DESTINI

SMART DATA PROCESSING AND SYSTEMS OF DEEP INSIGHT

Deliverable D3.3

Summer Schools & Workshop Proceedings

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Version	Date	Contributor	Comments
V1.0	09/07/2021	CUT	Initial document structure
V2.0	19/07/2021	CUT	First internal draft
V3.0	30/07/2021	Partners	Review, comments for corrections
V4.0	06/08/2021	CUT	Changes, adjustments
V5.0	10/08/2021	Partners	Final review and approval
V6.0	19/12/2022	CUT	Document Revision

Contents

1. Introduction

This deliverable presents the material and the presentations given during the 1st Online School on Smart Data Processing and Systems of Deep Insight which took place on April 12-16, 2021. The target of the school was to bring together students, researchers, SMEs and businesses, public organizations, and the general public, to share knowledge and experiences on Smart Data.

The school was also part of the project's dissemination and communication strategy that was previously planned and structured to demonstrate different topics within the project's Joint Research Activities (JRAs). The school aimed to share knowledge and present outcomes by facilitating discussions and exchanging ideas between researchers, industrial and business stakeholders, governmental and decision-making bodies and the general public.

The school was divided into two sections: The first section spanned three days, involved more general purpose subjects and was addressed to faculty members, project stakeholders and the general public. During the first section, various scientific topics and applications from European funded projects were presented, as well as case studies related to smart data processing. The second section lasted for two days and was dedicated to research topics, addressing faculty members, PhD/MSc Students and researchers.

This deliverable is part of Work-Package 3 (WP3) that describes the actions to support the successful transfer of knowledge, best practises and research skills from the leading institutions to CUT to tackle the research challenges that exist within the JRAs and the key knowledge areas identified in WP2. The actions of WP3 mostly refer to the organisation of summer schools and workshops, the delivery of virtual training sessions, exchanges short-term staff, experts visits and short-term on-site trainings at the leading institutions' labs and infrastructure.

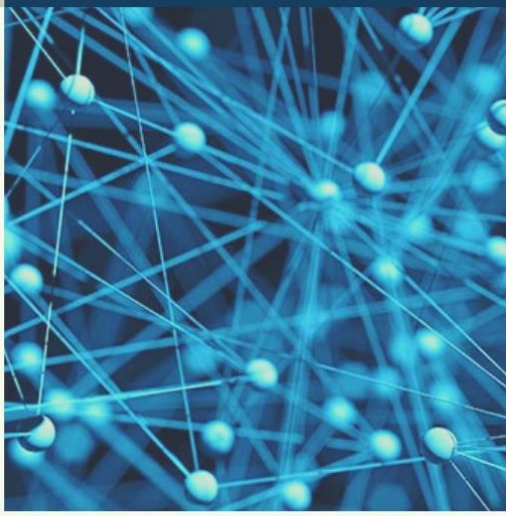
The rest of the document is structured as follows: Section 2 presents the invitation as well as the material that was sent to members of the Advisory Board, Stakeholders, Academic staff and Institutions and to the general public (through electronic means and social media) to participate in the DESTINI's first summer school. Section 3 describes the material and presentations delivered during the school. Finally, section 4 concludes this deliverable.

2. School invitation and promotional material

The invitation of the school is depicted below along with the detailed programme.

ABOUT DESTINI

DESTINI: *SMART DATA PROCESSING AND SYSTEMS OF DEEP INSIGHT*



TWINNING PROJECT - HORIZON2020

Smart Data ProcESsing and SysTems of Deep INsIght (DESTINI) is a H2020 Twinning Project that proposes a series of coordination and support actions for promoting research in the area of Smart Data. Cyprus University of Technology (CUT) joins forces with two internationally recognized scientific groups from the Netherlands (Tilburg University and Jheronymous Academy of Data Science) and Italy (Sapienza Universita di Roma), aiming to strengthen its research and scientific profile in the relevant area. Specifically, DESTINI's activities revolve around exchanging scientific knowledge and transferring the best research practices amongst its partners in the field of Smart Data Processing and Systems of Deep Insight.

destini2020.eu

twitter.com/destini2020eu

facebook.com/destini2020eu

linkedin.com/groups/13780883

School Program

Day 1 – Monday, April 12, 2021 (EEST Time)

09:00 – 09:30	Welcome – Overview of the DESTINI H2020 Twinning Project *Prof. Andreas S. Andreou (DESTINI coordinator, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)*
09:30 – 10:00	The SODALITE Project *Prof. Dario Di Nucci (Jheronymus Academy of Data Science)*
10:00 – 10:30	CYENS Center of Excllence *Prof. George Chrysanthou (Research Director of CYENS, Dept. of Computer Science, University of Cyprus)*
10:30 – 10:45	Break
10:45 – 11:05	The Nicosia Digital Twin Project *Prof. Vasos Vassiliou (Team Leader in CYENS, Dept. of Computer Science, University of Cyprus)*
11:05 – 11:45	Digital Twin for Smart Hospital Management *Alexandros Christodoulou & Vassilis Andreou (Students, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)*
11:45 – 12:25	Smart Health Record Based on Digital Twins *Stelios Mappouras & Evangelos Georgiou (Students, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)*
12:25 – 12:30	Closing

Day 2 – Tuesday, April 13, 2021 (EEST Time)

