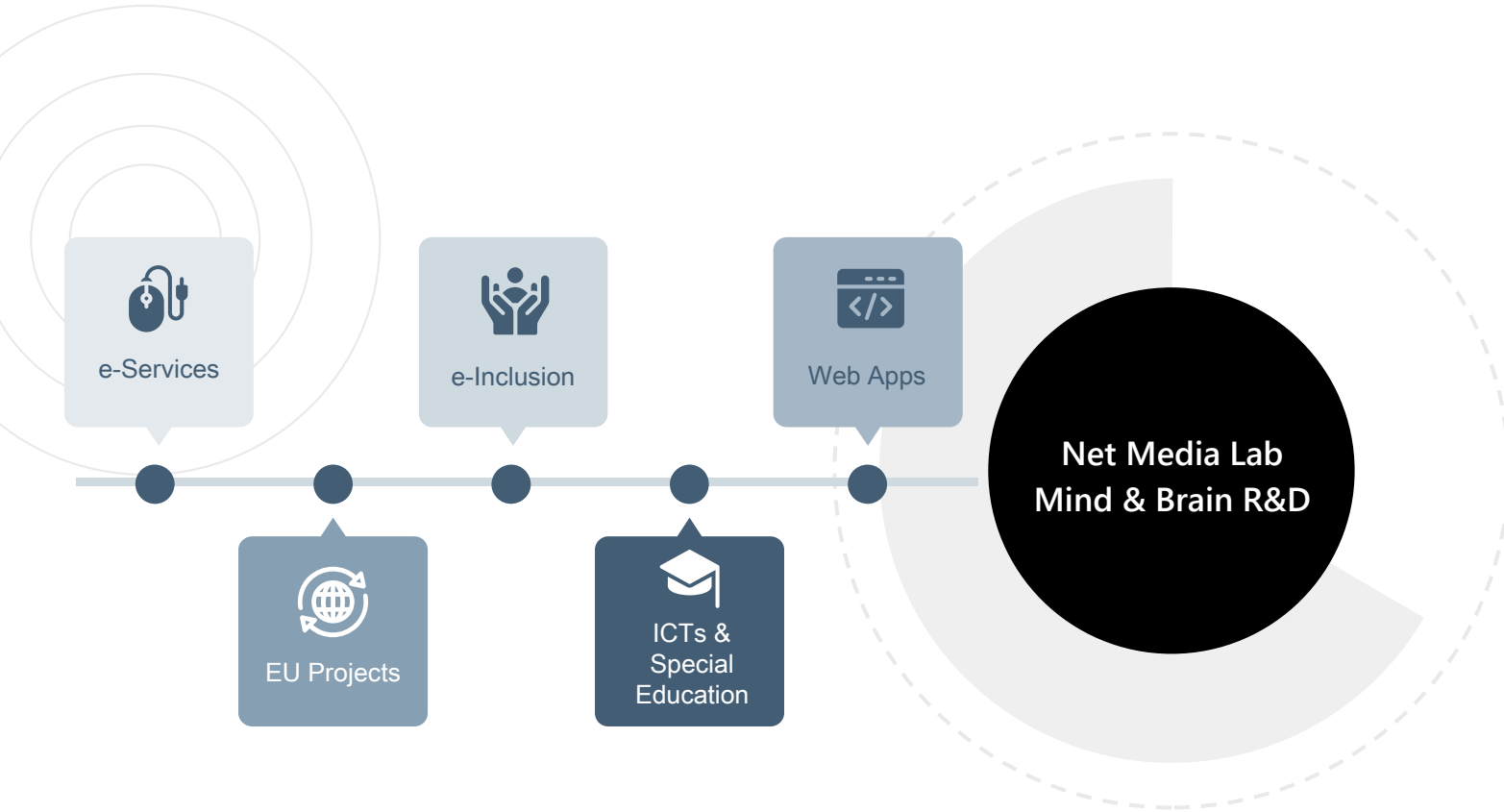
 **Net Media Lab**
Mind & Brain R&D

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Net Media Lab

Mind & Brain R&D

[POSTGRADUATE DEGREE](#) [SEMINARS](#)



