



Project Acronym: **GAIN**

Project Full Title: **Georgian Artificial Intelligence Networking and Twinning Initiative**

Grant Agreement Number: 101078950

HORIZON EUROPE - WIDERA-2021-ACCESS-03 (Twinning)

WEBSITE: www.gain-twinning.eu (under construction)

Project Start Date: 1st October 2022

Kick Off Meeting**MICM, 18-19 October, 2022, Tbilisi, Georgia**

| | |
|------------------------|--------------------|
| Dissemination level: | Public |
| Date: | |
| Deliverable leader: | MICM |
| Author: | George Giorgobiani |
| Contributors: | |
| Reviewers: | |
| Type: | |
| WP / Task responsible: | MICM |
| Keywords: | |

Table of Contents

| | |
|--|----|
| The first day, 18 October, 2022..... | 3 |
| The second day, 19 October, 2022..... | 7 |
| Meeting with Georgian Psychiatrists..... | 8 |
| Dissemination 1..... | 10 |
| AGENDA..... | 11 |

The first day, 18 October, 2022

On October 18 – 19, 2022, the Kick Off Meeting of the project GAIN was held at Muskhelishvili Institute of Computational Mathematics (MICM). The meeting was attended by the representatives of partner organizations: DFKI - Andrey Girenko, Jan Alexandersson, Philipp Mueller; INRIA - Francois Bremond, Alexandra Konig, EXOLAUNCH - Anton Vlaskin.

The meeting was attended by the deputy rector of GTU in the field of science, professor Zurab Gasitashvili, the head of the Grants Office of GTU Levan Khetsuriani, professors and teachers of the Faculty of Informatics and Management Systems, the director of MICM, professor Vakhtang Kvaratskhelia, the chairman of the scientific board of MICM, Professor Hamlet Meladze, heads of departments and employees of the Institute, guests from other organizations (up to 70 participants in total).

Meeting was opened by the project coordinator, deputy director of MICM, Professor G. Giorgobiani. Welcome speeches were given by Professor Z. Gasitashvili, Professor V. Kvaratskhelia and L. Khetsuriani.

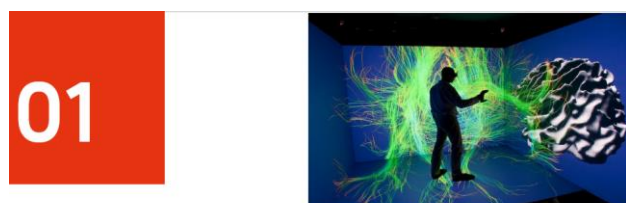
Project officer from the European Commission, Dr. Yanis Vacondios joined the meeting online and gave the welcome speech.

Project coordinator G. Giorgobiani made a presentation about the “Main Goals of the Project”, which is “to integrate MICM into the European research community in the area of Artificial Intelligence (AI) by strengthening its research and innovation capacities, to create a European-level Centre of Excellence in this field in Georgia”. The highlight of the presentation was to

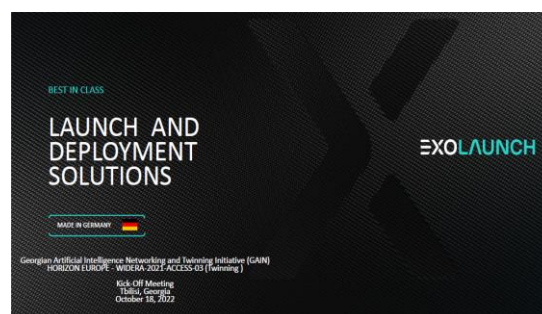
aware the audience about the means and activities, planned in the project to achieve these goals, and that these goals are feasible and realistic.



Then the representatives of the partner organizations gave the presentations of their organizations.

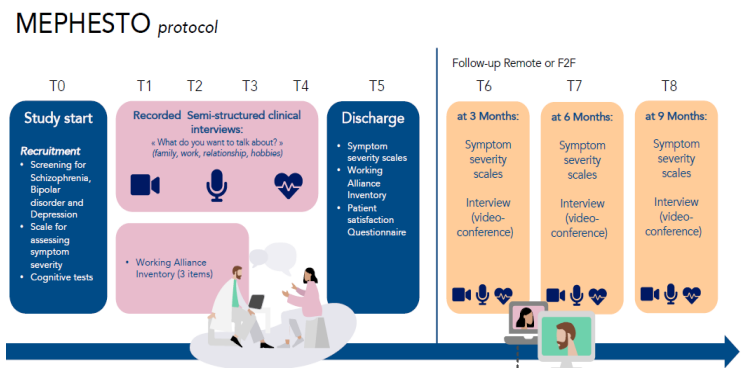


Inria Sophia Antipolis – Méditerranée,
a major player in the field of digital sciences and
technologies, deliberately oriented towards the
European research area