09:00 – 09:30 Introduction to 5G & Introduction to Smart Cities (the Nicosia Use Case)

Niki Ioannou (Business Solutions – Cyta Business) & Pantelis Frangoulis (CYTA Sales & Business Development – Vertical Markets)

09:30 – 10:00 DataCloud H2020 Project

Prof. Andrea Marrella (Sapienza Università di Roma)

10:00 – 10:30 The Sea Traffic Management in the Eastern Mediterranean Project

Prof. Michailides Michalis (Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

10:30 – 10:45 Break

10:45 – 11:05 Data-driven Applications for Optimized Sea Traffic Management

Prof. Herodotos Herodotou (Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

11:05 – 11:25 Automated Machine Learning (AutoML): A practical Approach

Thomas Nikidiotis (Student, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

11:25 – 11:45 Smart data: IoT Context and Applications

Vassos Charalambous (Student, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

School Program

Day 2 – Tuesday, April 13, 2021 (EEST Time)

11:45 – 12:05 **Smart Tourism: Processing Data from the Hotel Industry**

Dr. Andreas Christoforou (Postdoc-Research Associate, SEIIS Lab, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

12:05 – 12:25 **An Introduction to Smart Decentralized Applications**

Dr. Panayiotis Christodoulou (Lecturer, Neapolis University Pafos / Postdoc-Research Associate, SEIIS Lab, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

12:25 – 12:30 **Closing**

Day 3 – Wednesday, April 14, 2021 (EEST Time)

09:00 – 09:30 EXCELSIOR H2020 Teaming Project

Dr. Christiana Papoutsa (Post-Doc / Research Fellow, Dept. of Civil Engineering & Geomatics, CUT)

09:30 – 10:00 The importance of Data Processing for the Water Board of Lemesos

Mr. Solomos Charalambous (Senior Technician Engineer, Water Board of Lemesos)

10:00 – 10:30 Establishment of the Bioinformatics ERA Chair at the Cyprus Institute of Neurology and Genetics – BIORISE

Prof. Kyproula Christodoulou (Head of Neurogenetics Department, Cyprus Institute of Neurology & Genetics)

10:30 – 10:45 Break

10:45 – 11:05 The Bioinformatics ERA Chair at CING: Research and Applications

Prof. George Spyrou (Head of Bioinformatics Department, Cyprus Institute of Neurology and Genetics)

11:05 – 11:25 The ERA Chair on Digital Cultural Heritage MNEMOSYNE

Dr. Kyriakos Efstathiou (Digital Cultural Heritage Lab, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

11:25 – 11:45 Digital 3D documentation of Cultural Heritage Objects

Dr. Kyriakos Efstathiou (Digital Cultural Heritage Lab, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

11:45 – 12:05 Smart Data Processing for Public Safety Through Image and Video Analysis

Kyriakos Aristidou (Student, Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

12:05 – 12:25 Excelsior H2020 & Eratosthenes CoE Smart Applications

Eleni Loulli, (PhD Candidate, Dept. of Civil Engineering and Geomatics, CUT) & Maria Prodromou, (PhD Candidate, Dept. of Civil Engineering and Geomatics, CUT)

12:25 – 12:30 Closing

School Program

Day 4 – Thursday, April 15, 2021 (EEST Time)

09:00 – 09:45 Land Movement Estimation Over Archaeological Sites Using Space (Sentinel-1) and GIS Technologies
Despina Makri (Research Fellow Eratosthenis CoE – PhD candidate, Dept. of Civil Engineering and Geomatics, CUT)

09:45 – 10:30 Optimizing Big Data Processing Systems in Heterogeneous Cluster Environments
Prof. Herodotos Herodotou (Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)

10:30 – 10:45 Break

10:45 – 11:30 Blueprinting High-Performance Computing (HPC)
Dr. Indika Kumara (Jheronymus Academy of Data Science)

11:30 – 12:15 BPM and IoT
Prof. Massimo Mecella (Sapienza Università di Roma)

12:15 – 12:20 Closing

School Program

Day 5 – Friday, April 16, 2021 (EEST Time)

09:00 – 09:45	Network-based Bioinformatics Enhance our Understanding of Molecular Pathology and our Capabilities for Drug Repurposing Against Diseases *Prof. George Spyrou (Head of Bioinformatics Department, Cyprus Institute of Neurology and Genetics)*
09:45 – 10:30	Event Detection and Localization Algorithms for Smart Systems *Prof. Michalis Michailides (Dept. of Electrical Engineering, Computer Engineering & Informatics, CUT)*
10:30 – 10:45	Break
10:45 – 11:30	Automatic Synthesis in Industry 4.0 *Prof. Francesco Leotta (Sapienza Università di Roma)*
11:30 – 12:15	AI-enabled and Data-driven Privacy Preservation in the Dutch Telecom (KPN) *Nemania Borovits (PhD Candidate, Jheronymus Academy of Data Science)*
12:15 – 12:20	Closing

The invitation was distributed via email, postings on social networks and announcements in local electronic newspapers and scientific magazines as shown below.