Education

Interinstitutional - Interdepartmental **Postgraduate Programme** organized by the Department of Greek Philology of the Democritus University of Thrace and the Institute of Informatics & Telecommunications (I.I.&T.) of the National Centre for Scientific Research "Demokritos" entitled "**Specialization in ICTs and Special Education: Psychopedagogy of Inclusion**"

<http://specialedu.iit.demokritos.gr/>

Many PhD Degree Theses Researches, Studding ICTS for Cognition and for Various Fields in Special Education

<http://imm.iit.demokritos.gr/team/>

Annual Seminar entitled "Specialization in ICTs and Special Education"

<http://imm.iit.demokritos.gr/seminars/>

Training Activities within EU Projects

- "Seniors Go Digital: Promoting Inclusive Strategies for Disadvantaged Seniors" training activity
- "CODESKILLS4ROBOTICS: Promoting Coding & STEM Skills through Robotics: Supporting Primary Schools to Develop Inclusive Digital Strategies for All" Short-Term Joint Staff Training Event

- ✓ S.T.E.M.: Inquiry-Based Learning and **Gifted Education**
- ✓ Stress, Anxiety & Mental Health Problems in **Gifted Adolescents**
- ✓ ICTs, Mindfulness and **Emotional Intelligence** in Inter-National Educational Policies
- ✓ The 8 Pillars of **Metacognition**
- ✓ Mobile Applications, An Emerging Powerful Tool for **Dyslexia** Screening and Intervention: A Systematic Literature Review
- ✓ The Need for **Emotional Intelligence** Training Education in Critical and Stressful Situations: The Case of Covid-19
- ✓ The Role of **Sleep** and Impact on **Brain** and Learning
- ✓ **Brain computer interface** based applications for training and rehabilitation of students with **neurodevelopmental disorders**. A literature review
- ✓ **Mobile** and other applications for **mental imagery** to improve learning disabilities and mental health
- ✓ **Parents'** Involvement in the Education of their **Children with Autism**: Related Research and its Results



1

A new policy report of **European Commission** includes a Net Media Lab's Study for ICT's and **AI in Special Education 2019**

2

A Net Media Lab's study was cited by the American Governmental report entitled: "**Environmental scan of educational technology** in **U.S. public schools**". 2018

3

A Net Media Lab's study-article has been included in the **CIPD** Strategic Study entitled: "Rapid evidence review. Impact of **artificial intelligence**, robotics and automation technologies on work, targeting Global **Labor Market**". 2017

4

The Net Media Lab's **project ieWomen** is the unique project from Greece that is referenced in the Europe's Digital Progress Report (**EDPR**) 2017 Country Profile Greece and has assigned the title "Highlight of the year 2017"

5

A Net Media Lab's study-article has been included in the **OECD** Strategic Proposal entitled: "Making Innovation Benefit All: Policies **for Inclusive Growth**, targeting Country Members". 2017

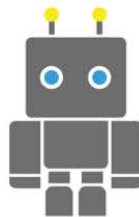
6

A NET MEDIA LAB's study - article has been included in a report on Virtual Learning Environments VLEs & **DYSLEXIA** for **National Policy in UK**.. 2016

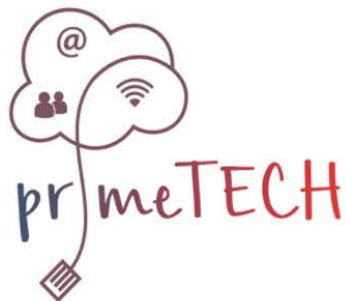
Projects



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CODESKILLS
4ROBOTICS



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<http://imm.iit.demokritos.gr/projects>

CODESKILLS4ROBOTICS:

