

Day 1 – Wednesday, September 24

09.00 – 09.30

Opening

Day1: 24/09/2025

Dimitris Kardaras, Ioanna Lykourantzou, David Vallejo Fernández

Greetings from the General Chairs

Akrivi Krouska, Phivos Mylonas, Jaime Caro

Greetings from the Program Committee Chairs

[NiDS2025 – Link A](#)

09.30 – 10.30

Keynote Speech

Day1: 24/09/2025

Prof.-Dr. Yasushi Kambayashi, Department of Informatics and Data Science, Sanyo-Onoda City University

Title: Multi-Agent Base Evacuation Support System Using MANET

[NiDS2025 – Link A](#)

10.30 – 11.00

Coffee break

11.00 – 13.00

Session 1 & Session 2

Day1: 24/09/2025

Session 1: AI and Digital Technologies for Human-Centered Learning, Health, and Sustainability

Session Chair: George Voutos, University of West Attica

[NiDS2025 – Link A](#)

1. Efthymis Koutras and Vassilios Krassanakis

SGHeatAOI: An Open-Source Python Tool for the Automatic Delineation and Ranking of Areas of Interest (AOIs) based on Aggregated Gaze Data

2. Stanley Lawrence Sie and Merlin Teodosia Suarez

Shallow Three Stream CNN (S3S-CNN) for Micro-Expression Recognition

3. Fernand Bernardez, Darmae Tan and Paula Mayol

Bridging Creativity and Code: A Case Study on Integrating Design Thinking in Software Engineering Education

4. Michalis Feidakis, Angelos Antikatzidis, Periklis Michalopoulos, Chrysa Zaravinou and Grigorios Nikolaou

Utilising Humanoid Robots with AI to Enhance Cognitive and Social Skills in Preschool Children

5. Jhoanna Rica Lagumbay and Robert Roxas

CebQA: Cebuano Question Answering System

6. Julija Saveljeva, Liga Peiseniece, Tatjana Volkova, Inga Uvarova, Jekaterina Novicka, Gatis Polis, Silvija Kristapsone and Aivars Vembris

Integrating Cybersecurity into Sustainability: Emerging Trends and the Role of Artificial Intelligence

Session 2: AI and Computational Methods for Human, Cognitive, and Technical Applications

Session Chair: Christos Papakostas, University of West Attica

[NiDS2025 – Link B](#)

1. Aurelio Vilbar, Christian Philippe Momongan and Jenifer Abella

Hybrid Volunteer Tutorial Program to Develop Elementary Children's Reading Comprehension

2. Georgios Drakopoulos, Phivos Mylonas and Ioannis Voyiatzis

Geometric Considerations of Digital Twinning The Trajectories of Unmanned Aerial Vehicles

3. Joenne Mied Amancio and Jasmine Malinao

A Matrix Representation for the Verification of Separability of Robustness Diagrams with Loop and Time Controls

4. John Achapero, Jose Antonio Bolado, Richelle Ann Juayong, Jozelle Addawe and Jaime Caro

Progress-Up: Design of a mobile application utilizing angle heuristics to provide real-time feedback for push-up progressions

5. Gregg Lloren

The Möbius Mind: Quantum Semiotics and the Future of Artificial Cognition

6. Carlos Jude Maminta, Isaiah Job Enriquez, Deandre Nigel Nuñez and Michael Dela Fuente

FILLM - A Filipino-optimized Large Language Model based on Southeast Asia Large Language Model (SEALLM)

7. Geoffrey Solano, Ma. Sheila Magboo, Francesca Nicole Rivera, Perlita Gasmen and Marc Jermaine Pontiveros

A Machine Learning Web Application for Predicting the Risk of Diabetes Using Explainable Artificial Intelligence (XAI) on Philippine Data

8. Maria Eliza Aguila, Veeda Michelle Anlacan, Cherica Tee, Roland Dominic Jamora, Angelo Cedric Panganiban, Bryan Andrei Galecio, Ben Anthony Lopez, Christian Alfredo Cruz, Isabel Teresa Salido, Michael Tee and Jaime Caro