STOCKwatch

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Σύμβολο Τιμή μετοχής Εύρεση

Πέμπτη, 15 Ιουλίου, 2021 - 09:14 ΧΑΚ 65.00 +0.17% €68,066 17:25 ΧΑΑ 871.07 +0.16% €115,139,027 17:25

Οικοσελίδα » Ειδήσεις » Εμπορικά Νέα » Το ΤΕΠΑΚ διοργανώνει Διαδικτυακό Σχολείο με θέμα «Smart Data Processing and Systems of Deep Insight»

Το ΤΕΠΑΚ διοργανώνει Διαδικτυακό Σχολείο με θέμα «Smart Data Processing and Systems of Deep Insight»

Ειδήσεις

Κυπριακή Οικονομία Ευρωπαϊκή Οικονομία Ελληνική Οικονομία Διεθνής Οικονομία Εμπορικά Νέα Συνεντεύξεις

12/04/2021 09:51

DESTINI H2020 - "Twinning (H2020-TWINN-2015) Coordination and support actions: Spreading excellence and widening participation"

Στα πλαίσια του ερευνητικού προγράμματος DESTINI, το Τμήμα Ηλεκτρολόγων Μηχανικών και Μηχανικών Η/Υ και Πληροφορικής του Τεχνολογικού Πανεπιστημίου Κύπρου (ΤΕΠΑΚ) διοργανώνει στις **12-16 Απριλίου 2021** το πρώτο διαδικτυακό σχολείο με θέμα «Επεξεργασία Ευφυών Δεδομένων και Συστήματα Βαθιάς Διορατικότητας» (Smart Data Processing and Systems of Deep Insight). Το σχολείο θα περιλαμβάνει σειρά ομιλιών και παρουσιάσεων στην αγγλική γλώσσα, οργανωμένων σε δύο ενότητες και θα μεταδίδεται διαδικτυακά.

Η πρώτη ενότητα διαρκεί τρεις μέρες (12-14 Απριλίου 2021) και απευθύνεται σε ακαδημαϊκούς, φοιτητές, επιχειρήσεις, κρατικούς φορείς, ημικρατικούς οργανισμούς και στο ευρύ κοινό. Κατά την πρώτη ενότητα, θα παρουσιαστούν σημαντικά ευρωπαϊκά χρηματοδοτούμενα έργα που έχουν σχέση με Ευφυή Δεδομένα (Smart Data) καθώς και πρακτικές εφαρμογές ή εργαλεία που αναπτύχθηκαν στα πλαίσια των έργων αυτών.

Η δεύτερη ενότητα διαρκεί δύο μέρες (15 -16 Απριλίου 2021), είναι εξ' ολοκλήρου αφιερωμένη σε ερευνητικά θέματα στην επιστημονική περιοχή των Ευφυών Δεδομένων και απευθύνεται κυρίως σε ακαδημαϊκούς, φοιτητές διδακτορικού ή μεταδιδακτορικού επιπέδου και επιπέδου Μάστερ και ερευνητές.

Στο δίκτυο συνεργασίας του DESTINI μαζί με το ΤΕΠΑΚ συμμετέχουν και δύο κορυφαία πανεπιστήμια με διακεκριμένη ερευνητική δραστηριότητα στα πεδία της Ευφυούς Επεξεργασίας Δεδομένων (Smart Data Processing) και της Επιστήμης Δεδομένων (Data Science), το Πανεπιστήμιο του Τίλμπουργκ στην Ολλανδία (University of Tilburg - https://www.tilburguniversity.edu/) και το Πανεπιστήμιο Σαπιέντζα της Ρώμης στην Ιταλία (Sapienza University of Rome - https://www.uniroma1.it).

Κύριος στόχος του έργου DESTINI είναι η ανάπτυξη ενός δικτύου συνεργασίας μεταξύ των τριών ακαδημαϊκών ιδρυμάτων για την ενίσχυση της ερευνητικής δυναμικής και δραστηριότητάς τους στους τομείς των Ευφυών Δεδομένων (Smart Data), με προεκτάσεις σε διάφορους τομείς, όπως είναι η Υγεία, ο Τουρισμός και η Βιομηχανία 4ης γενιάς (Industry 4.0), μέσω της μεταφοράς τεχνογνωσίας και της από κοινού διερεύνησης και υλοποίησης νέων εφαρμοσμένων ερευνητικών ιδεών και εργαλείων.

Η στενή συνεργασία μεταξύ των εταίρων του DESTINI θα επιτρέψει την απόκτηση νέων γνώσεων και τη μεταφορά εμπειριών και τεχνογνωσίας μέσω της ανταλλαγής προσωπικού, επισκέψεων εμπειρογνωμόνων, διοργάνωσης εργαστηρίων και σχολείων με διαλέξεις από τα ιδρύματα-εταίρους του έργου, συμμετοχής σε διεθνή επιστημονικά συνέδρια/εργαστήρια και ανάπτυξης κοινών εκπαιδευτικών προγραμμάτων και προγραμμάτων κινητικότητας για νέους ερευνητές.

Ιδιαίτερη έμφαση δίνεται στη δημιουργία ισχυρών δεσμών με την αγορά/βιομηχανία και στην πρακτική εφαρμογή των ερευνητικών αποτελεσμάτων του έργου σε προβλήματα στους τομείς που προαναφέρθηκαν.