Promoting Coding and STEM Skills through Robotics:
Supporting Primary Schools to Develop Inclusive Digital Strategies for All

AIMS

- Introduce 'Coding and Robotics' to Primary School Students (aged 9-12)
- Support schools to design their own Strategy/Action Plan in order to implement the programme
- Utilize the extra-curricular time available in a constructive way to set up CODESKILLS4ROBOTICS Clubs in schools/educational institutions for students who voluntarily want to learn how to code
- Create Synergies between the school and various stakeholders

CONSORTIUM

P1: N.C.S.R. "Demokritos" –
Greece



P2: Lifelong Learning Platform –
Belgium



P3: Regional Directorate of
Primary and Secondary
Education of Crete –
Greece



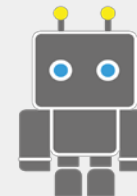
P4: Emphasys Centre –
Cyprus



P5: Hellenic Mediterranean
University –
Greece



P6: Hälsingland Education
Association –
Sweden



CODESKILLS
4ROBOTICS

Strategic Partnerships for
School Education
2018-1-EL01-KA201-047823

31 months
(1/9/2018 - 31/3/2021)

3D2ACT:

Fostering Industry 4.0 and 3D Technologies through Social Entrepreneurship: An Innovative Programme for a Sustainable Future

AIMS

- Support VET trainers and educators in an attempt to strengthen their profiles with the acquisition of new skills, the development of targeted material, the collection of tools and resources
- Create opportunities for linking VET schools with the labour market building on synergies and partnerships with established organizations using industry 4.0 and automation or 3D printing and Robotics

CONSORTIUM

P1: N.C.S.R. “Demokritos” –
Greece

P2: European Digital Learning
Network –
Italy

P3: Politeknika Ikastegia Txorierrri –
Spain

P4: Emphasys Centre –
Cyprus

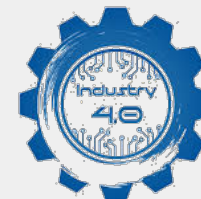
P5: Incubator Leeuwarden –
Netherlands

P6: Regional Directorate of
Primary and Secondary
Education of Crete –
Greece

P7: University of Crete –
Greece



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Strategic Partnerships for
Vocational Education and Training
2020-1-EL01-KA202-078957

30 months
(1/12/2020 - 31/05/2023)

STEAM4ALL:

Supporting the Digital Inclusion of All Students Through An Inter-disciplinary Programme For A Sustainable Future

AIMS

- o Design, pilot-test and produce an inclusive multimedia toolkit to support students with fewer opportunities
- o Help students with fewer opportunities to acquire a combination of digital (coding and robotics) and STEAM competences based on an interdisciplinary approach that will promote environmental education and sustainable development

CONSORTIUM

P1: Culture Goes Europe (CGE) – **Germany**

P2: European Digital Learning Network – **Italy**

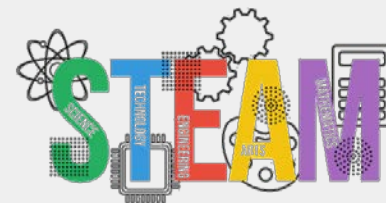
P3: 2nd E.K. of Piraeus – **Greece**

P4: Stichting Amsterdam European Mobility – **Netherlands**

P5: Emphasys Centre – **Cyprus**

P6: N.C.S.R. “Demokritos” – **Greece**

P7: Gemeinschaftsschule Campus Efeuweg – **Germany**



Strategic Partnerships for
School Education
2020-1-DE03-KA201-077538

30 months
(1/10/2020 - 31/03/2023)

ROBOTICS4DEAF:

Robotics through Sign Language: Ensuring Access and Participation of Deaf Students (or Students with Hearing Impairment) to the Digital World of Coding and Robotics

AIMS

- o Ensure access and participation of students with deafness or hearing impairments through the design and development of a Training Package which promotes coding/robotics skills that integrates into all STEM fields (Science, Technology, Engineering and Mathematics)
- o Design and implement the programme for students with in-built ICT training offered both on-line and face-to-face, and constant monitoring and assessment procedures through a mentoring offered in an open environment.