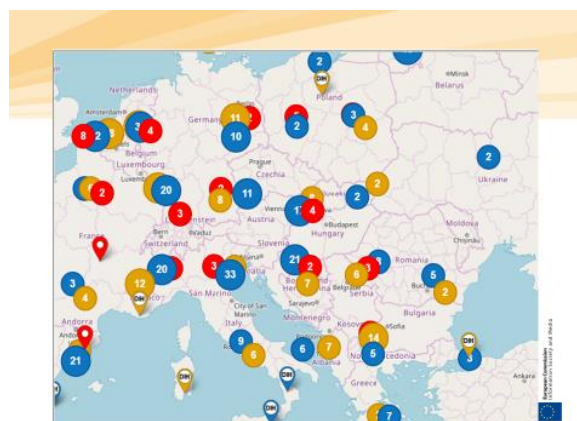
Two presentations of the large-scale project "MePheSto" were given by Alexandra König and Philipp Mueller (INRIA, DFKI). Project deals with the use of artificial intelligence in psychiatry and the main executors are partner organizations - DFKI and INRIA. In the GAIN project, similar studies are planned in Georgia. aroused great interest



Later, participants of the meeting were addressed by Dr. Silvia Bozhinova (Team leader NCP countries at the European Commission DG R&I), and Nino Inasaridze, the head of the Horizon Europe Georgia office.



Dr. Givi Kochoradze (EC Horizon Europe NCP for Digital, Industry and Space in Georgia, head of ICARTI) made a presentation on “Transfer of the Innovation and Economical Models from Europe for achieving Exclusive Economic Growth in Georgia”.



The first day meeting ended with 2 presentations by young scientists, the members of the newly created laboratory of artificial intelligence (MICM AI Lab) within the framework of the GAIN project at MICM.

Project GAIN supports MICM with enhancing of computer capacities. The first presentation was about the HPC server, which is already launched at MICM, and the corresponding plan of its upgrade by the help of the project GAIN.



Another presentation was about the practical implementation of the Machine Learning method for one medical problem.

Both presentations aroused the interest of the audience, some questions were posed and discussed.

The first day of the meeting ended with networking discussions and a social program.

The second day, 19 October, 2022

The second day, 19 October, started with the discussion about administrative and management Issues.

Composition of the Project steering board and TRIP (Work package 2) steering board were agreed. It was decided that both boards include the same representatives of all four partners.

Composition of the Project & TRIP steering boards

- ✓ DFKI – Jan Alexandersson
- ✓ INRIA - Alexandra Konig, Francois Bremond
- ✓ EXO – Svetlana Jasich
- ✓ MICM – George Giorgobiani

Deliverable D.5.1. Project Website – It was decided that the website will be designed by the researchers of MICM with active participation of all the partners of the project. Its initial design and functionality was agreed with the Project Steering Board

Deliverable D.6.2. Project online management platform - It was decided that the platform will be structured in the google drive.

Next, Professor Francois Bremond made a presentation “Video Understanding for Human Behavior Analysis”, which describes research of STARS team INRIA, Sophia Antipolis – Nice University Hospital –CoBTeK.

**Video Understanding
for Human Behavior Analysis**

Francois.Bremond@inria.fr

INRIA Sophia Antipolis – STARS team
Nice University Hospital - CoBTeK,




Emotion Recognition : Facial Expression Recognition

Characterizing the state of Apathy using Facial Motion and Emotion



Meeting with Georgian Psychiatrists

Horizon Europe Project GAIN proposes to extend the scope of the MePheSTO project. This includes digital phenotyping of various mental and mood disorders pathological evidence such as executive dysfunction or inadequate emotional distress. Video analytics section refers to measuring activities of daily living (ADL), emotions and lifestyle. As the medical data will be collected in Georgia, appointment of an independent Ethics Advisor (Deliverable 1.1) was recommended by the Project Officer during the Grant Preparation process in order to ensure that the participants are protected.

Doctor of Medicine from Tbilisi State Medical University, the Head of the Society of Georgian Psychiatrists, and clinical director at the Central Psychiatric Hospital, Professor Eka Chkonია was invited on the second day of the Kick-Off meeting. She presented her current research and collaboration results. The title of the presentation is “The electrophysiology and genetics of visual backward masking”.



**The electrophysiology and genetics
of visual backward masking**



Research is carried out at “Tbilisi State Medical University” in cooperation with Swiss scientists from “Ecole Polytechnique Federale de Lausanne”. It deals with the Endophenotype concept in psychiatry, namely in the study of schizophrenia. According to the research, conclusions and take home messages are as follows:

- Schizophrenia patients have difficulties enhancing faint sensory information (i.e., target enhancement deficit) reflected by the GFP.
- The endophenotype is the adaptive behavioural performance, not the neural correlates.
- The deficits are found along the entire continuum.
- Deficits are shared to some extent between disorders, reflecting the complex genetics of psychiatric diseases.

Professor Eka Chkonia expressed her interest in the research topics of the project GAIN and suggested supporting it in every way. She introduced to the project participants a young researcher, doctoral student, and staff of the Central Psychiatric Hospital in Tbilisi, who will be permanently involved in the project activities related to collecting and analysing medical data.



Professor Eka Chkonia was suggested to be the EA of the project GAIN. The suggestion was accepted.