Σύνδεσμος εκδήλωσης: https://www.facebook.com/events/455817989066516

Πρόσκληση: https://bit.ly/39FVW2y

Πρόγραμμα: https://www.cut.ac.cy/digitalAssets/439/439120_100DESTINI.pdf

Δήλωση συμμετοχής: https://forms.gle/Rzr62VGFpXFdGPLM8

ΙστοσελίδαΈργου: destini2020.eu

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> Μια μέθοδος άσκησης της Ανατολής στην υπηρεσία όσων έχουν περάσει έμφραγμα

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Το ΤΕΠΑΚ διοργανώνει Διαδικτυακό Σχολείο

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Δήλωση συμμετοχής : https://forms.gle/Rzr62VGFpXFdGPLM9

ΙστοσελίδαΈργου : destini2020.eu

ΤΕΛΕΥΤΑΙΑ ΝΕΑ ΔΗΜΟΦΙΛΕΣΤΕΡΑ

ΠΑΣΥΠΑΕ ΚΙΕ: Ευχαριστίες στην Επ. Παιδείας για τη διαμεσολάβηση της προς τον ΠτΔ

Ένας θάνατος, 1,120 κρούσματα, 165 ασθενείς, οι 40 σε σοβαρή κατάσταση. Τετάρτη 14 Ιουλίου 2021

Τελετή αποφοίτησης της Πολυτεχνικής Σχολής του Πανεπιστημίου Frederick

ΤΕΠΑΚ και Απολλώνειο Ιδιωτικό Νοσοκομείο υπέγραψαν Πρωτόκολλο Συνεργασίας

ΑΞΙΚ: Επιμορφωτικά προγράμματα εκμάθησης ρωσικής και γερμανικής γλώσσας για προσωπικό της ξενοδοχειακής

3. Presentations and Material

A total of 30 talks/presentations were delivered by speakers from CUT, JADS, UNIROMA, UCY, CING, CYTA and the Water Board of Lemesos. The whole event was broadcasted live from Facebook: https://m.facebook.com/destini2020eu/

All material of the 1st Online School on Smart Data Processing and Systems of Deep Insight is uploaded on the shared folder of the project:
https://drive.google.com/drive/folders/1jsJLg5cdTU8z5Q-fxTjmJWvr1bzXdBtg?usp=sharing

The talks are also uploaded on DESTINI's YouTube channel.

The presentations and talks delivered during the school are divided into the following categories:

Introductory Presentations on Smart Data Processing and Systems of Deep Insight

- Welcome - Overview of the DESTINI Twinning H2020 Project
- CYENS Center of Excllence
- DataCloud H2020 Project
- An Introduction to Decentralized Applications
- EXCELSIOR H2020 Teaming Project
- Optimizing Big Data Processing Systems in Heterogeneous Cluster Environments
- Blueprinting High Performance Computing (HPC)
- Quantum Service Oriented Computing

Smart Cities and Earth observation

- The Nicosia Digital Twin Project
- Introduction to 5G & Introduction to Smart Cities (the Nicosia Use Case)
- The Sea Traffic management in the EAstern Mediterranean project
- Data-driven Applications for Optimized Sea Traffic Management
- Smart Tourism: Processing Data from the Hotel Industry
- The importance of data processing for the Water Board of Lemesos
- Smart Data Processing for Public Safety Through Image and Video Analysis

- Excelsior H2020 & Eratosthenes CoE Smart Applications

Smart Health Care

- Digital Twin for Smart Hospital Management
- Smart Health Record Based on Digital Twins
- Automated Machine Learning (AutoML): A practical approach
- Establishment of the Bioinformatics ERA Chair at the Cyprus Institute of Neurology and Genetics Biorise
- The Bioinformatics ERA Chair at CING: Research and Applications
- Network-based Bioinformatics Enhance our Understanding of Molecular Pathology and our Capabilities for Drug Repurposing Against Diseases

Digital Cultural Heritage

- The ERA Chair on Digital Cultural Heritage MNEMOSYNE
- Digital 3D documentation of Cultural Heritage Objects
- Land Movement Estimation Over Archaeological Sites Using Space (Sentinel-1) and GIS Technologies

Smart Manufacturing / Industry / buildings

- The SODALITE Project
- Smart data: IoT Context and Application
- BPM and IoT
- Event Detection and Localization Algorithms for Smart Systems
- Automatic Synthesis in Industry 4.0

A presentation of each talk follows, which includes a short description and details about the speaker and the link for accessing the corresponding presentation.

Day 1 – Monday, April 12, 2021 (EEST Time)

Presentation Title:	Enabling Serverless MLOps: an within EU DESTINI		
Presentation:	https://youtu.be/rhfWwGU5lgs?t=2402		
Date: (MM/DD/YYYY)	04/12/2021	**Time:**	09:30 - 10:00
Presenter:	Prof. Damian A. Tamburri	**Organization/ Institution:**	Jheronymus Academy of Data Science

1. Presentation short description
The goal of this presentation is to present a way to contextualize serverless computing and machine learning operations in the scope of a European project called RADON and find ways to apply these concepts in the DESTINI project.

Presentation Title:	CYENS Center of Excellence		
Presentation:	https://youtu.be/rhfWwGU5lgs?t=4203		
Date: (MM/DD/YYYY)	04/12/2021	**Time:**	10:00 - 10:30
Presenter:	Prof. George Chrysanthou	**Organization/ Institution:**	University of Cyprus

1. Presentation short description
This presentation presents the Centre of Excellence (CYENS) which is a research centre that aims to conduct high international standards and excellent research with real world applicability, by bringing together a multidisciplinary team from different backgrounds and different universities.