CONSORTIUM

P1: University of Social Sciences –



Poland

P2: Turin Institute for the Deaf –



Italy

P3: Emphasys Centre –



Cyprus

P4: N.C.S.R. "Demokritos" –



Greece

P5: Deaf Studio –



Slovakia

P6: Rezekne Academy of Technologies –



Latvia



Strategic Partnerships for
School Education
2019-1-PL01-KA201-065123

30 months
(1/10/2019 - 30/11/2021)

MGM:

MYgrant METAMORPHOSIS – Professionalization of Youth Workers – Integration of Migrants through Multi-Medial & Art-Based Learning

AIMS

- Create a supportive environment for youth workers in favour of social inclusion of young people with migrant background and reinforce their role as (European) citizens
- Provide youth workers and youth organizations with a set of methods and tools supporting them in their professional activities on developing and improving migrants' basic soft skills, taking initiative and extracting their potential by using art as a driver for education and integration.

CONSORTIUM

P1: Bennohaus –
Germany



P2: VITECO
e-Learning Solutions –
Italy



P3: Polskie Gry Planszowe –
Poland



P4: N.C.S.R. “Demokritos” –
Greece



Strategic Partnerships for
Youth Education
2018-2-DE04-KA205-016979

36 months
(1/9/2018 - 31/08/2021)

CLICHA:

Climate Change in Agriculture

AIMS

- New updated material in the field of "climate change, crop and animal production"
- Development of the relevant training courses
- Development of modern learning materials (educational and mechanical equipment related to the courses)
- Development of e-learning tools (e-learning platform & dynamic web site)

CONSORTIUM

- P1:** Agricultural University of Athens (AUA) – **Greece**
- P2:** Creative Thinking Development (CRE.THI.DEV.) – **Greece**
- P3:** N.C.S.R. "Demokritos" – **Greece**
- P4:** University of Jendouba (UJ) – **Tunisia**
- P5:** University of Carthage (UCAR) – **Tunisia**
- P6:** University of Sousse (US) – **Tunisia**
- P7:** National Institute of Field Crops (INGC) – **Tunisia**
- P8:** Centre of Adaptation to Climate Changes (CACC) – **Tunisia**
- P9:** Latvia University of Agriculture (LLU) – **Latvia**
- P10:** Università degli Studi di Torino (UNITO) – **Italy**



CLICHA
Climate Change in Agriculture

**Capacity Building in
Higher Education**

48 months
(15/10/2017 - 14/10/2021)

MeLDE:

Media Literacy in the Digitalized Era: Supporting Teachers Through a Whole-School Approach

AIMS

- o Develop relevant and high quality skills and competences and to open education and innovative practices in the digital era by offering open and free access to the tools to be developed
- o Strengthen the profiles of secondary school teachers through the professional development course to be developed, the educational pack to be created to support teaching and learning of digital media skills.

CONSORTIUM

P1: University of
Wolverhampton –

UK

P2: Emphasys Centre –

Cyprus

P3: N.C.S.R. “Demokritos” –

Greece

P4: Antenna –

Cyprus

P5: Bennohaus –

Germany



MeLDE

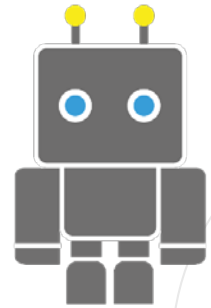
Strategic Partnerships for
School Education
2017-1-SE01-KA204-034538

36 months
(01/09/2018 - 31/08/2021)



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<http://meldeproject.eu/> | <http://melde.iit.demokritos.gr/>



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Thanks!

Any questions?

You can find me at

✉ dr@iit.demokritos.gr

<http://imm.iit.demokritos.gr/>



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