Acceptability of Immersive Gamification Using Semi-CAVE: An Exploratory Case Study on the Philippine Experience with Persons with Dementia and Cerebral Palsy

7. Rugie Gabitanan, Shann Aurelle Ripalda and Jasmine Malinao

On the Hardness of Generating Cyclic Profiles of Robustness Diagram with Loop and Time Controls

8. Allaine Ricci Tan, Lorenzo Gerard Pangan and Richelle Ann Juayong

InsightLab: A Lower-Barrier EDA Workflow using LLMs for Insight Discovery

13.00 – 14.00 Lunch break

14.00 – 16.00 Session 3 & Session 4

Day1: 24/09/2025

Session 3: Applied AI, Machine Learning, and Digital Tools in Education, Healthcare, and Human-Centered Systems

Session Chair: Maria Trigka, University of Patras

[NiDS2025 – Link A](#)

Session 4: Emerging Technology Tools for Education, Healthcare, and Smart Environments

Session Chair: Panagiotis Strousopoulos, University of West Attica

[NiDS2025 – Link B](#)

1. Mia Amor Tinam-Isan, January Naga, Erik Louwe Sala, Isnaina Abdulaziz and Anne Hayathi Albiso

Assessing the Perceived Usefulness and Usability of an Electronic Medical Records in a College Clinic

2. Elias Dritsas, Maria Trigka and Phivos Mylonas

Comparative Analysis of Machine Learning Models for Employee Salary Prediction

3. Pe Arian Rey, Sofia Anne Canlas, Ma. Rowena Solamo, Ligaya Leah Figueroa and Rommel Feria

Keller: Understanding the Experience of Low Vision Users with an Image to Text Generator Extension

4. Athanasios Kanavos, Gerasimos Vonitsanos, Manolis Maragoudakis and Phivos Mylonas

Designing and Regularizing Deep CNN Architectures for Dog versus Cat Image Classification

5. Georgios Drakopoulos and Phivos Mylonas

Linear Algebraic Properties of Quantum Gates As A Starting Point For Their Digital Twinning

6. Yavor Dankov

Dashboard Design for Educational Video Game Designers: A Designer-Centered Approach

7. Ace York Aguilar, Ernil Sumayao and Andrew Dy

Offline Webpage Interface in Teaching Protein Synthesis Concept

1. Konstantinos Evgenikos, Christos Troussas, Areti Stavropoulou and Dimitrios Papageorgiou

Design of a Rule-Based XR Simulation Tool Integrating E-Health and Human-Computer Interaction for Critical Care Nursing Education

2. Frances Ysabelle Rebolledo, Jaime Caro and Mark Roberth Laurea

Exploring the Impact of ChatGPT in a Grade 9 Introductory Programming Course in the Philippines

3. Neha Tuli, Nitin Gupta, Manisha Pathania and Chander Partap Singh

Enhancing Early Childhood Education: A Usability-Centric Investigation into Mobile-Based Augmented Reality Learning Environments

4. Lyward Manuel Tongzon and Jasmine Malinao

An Automation Tool for Model Conversion and Soundness Verification from Robustness Diagrams with Loop and Time Controls to Petri Nets

5. Ligaya Leah Figueroa, John Caleb Bunye, Ethan Joshua Camingao, Rommel Feria and Ma. Rowena Solamo

Quantifying the Relationship of Tree Quantity to PM10 Concentrations: A Case Study for Urban Areas in Tropical Climates

6. Malakit Ram, Czarina Ancella Gabi, Joleco Agullo, Rustom Clemente, Rhoderick Malangsa and Dorris Lintao

Unsupervised Anomaly Detection in IoT Attacks Using Isolation Forest on the Kitsune Dataset

7. Angelos Tzirtis, Christos Troussas, Akrivi Krouska, Phivos Mylonas and Cleo Sgouropoulou

Comparative Evaluation of Explainable AI Techniques for Deep Learning in Image Recognition



September 24 – 26
Athens, Greece
(Hybrid)