Presentation Title:	The Nicosia Digital Twin Project		
Presentation:	https://youtu.be/rhfWwGU5lgs?t=6064		
Date: (MM/DD/YYYY)	04/12/2021	**Time:**	10:45 - 11:05
Presenter:	Prof. Vasos Vassiliou	**Organization/ Institution:**	University of Cyprus

1. Presentation short description
The purpose of this presentation is to present the iNicosia Flagship Project that aims to create an interactive 3D model of Nicosia, which will be used to represent information about the city using mobile and mixed-reality applications. In Addition, iNicosia includes a Digital Twin, which is the Digital Representation of Nicosia that provides real time data about the city.

Presentation Title:	Digital Twin for Smart Hospital Management		
Presentation:	https://youtu.be/rhfWwGU5lgs?t=7515		
Date: (MM/DD/YYYY)	04/12/2021	Time:	11:05 - 11:45
Presenter:	Alexandros Christodoulou & Vassilis Andreou (undergrad students)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
This presentation describes a bachelor degree thesis namely, "Digital Twin for Smart Hospital Management". Hospital Digital Twin consists of a realistic visual environment of a hospital. The Digital Twin provides the ability for the user to have visualization of the hospital's environment and equipment at any time, as well as to modify the equipment of the rooms and create scenarios and reports about the hospital's info.

Presentation Title:	Smart Health Record Based on Digital Twins		
Presentation:	https://youtu.be/rhfWwGU5lgs?t=9103		
Date: (MM/DD/YYYY)	04/12/2021	**Time:**	11:45 - 12:25
Presenter:	Stelios Mappouras & Evangelos Georgiou (undergrad students)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

This presentation presents the 4th year thesis project of bachelor degree students namely “Smart Health Record Based on Digital Twins”. Smart Health Record Digital Twin consists of a Digital Twin that represents the data of a patient's health file and a Web Application to manipulate the data. It aims to make diagnosis and therapy of patients more effective, as well as to minimize the error factor on drug prescription

Day 2 – Tuesday, April 13, 2021 (EEST Time)

Presentation Title:	Introduction to 5G & Introduction to Smart Cities (the Nicosia Use Case)		
Presentation:	https://youtu.be/NMh6P65dK1A?t=127		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	09:00 - 9:30
Presenter:	Niki Ioannou	**Organization/ Institution:**	Cyprus University of Technology
Presenter:	Pantelis Frangoulis	**Organization/ Institution:**	Cyta Sales & Business Development-Vertical Markets

1. Presentation short description
The presentation presents the application of Smart Cities platforms and solutions provided by Cyta. In the presentation the Use Case of Nicosia is presented.

Presentation Title:	DataCloud H2020 Project		
Presentation:	https://youtu.be/NMh6P65dK1A?t=2608		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	09:30 - 10:00
Presenter:	Prof. Andrea Marrella	**Organization/ Institution:**	Sapienza University di Roma

1. Presentation short description
The goal of this presentation is to present the main goal of the Horizon2020 project DataCloud2020. The presentation outlines the vision of the project which is the creation of a novel paradigm for Big Data pipeline

processing over heterogeneous resources encompassing the Computing Continuum, covering the complete lifecycle of managing Big Data pipelines.

Presentation Title:	The Sea Traffic Management in the Eastern Mediterranean Project		
Presentation:	https://youtu.be/NMh6P65dK1A?t=4699		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	10:00 - 10:30
Presenter:	Prof. Michailides Michalis	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

The main purpose of the presentation is to describe the STEAM project which is to upgrade the port of Limassol to be a world class transhipment and a driver for short sea shipping in the Eastern Mediterranean. In this presentation we will see which sectors of the port of Limassol STEAM project will affect due to accomplish their goals.

Presentation Title:	Data-driven Applications for Optimized Sea Traffic Management		
Presentation:	https://youtu.be/NMh6P65dK1A?t=6058		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	10:45 - 11:05
Presenter:	Prof. Herodotos Herodotou	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

The purpose of the presentation is to describe ways to ensure efficiency, safety and environmental sustainability of the shipping industry.

Presentation Title:	Automated Machine Learning (AutoML): A practical Approach		
Presentation:	https://youtu.be/NMh6P65dK1A?t=7650		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	11:05 - 11:25
Presenter:	Thomas Nikidiotis (undergrad student)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
The purpose of the presentation is to present a practical approach of a system which is implemented to perform automations and optimization of the process of Machine Learning application.

Presentation Title:	Smart data: IoT Context and Applications		
Presentation:	https://youtu.be/NMh6P65dK1A?t=8611		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	11:25 - 11:45
Presenter:	Vassos Charalambous (undergrad student)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
The purpose of this presentation is to describe the meaning of IoT along with its potentials. In addition, many use cases about the applications of IoT in our life are presented. Finally, this presentation outlines the target of IoT, the technologies that are used and a description about how the data are collected.

Presentation Title:	Smart Tourism: Processing Data from the Hotel Industry		
Presentation:	https://youtu.be/NMh6P65dK1A?t=9318		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	11:45 - 12:05
Presenter:	Dr. Andreas Christoforou	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

The presentation revolves around a case study of Big data processing using data from the hotel industry. At first, a brief introduction of the idea is given, followed by a short reference to the definition and challenges around Big Data. Next, a reference is made to the Big Data processing architecture which examines how this architecture can be applied to data from the hotel industry. Finally, this presentation introduces an online application for collecting, processing, and visualizing data from Cyprus tourism.