Future collaboration details were discussed and agreed. It was stressed that research, planned by the project GAIN, is very important, especially for the Georgian researchers, who will adopt new technologies of Artificial Intelligence and their application in medical

sciences. Non the less important is the new, for the Georgian psychiatrists, vision how to collect and treat medical data, the opportunity of creation of the Georgian corpus of clinical interactional (speech and video) data (not available not only in Georgia, but in the entire Caucasus region) using the methodology developed in the project “MePheSTO” for the relevant diseases.

The Kick Off Meeting of the project GAIN ended with networking and discussions. The GAIN team enjoyed sightseeing tour near Tbilisi, to the old capital of Georgia, Mtskheta.



Dissemination 1.

Information about the GAIN project was published at

- ✓ IPN Interpressnews - <https://www.interpressnews.ge/ka/article/734014-sakartvelos-technikuri-universitetis-gamotvliti-matematikis-institutis-proekti-horizonti-evropas-sagranto-konkursis-gamarjvebulia>
- ✓ GTU website news - <https://gtu.ge/News/20899/>
- ✓ MICM website - <http://micm.edu.ge/en/project-gain-first-meeting/>

AGENDA

| GAIN Georgian Artificial Intelligence Networking and Twinning Initiative HORIZON EUROPE - WIDERA-2021-ACCESS-03 (Twinning) Project #101078950 | | | |
|---|--|---|--|
| Kick - Off Meeting | | | |
| Date: | October 18, 2022 | | |
| Start Time: | 10:30 AM | | |
| End Time: | 4:45 PM | | |
| Location: | Grigol Peradze 4, Tbilisi, Georgia, MICM, Conference Room, 1st floor | | |
| Time | Minutes | Topic / Discussion | Facilitator |
| 10:30 AM | Arrival | | |
| 11:00 AM | 5 | Welcome | Project coordinator - Dr. George Giorgobiani |
| 11:05 AM | 5 | Welcome | Prof. David Gurgendze (Rector, GTU) |
| 11:10 AM | 5 | Welcome (online) | Project Officer, Dr. Vacondios Yiannis |
| 11:15 AM | 5 | Welcome | Prof. Vakhtang Kvaratskhelia (Director, MICM) |
| 11:20 AM | 20 | The Main Goals of the Project | Dr. George Giorgobiani |
| 11:40 AM | Presentations of the partner organizations | | |
| 11:40 AM | 15 | GTU | Grants Office GTU |
| 11:55 AM | 30 | Coffee Break | |
| 12:25 PM | 15 | DFKI | Dr. Jan Alexandersson |
| 12:40 PM | 15 | INRIA | Dr. Francois Bremond |
| 12:55 PM | 15 | EXOLAUNCH | Dr. Anton Vlaskin |
| 1:10 PM | 15 | MICM | Dr. George Giorgobiani |
| 1:25 PM | 25 | Project - MePheSto | Dr. Alexandra Konig / Dr. Philipp Mueller (INRIA, DFKI) |
| 1:50 PM | 70 | Lunch Break | |
| 3:00 PM | 20 | Greetings | Sylvia Bojinova Senior Policy Officer and ENP Team leader at the European Commission DG R&I |
| 3:20 PM | 10 | Greetings | Nino Inasaridze Head of the Horizon Europe National Office of Georgia |
| 3:30 PM | 15 | Transfer of the Innovation and Economical Models from Europe for achieving Exclusive Economic Growth in Georgia | Dr. Givi Kochoradze (ICARTI) |
| 3:45 PM | 30 | Machine Learning task (example) | AI Lab at MICM |
| 4:15 PM | 30 | Discussion, Networking | All |
| 4:45 PM | 375 min | End of Meeting | |

| GAIN Georgian Artificial Intelligence Networking and Twinning Initiative HORIZON EUROPE - WIDERA-2021-ACCESS-03 (Twinning) Project #101078950 | | | |
|--|---|--|---|
| Kick - Off Meeting | | | |
| Date: | October 19, 2022 | | |
| Start Time: | 10:00 AM | | |
| End Time: | 4:00 PM | | |
| Location: | Grigol Peradze 4, Tbilisi, Georgia, MICM, Meeting Room, 2nd floor | | |
| Time | Minutes | Topic / Discussion | Facilitator |
| 10:00 AM | 10 | Project steering board; TRIP steering board | |
| 10:10 AM | 30 | Detailed activity plan for the 1st year | |
| 10:40 AM | 40 | Administrative Issues | |
| 11:20 AM | Work packages and individual work plan of participants | | |
| 11:20 AM | 10 | DFKI | |
| 11:30 AM | 10 | INRIA | |
| 11:40 AM | 10 | EXO | |
| 11:50 AM | 10 | MICM | |
| 12:00 PM | 20 | Coffee Break | |
| 12:20 PM | 40 | Meeting with Georgian Psychiatrists | Prof. Eka Chkonia, Tbilisi Medical University |
| 1:00 PM | 60 | Lunch Break | |
| 2:00 PM | End of Meeting/Sightseeing | | |