Conference Program

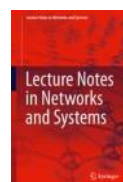
The timetable corresponds to Eastern European Summer Time
(EEST); UTC+3 hours

8. Yavor Dankov

Supporting Designers in the Personalization of Educational
Video Games: A Dashboard-Based Instrument

8. Evangelia Triperina, Dimitrios Kouis, Adamantia Psallidakou, Anastasios Tsolakidis, Konstantinos Chytas and Georgios Bardis

Integrated System for Managing and Assessing
Educational and Research Data in Academic
Environments: A Visual Analytics Approach



Day 2 – Thursday, September 25

09.30 – 10.30

Day2: 25/09/2025

Keynote Speech

Assoc. Prof.-Dr. Filippo Sciarrone, Department of Science and Technology, Universitas Mercatorum, Rome, Italy

Title: Generative AI and Education: a winning combination?

[NiDS2025 – Link A](#)

10.30 – 11.00

Break

11.00 – 13.00

Day2: 25/09/2025

Session 5 & Session 6

Session 5: AI and Digital Innovation for Education, Health, and Organizational Insights

Session Chair: Reymark-John Macapanas, University of Science and Technology of Southern Philippines

[NiDS2025 – Link A](#)

- 1. Rodgessa Lopez, Michael Gatela, Aurelio Vilbar and MarieLyn Cayunda**
Effect of Hybrid Service-Learning on Agricultural Cooperative Members' and University Student Volunteers' Financial Management Skills
- 2. Alexandros Oikonomou, Stefanos Ougiaroglou and Charalampos Bratsas**
An AutoML web tool for multi-label classification
- 3. Anastasia Themeli, Dimitrios Kotsifakos and Yannis Psaromiligkos**
Enhancing Learning Design Decisions with Risk Management Strategies
- 4. Kharen Mae Caldo, Karyl Claire Derecho, Maicah Gerodias, Gloria Shiela Coyoca, Jerina Jean Ecleo and Adrian Galido**
Assessing Data Literacy and Data Analytics Capabilities in Community-based Health Centers
- 5. Edu Petilos and Jasmine Malinao**
Enriched Robustness Diagram with Loop and Time Controls for Scalable Model Representation
- 6. Evangelia Zoi Akritidi and Andreas Kanavos**
Academic Spin-Offs and Digital Transformation: Case Studies from Greek Universities
- 7. Reymark-John Macapanas, Adrian Galido and Apple Rose Alce**
Deep Learning-Based Forecasting of Environmental Noise in Campus Buildings Using Bi-LSTM and IoT Integration

Session 6: AI and Machine Learning for Personalization, Security, and Societal Applications

Session Chair: Anna Sotiropoulou, Ionian University

[NiDS2025 – Link B](#)

- 1. Eldar Mardanov, Inese Mavlutova and Biruta Sloka**
AI-Driven Predictive Maintenance using Digital Twin Technology for Boosting Oil & Gas Efficiency
- 2. Rugie Gabitanan, William Benedict Dy and Jasmine Malinao**
Matrix Representation and Automation for the Verification of Free-choiceness in Robustness Diagram with Loop and Time Controls
- 3. Anastasios Christodoulides, Paris Mastorocostas, George Kandilogiannakis, Panagiota Tselenti and Anastasios Kesidis**
Recurrent Fuzzy Neural Networks for Time-Series Prediction
- 4. Efthimios Tambouris, Rafail Promikyridis, Christos-Fanourios Patsouras, Dimitris Zeginis, Areti Karamanou, Evangelos Kalampokis, Konstantinos Tarabanis, Marius Rohde Johannessen and Lasse Berntzen**
AI-Driven Dialogue Systems for Personalized Information Provision in eGovernment: The Case of MITOS Dialogues
- 5. Eleni Papachristou, Christos Troussas, Akrivi Krouska and Cleo Sgouropoulou**
An AI-Powered Dual-Model Framework for Personalized and Adaptive Learning Support
- 6. Maria Poli and Konstantinos Malagas**
The Contribution of Early Warning Systems and Sustainable Architecture to Social Resilience Achievement
- 7. Dimitrios Panagiotakopoulos, Georgică Gheorghe, Inmaculada Villafranca Jiménez, Spyridoula Tzortzi, Georgios Patelis, Triantafyllos Dimas, Georgia Cheirchanteri, Ioannis Deliyannis and Rossetos Metzitakos**
Reimagining the Erasmus+ Experience through the Metaverse Erasmus Hub