Presentation Title:	An Introduction to Smart Decentralized Applications		
Presentation:	https://youtu.be/NMh6P65dK1A?t=10413		
Date: (MM/DD/YYYY)	04/13/2021	**Time:**	12:05 - 12:25
Presenter:	Dr. Panayiotis Christodoulou	**Organization/ Institution:**	Neapolis University Pafos

1. Presentation short description

Initially introduced in 2008, Blockchain is considered to be one of the most advanced technologies of the 21st century. Blockchain is a distributed and immutable public ledger, in which users perform transactions in a secure and transparent way over a peer-to-peer (p2p) network without the need of a middleman. This new emerging technology postulated the opportunity for developers to design special-purpose decentralized applications (dApps) that can support the transformation from web2 towards web3 . During this talk we firstly describe what Blockchain is and then we outline the benefits of using a Blockchain network rather than centralized servers. Subsequently, we describe various domains of applications in which decentralized applications can be developed to tackle the challenges and limitations of already existing centralized solutions.

Day 3 – Wednesday, April 14, 2021 (EEST Time)

Presentation Title:	EXCELSIOR H2020 Teaming Project		
Presentation:	https://youtu.be/-knytJC8PlE?t=6		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	09:00 - 09:30
Presenter:	Dr. Christiana Papoutsa	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
The purpose of this presentation is to present the Excelsior H2020 Project. The Excelsior H2020 aims to upgrade the ERATOSTHENES Research Centre of CUT into an autonomous Centre of Excellence (ECoE) which will become a world-class Digital Innovation Hub and a Research Competence Centre for Earth Observation and Geospatial Information

Presentation Title:	The importance of Data Processing for the Water Board of Lemesos		
Presentation:	https://youtu.be/-knytJC8PlE?t=1845		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	09:30 - 10:00
Presenter:	Mr. Solomos Charalambous	**Organization/ Institution:**	Water Board of Lemesos

1. Presentation short description
The goal of the presentation is to explain the importance of data processing systems for the Water Board of Lemesos and how these systems assist in achieving more efficient management of the Water Distribution Network.

Presentation Title:	Establishment of the Bioinformatics ERA Chair at the Cyprus Institute of Neurology and Genetics – BIORISE		
Presentation:	https://youtu.be/-knytJC8PlE?t=3543		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	10:00 - 10:30
Presenter:	Prof. Kyproula Christodoulou	**Organization/ Institution:**	Cyprus Institute of Neurology & Genetics

1. Presentation short description
The purpose of the presentation is to present the mission of the CING (Cyprus Institute of Neurology and Genetics) and its established Bioinformatics ERA Chair. This presentation describes the three pillars which CING is based on and explains the objectives and work packages that CING follows to achieve its goal, which is to act as a hub of excellence in the areas of applied bioinformatics.

Presentation Title:	The Bioinformatics ERA Chair at CING: Research and Applications		
Presentation:	https://youtu.be/-knytJC8PlE?t=6205		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	10:45 - 11:05
Presenter:	Prof. George Spyrou	**Organization/ Institution:**	Cyprus Institute of Neurology & Genetics

1. Presentation short description
The presentation focuses on how CING is built and explains the structure of the Bioinformatics Group as well as some technical details about it. In addition, training workshops and courses that are offered by CING are also presented. Lastly, the presentation explains some methods and paradigms from the research that has already been conducted in the area of smart bio-data processing.

Presentation Title:	The ERA Chair on Digital Cultural Heritage MNEMOSYNE		
Presentation:	https://youtu.be/-knytJC8PlE?t=7595		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	11:05 - 11:25
Presenter:	Dr. Kyriakos Efstathiou	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

The purpose of the presentation is to present MNEMOSYNE. MNEMOSYNE is an ERA Chair project on Digital Cultural Heritage. It is a three-phase programme centered on the holistic documentation of the Digital Heritage lifecycle. The presentation describes the methodology around the data acquisition for the cultural heritage, followed by some case studies with some results of the project.

Presentation Title:	Digital 3D documentation of Cultural Heritage Objects		
Presentation:	https://youtu.be/-knytJC8PlE?t=9160		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	11:25 - 11:45
Presenter:	Dr. Kyriakos Efstathiou	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

This presentation presents various case studies from the Digital 3D documentation of Cultural Heritage Objects. The presentation elaborates on some techniques used to accomplish the desired results.

Presentation Title:	Smart Data Processing for Public Safety Through Image and Video Analysis		
Presentation:	https://youtu.be/-knytJC8PlE?t=10470		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	11:45 - 12:05
Presenter:	Kyriakos Aristidou (undergrad. student)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

This presentation described a final year thesis project for obtaining bachelor's degree and is entitled "Smart Data Processing for Public Safety Through Image and Video Analysis". The project's purpose is to create an application to detect hazards in public places, such as fire, theft, fights, etc., with the use of Artificial Intelligence and Computer Vision. The presentation explains the methodology followed in this project, describes the violation rules that the application can detect and presents case study results of certain hazards detection.

Presentation Title:	Excelsior H2020 & Eratosthenes CoE Smart Applications		
Presentation:	https://youtu.be/-knytJC8PlE?t=11160		
Date: (MM/DD/YYYY)	04/14/2021	**Time:**	12:05 - 12:25
Presenter:	Eleni Loulli (PhD candidate, researcher)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description

This talk focused on the presentation of various smart data applications that were developed from Eratosthenis centre of excellence at CUT revolving around the processing of earth and satellite data for real-world applications.

Day 4 – Tuesday, April 15, 2021 (EEST Time)

Presentation Title:	Land Movement Estimation Over Archaeological Sites Using Space (Sentinel-1) and GIS Technologies		
Presentation:	https://youtu.be/g5DbTuhKGGc?t=70		
Date: (MM/DD/YYYY)	04/15/2021	**Time:**	09:00 - 09:45
Presenter:	Despina Makri (PhD candidate, researcher)	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
The main purpose of the presentation is to describe the five research focuses of the ERATOSTHENIS CoE which are the remote sensing, the space technologies, the geoinformatics, the spatialization and the navigation.

Presentation Title:	Optimizing Big Data Processing Systems in Heterogeneous Cluster Environments		
Presentation:	https://youtu.be/g5DbTuhKGGc?t=2320		
Date: (MM/DD/YYYY)	04/15/2021	**Time:**	09:45 - 10:30
Presenter:	Prof. Herodotos Herodotou	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
The presentation describes the whole process and the ecosystems for big data analysis and presents the trends on these technologies. In addition, the main focus of the presentation is to allow us to understand how OctopusFS architecture works.

Presentation Title:	Blueprinting High-Performance Computing (HPC)		
Presentation:	https://youtu.be/g5DbTuhKGGc?t=5972		
Date: (MM/DD/YYYY)	04/15/2021	**Time:**	10:45 - 11:30
Presenter:	Dr. Indika Kamura	**Organization/ Institution:**	Jheronimus Academy of Data Science

1. Presentation short description

This presentation firstly, presents use cases about software defined application infrastructures management and engineering, and, secondly, it explains the goals of the SODALITE project, as well as methodologies that are currently used.

Presentation Title:	BPM and Iot		
Presentation:	https://youtu.be/g5DbTuhKGGc?t=7981		
Date: (MM/DD/YYYY)	04/15/2021	**Time:**	11:30 - 12:15
Presenter:	Prof. Massimo Mecella	**Organization/ Institution:**	Sapienza University di Roma

1. Presentation short description

The main purpose of the presentation is to describe the business processes and how we can handle them in an efficient way. In addition, the presentation outlines the concept of Internet of Things and how it works. Finally, the talk analyzes how the Internet of Things interacts with business process management, as well as describe various challenges that are derived from this interaction.

Day 5 – Tuesday, April 16, 2021 (EEST Time)

Presentation Title:	Network-based Bioinformatics Enhance our Understanding of Molecular Pathology and our Capabilities for Drug Repurposing Against Diseases		
Presentation:	https://youtu.be/ffcAwbTvXPY?t=85		
Date: (MM/DD/YYYY)	04/16/2021	**Time:**	09:00 - 09:45
Presenter:	Prof. George Spyrou	**Organization/ Institution:**	Cyprus Institute of Neurology and Genetics

1. Presentation short description
The presentation focuses on a research of CING, to apply network based bioinformatics (System Bioinformatics) on molecular pathology. In addition, the presentation explains some methods of constructing such a network, and ways to analyze it in order to extract some conclusions, that can be used to understand the capabilities that exist for drug repurposing against diseases using such technologies.

Presentation Title:	Event Detection and Localization Algorithms for Smart Systems		
Presentation:	https://youtu.be/ffcAwbTvXPY?t=2765		
Date: (MM/DD/YYYY)	04/16/2021	**Time:**	09:45 - 10:30
Presenter:	Prof. Michalis Michailides	**Organization/ Institution:**	Cyprus University of Technology

1. Presentation short description
This presentation describes the methodology and tools that can be used to detect events as well as to collect data about them. Those data can be used to develop smart systems that are able to localize the events and transform the data into information using dedicated algorithms.

Presentation Title:	Automatic Synthesis in Industry 4.0		
Presentation:	https://youtu.be/ffcAwbTvXPY?t=5531		
Date: (MM/DD/YYYY)	04/16/2021	***Time:***	10:45 - 11:30
Presenter:	Prof. Francesco Leotta	***Organization /Institution:***	Sapienza Universita di Roma

1. Presentation short description

This presentation describes smart manufacturing and all the stages of evolution to the 4th generation industry. In addition, this presentation describes how Artificial Intelligence helped the industry to evolve to its 4th generation. Furthermore in the presentation we will find information about the automated synthesis and how this affect positively for the evolution, the productivity and the quality.

Presentation Title:	AI-enabled and Data-driven Privacy Preservation in the Dutch Telecom		
File/material name	https://youtu.be/ffcAwbTvXPY?t=8781		
Date: (MM/DD/YYYY)	04/16/2021	***Time:***	11:30 - 12:15
Presenter:	Nemania Borovits (PhD candidate)	***Organization /Institution:***	Jheronimus Academy of Data Science

1. Presentation short description

This presentation is about the GDPR policy that is used for personal data safety as well as Artificial Intelligence models that are utilized for preserving privacy of data. Furthermore, use cases are analyzed stemming from both KPN and JADS about the privacy of data in the world of business.