8. Alexander Katyshev, Anton Anikin and Vladislav Smirnov

Using BERT and GPT as an Effective Solution for Ontology Development Automation

8. Ceinne Reyes, Anna Liza Ramos, Jennylle Shayne Sia and Ronel Glifonea

Exploring AI-Cloned Voices Through Pitch, Tone, and Intonation for Enhanced Speech Accuracy

13.00 – 14.00 Lunch break

14.00 – 16.00

Day2: 25/09/2025

Session 7 & Session 8

Session 7: AI and Data-Driven Approaches for Education, Health, and Decision Support

Session Chair: Elias Dritsas, University of Patras

[NiDS2025 – Link A](#)

Session 8: AI and Digital Technologies for Education, Learning, and Research Enhancement

Session Chair: Christos Papakostas, University of West Attica

[NiDS2025 – Link B](#)

1. Aurelio Vilbar and Angel Ruth Moran

Peer Feedback in Online Video-Based Discussion Platform to Improve the Students' Speaking Performance

2. Dania Ashraf Mohamed and Richard Bryann Chua

Secure Phenotype Inference on Homomorphically Encrypted Genotype Data and Model Parameters

3. Jannie Fleur Orano, Czarina Ancella Gabi, Francis Ann Sy and Gerald Ceniza

Predictive Crime Analytics: A Model Comparison for Offense Classification Using Spatio-Temporal and Demographic Features

4. Elias Dritsas, Maria Trigka and Phivos Mylonas

Machine Learning Applications in Databases and Big Data Analytics

5. Violetta Gushchina, Danila Parygin, Ekaterina Fadeeva, Andrey Alekseev and Artyom Kolyadov

Data-Driven DSS for Assessing the Viability of Urban and Rural Settlements

6. Kalliopi Rigopoulou, Dimitrios Kotsifakos and Yannis Psaromiligkos

Whale Optimization Algorithm in a teacher's professional development program

7. Jejomar Derecho, Jaime Caro and Geoffrey Solano

Simulating federated learning for enhanced breast cancer detection in ultrasound images

8. Paul Jr. Bokingito, Redeemtor Sacayan, Krisanadej Jaroensutasinee and Mullica Jaroensutasinee

Predicting the Unseen: A Performance Analysis of Machine Learning Models in Forecasting Tuberculosis Cases in Zamboanga Sibugay, Philippines

1. Panagiotis-Hector Kopsidas, Christos Troussas, Akrivi Krouska, Phivos Mylonas and Cleo Sgouropoulou

DigComp Quest: A Game-Based Approach for Assessing and Enhancing Digital Competences

2. Eleftheria Malisiova and Despoina Kompoti

Children's Gender Representations through Digital Storytelling in Preschool Settings

3. Raymond Valdepeñas, Marie Glo Generalao, Selena Suario, Apple Rose Alce, Paul Rodolf Castor, Jomari Francis Villanueva, Leah Alindayo and Ernesto Empig

My.BoardHub: Development of a Single-Board Computer-Based Security System using Artificial Intelligence of Things for Boarding Houses

4. Georgios Rouselatos, Anastasios Kesidis, Paris Mastorocostas and Nikolaos Vassilas

Exploring the potential of advanced GAN architectures for super-resolution related problems

5. Angelo Louis Flores and Jasmine Malinao

Matrix-Based Conversion of RDLT to PN with Multiple Abstract Arc Handling

6. Eleni Papachristou, Christos Troussas, Akrivi Krouska and Cleo Sgouropoulou

AI-Powered Digital Assistants in Teaching: Exploring Educators' Needs, Attitudes and Integration Strategies