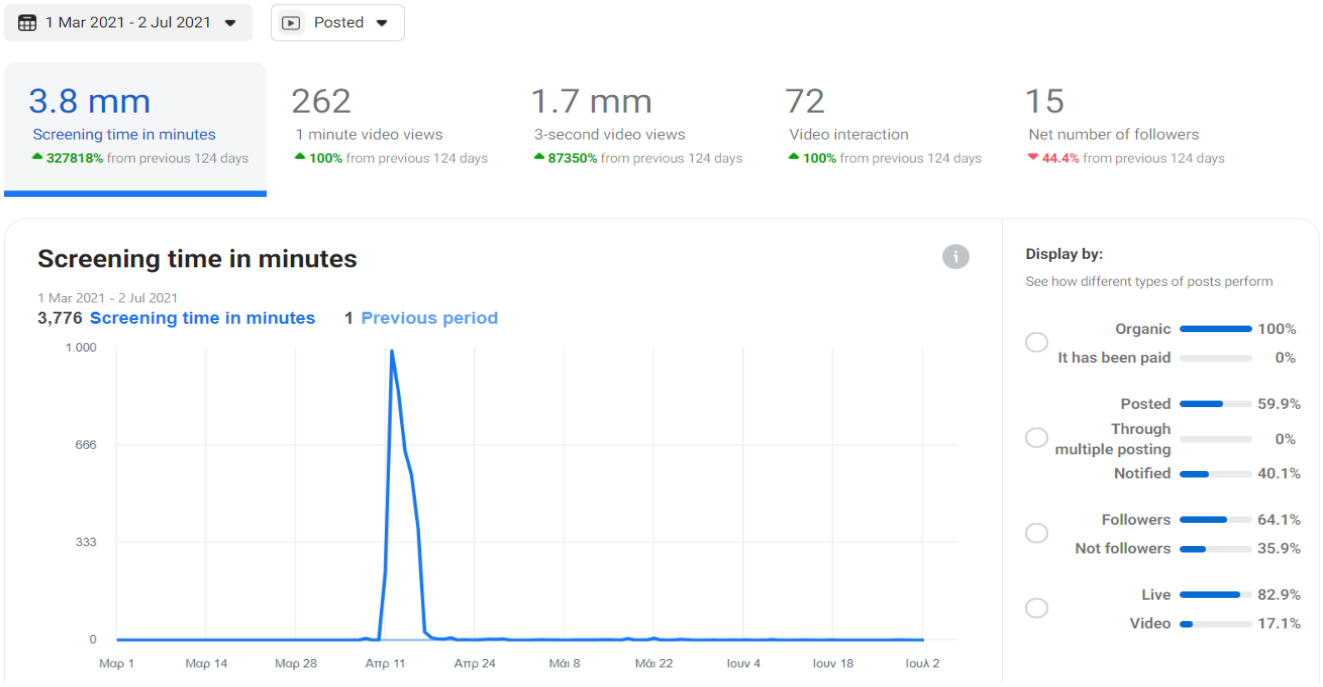
As previously mentioned, the activities of the School were performed using Zoom Cloud meeting application and broadcasted also through DESTINI's social media (Facebook, Youtube).

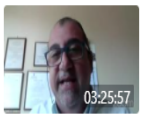
The Participants of the School per day were as follows:

- **Zoom Participants**

  Day 1 Zoom Participants: 30
  Day 2 Zoom Participants: 25
  Day 3 Zoom Participants: 22
  Day 4 Zoom Participants: 19
  Day 5 Zoom Participants: 25
  Day 6 Zoom Participants: 28

- **Facebook Statistics/ Participants 1 March 2021 - 2 July 2021**



Video	Date added	Screening time in minut... ↓	1 minute video views	3-second video views	Interaction
 03:17:09 First School on Smart... Destini - Smart Data...	12/4/2021 9:02 a.m. Destini - Smart Data...	1,196	84	515	23
 03:25:57 First School on Smart... Destini - Smart Data...	13/4/2021 9:05 a.m. Destini - Smart Data...	750	65	399	16
 03:36:54 First School on Smart... Destini - Smart Data...	14/4/2021 9:00 a.m. Destini - Smart Data...	690	44	209	12
 03:20:57 First School on Smart... Destini - Smart Data...	15/4/2021 8:59 a.m. Destini - Smart Data...	624	45	404	12
 03:36:15 First School on Smart... Destini - Smart Data...	16/4/2021 9:02 a.m. Destini - Smart Data...	502	21	190	6

4. Conclusions

In the context of Work Package 3, a number of actions and activities were organized and performed aiming to transfer scientific knowledge to CUT members in the area Smart Data Processing and Systems of Deep Insights to tackle the research challenges that exist within the JRAs and the key knowledge areas identified during WP2.

DESTINI's consortium organized the 1st online DESTINI school which aimed to share knowledge and project outcomes by facilitating discussions and exchanging ideas between researchers, industrial and business stakeholders, governmental and decision-making bodies and the general public. The school may be considered as highly successful, attracting people from a variety of domains and businesses, and of course the academia.

The 2nd DESTINI School is expected to be organized in September 2022. Researchers from CUT, SAPIENZA and JADS will prepare the ground for the new school, again focusing on delivering an event of global outreach. In this context industrial and business stakeholders will be invited, as well as governmental and decision-making bodies and the general public. The presentations and talks will again revolve around DESTINI's JRAs and will focus on applied scientific and research results.