7. Evangelia Triperina, Dimitrios Kouis, Adamantia Psallidakou, Stefania Gkounela and Anastasios Tsolakidis

Evaluating Research and Education in Academia: Integrating Open Science Principles

8. Nornia Dia and Reymark Deleña

A Comparative Evaluation of Machine Learning Techniques for Student Retention Prediction

20.00

Day2: 25/09/2025

Gala Dinner

TBA

Day 3 – Friday, September 26

09.30 – 10.00

Day3: 26/09/2025

Workshop

Title: **Project Management in the age of Artificial Intelligence (AI)**

Presenter: **Nektaria Marava, Senior Project Manager, APOPSI GROUP**

[NiDS2025 – Link A](#)

10.00 – 12.45

Day3: 26/09/2025

Session 9 & Session 10

Session 9: Deep Learning and AI for Vision, Gesture, and Audio Analysis

Session Chair: Reymark-John Macapanas, University of Science and Technology of Southern Philippines

[NiDS2025 – Link A](#)

1. King Miles Edrienne Ramos and Jheanel Estrada

Out-of-frame Occlusion handling in 3D Pose Estimation for Multi-view and Multi-Person

2. King Miles Edrienne Ramos, Kenneth Ryan Basibas and Carl Justine Alejandro

Pose Estimation Detection and Analysis for Workout Exercises using Convolutional Neural Network

3. Danna Patricia Buena, Anilov Gutierrez, Anna Liza Ramos and Jefferson Salinas

A Hybrid Deep Learning Framework for Logo Fidelity and Distortion Analysis

4. Allan David Musngi, Anna Liza Ramos, Launzer Castillano and Patricia Paran

Classification of Profanities Obfuscated by Phonetically Similar Words Using Text-To-Speech

5. Luigi Boy Londres, Anna Liza Ramos, Tricia Cyly Protacio and Sheenna Dane Sombon

Tartar Segmentation and Discoloration Severity using Deep Learning Models

6. Ma. Antoinette De Pedro, Anna Liza Ramos, John Patrick Anonuevo, Francis Carandang and Aliza Lyca Gonzales

Automated Detection and Severity Grading of Facial Discoloration Across Diverse Skin Types

7. Ceinne Reyes, Anna Liza Ramos, Jennylle Shayne Sia and Ronel Glifonea

Exploring AI-Cloned Voices Through Pitch, Tone, and Intonation for Enhanced Speech Accuracy

8. Denice Arian Mercado, Anna Liza Ramos, John Ronvel Zarco, Luis Jurado Jr and King Miles Edrienne Ramos

Advancing Hand Gesture Recognition for Distraction Level Analysis based on Rate, Duration and Saliency with Occlusion Mitigation using Deep Learning

Session 10: AI and Digital Innovations for Analysis, Prediction, and Learning Applications

Session Chair: George Voutos, University of West Attica

[NiDS2025 – Link B](#)

1. Andrei Luz Asoy and Jasmine Malinao

Automated Verification of Classical Soundness in Robustness Diagrams with Loop and Time Controls via L-safeness

2. Konstantinos Parathyras, Christiana Papapostolou and Zoe Kanetaki

Prospects and Challenges of integrating digital technologies in the Military Supply Chain

3. Ronnie Li Ramirez and Jasmine Malinao

On Weak Soundness in Robustness Diagrams with Loop and Time Controls

4. Polina Kalyagina, Danila Parygin, Tatyana Kovaleva, Timofey Kovalev and Olga Golubeva

Generative Design of Urban Identity

5. Alexandros Margaritis, Nikolaos Vassilas and Djamchid Ghazanfarpour

Building Detection from High-Resolution Aerial Images Using Deep Learning Techniques

6. Emiline Barcent Jloise Acompañado, Melben Kian Gabiana and John Paul Yusiong

CoVirNet: A Multimodal Web-Based Book Genre Classification System Using a Dual-Color-Space Input CNN-ViT Architecture

7. Mary Ann Gliefen Bermudo, Adrian Galido and Apple Rose Alce

Performance Analysis of YOLO-based Architecture for Water Level Monitoring

8. Jannie Fleur Orano, Larmie Feliscuzo, Chris Jordan Aliac and Jerome Jack Napala

Transformer-Based Coral Detection: Applying RT-DETR for the Identification of Scleractinian Corals in Quadrat Images



September 24 – 26
Athens, Greece
(Hybrid)

Conference Program

The timetable corresponds to Eastern European Summer Time (EEST); UTC+3 hours

9. Charles Roy Phillips, Charissa Mae Madriaga, Shaw Jie Yao and John Paul Yusiong

MarketNet: Multicolor Hybrid CNN and ViT for Multitask Image Classification and Segmentation

10. Vincent Peter Magboo, Ma Sheila Magboo and May Ann Grace Palisoc

Evaluation of Different Batch Sizes in Convolutional Neural Network Models for Sugarcane Leaf Disease Classification

11. Matthew John Sino Cruz, Jaime Caro and Geoffrey Solano

Fine-Tuning hybrid CNN+LSTM for Brain Tumor Multiclass Classification

9. Angel Estañó and Demelo Lao

ARSafari: An Augmented Reality Tool for Learning Philippine Endemic Flora and Fauna Species

10. Jacqueline Dela Cruz, Emily Costan, Aurelio Vilbar, Gerly Alcantara, Felix Costan, Ivy Carascal and Lisle Valle

Sewing New Lives: The Dual Impact of Service-Learning on Sewing Technology Skills on Persons Who Used Drugs and University Student Volunteers

11. Reymark Delena, Thedion Jr Diam, Brent Jason Dequina and Redeemtor Sacayan

Machine Learning Models for Predicting Weekly Dengue Incidences Based on Climate Data: A Case Study in Zamboanga Sibugay

12.45 – 13.00

Day3: 26/09/2025

Closing & Best Paper Awards

[NiDS2025 – Link A](#)

Note:

- All the papers should have a **15-minute** duration **including Q&A** (13 minutes for oral presentation, 2 minutes for answering questions from the audience).
- The timetable of the NiDS2025 Program corresponds to **Eastern European Summer Time (EEST); UTC+3 hours**.
- NiDS2025 Conference links:
 - [NiDS2025 – Link A](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWQ3N2I5MzQtMWYwMS00M2JjLTg0YjQzMjQwNzdkYjZmNWl3%40thread.v2/0?context=%7b%22Tid%22%3a%220c8943ee-c370-4bb3-ba51-321f406f32ec%22%2c%22Oid%22%3a%224d87f611-a6f2-4156-8750-bfe9b354823d%22%7d) : https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWQ3N2I5MzQtMWYwMS00M2JjLTg0YjQzMjQwNzdkYjZmNWl3%40thread.v2/0?context=%7b%22Tid%22%3a%220c8943ee-c370-4bb3-ba51-321f406f32ec%22%2c%22Oid%22%3a%224d87f611-a6f2-4156-8750-bfe9b354823d%22%7d
Meeting ID: 356 789 133 069 8
Passcode: Lm2Bn9kV
 - [NiDS2025 – Link B](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MzUzMDY4NGEtMWNINS00NGRhLWlwZWUtZDRhMWU1MTAzMmE5%40thread.v2/0?context=%7b%22Tid%22%3a%220c8943ee-c370-4bb3-ba51-321f406f32ec%22%2c%22Oid%22%3a%224d87f611-a6f2-4156-8750-bfe9b354823d%22%7d) : https://teams.microsoft.com/l/meetup-join/19%3ameeting_MzUzMDY4NGEtMWNINS00NGRhLWlwZWUtZDRhMWU1MTAzMmE5%40thread.v2/0?context=%7b%22Tid%22%3a%220c8943ee-c370-4bb3-ba51-321f406f32ec%22%2c%22Oid%22%3a%224d87f611-a6f2-4156-8750-bfe9b354823d%22%7d
Meeting ID: 387 618 307 127 8
Passcode: QC6hG7x2

