

06.03.2023

07.03.2023

09:00

09:00 / Registration & coffee
10:00

09:00 / Registration & coffee
10:00

10:00

10:00 / Opening remarks
10:10 / AI Technologies for Digital Characters and Avatars
10:40

10:00 / Opening remarks
10:10 / Natural Language Processing – main in 2022
10:55
11:25 / Firechat: Investments in AI – a crisis or a time of new opportunities?

11:00

10:40 / Computer vision – main in 2022
11:25

Coffee break

12:00

Computer Vision in medicine	Datasets, markup and testing	AI in legal practice	Computing resources for AI	Natural Language Processing in business	Diffusion models – tutorial. Part 1
Large Auditorium	Manoogian Hall	Small hall	Large Auditorium	Manoogian Hall	Small hall

Coffee break

13:00

Generative models in business	Robots and drones – research & development	Natural Language Processing – research & development	Spiking neural networks and neuromorphic processors	Natural Language Processing – research & development	Diffusion models – tutorial. Part 2
Large Auditorium	Manoogian Hall	Small hall	Large Auditorium	Manoogian Hall	Small hall

14:00

14:00 / Lunch
15:00

14:00 / Lunch
15:00

15:00

15:00 / Reinforcement Learning – main in 2022 15:45 / Generative and diffusion models – main in 2022 16:30	15:00 / Pitch session of startups 16:30	Artificial General Intelligence (AGI) – reviews	Natural Language Processing – research & development
Large Auditorium	Manoogian Hall	Large Auditorium	Manoogian Hall

Coffee break

16:00

17:00

Reinforcement Learning in business	Computer Vision – research & development	Machine learning – academic talks	16:30 / 10 years of AI revolution – 10 works, that shook the world 19:00
Large Auditorium	Manoogian Hall	Small hall	

18:00

19:00

Computer Vision in business	Dubai, Almaty, Yerevan, Tbilisi, London, Singapore – Russian experience	Machine learning – academic talks	19:30 / Networking Party 22:00 Hard Rock Cafe
Large Auditorium	Manoogian Hall	Small hall	

OpenTalks.AI / 2023



www.opentalks.ai

Organizational / Information /



We begin at 10:00am every day and work till 19:00pm



From 9:00am to 10:00am – welcome coffee. Between sections – tea, coffee and cookies. Lunch from 2:00pm till 3:00pm



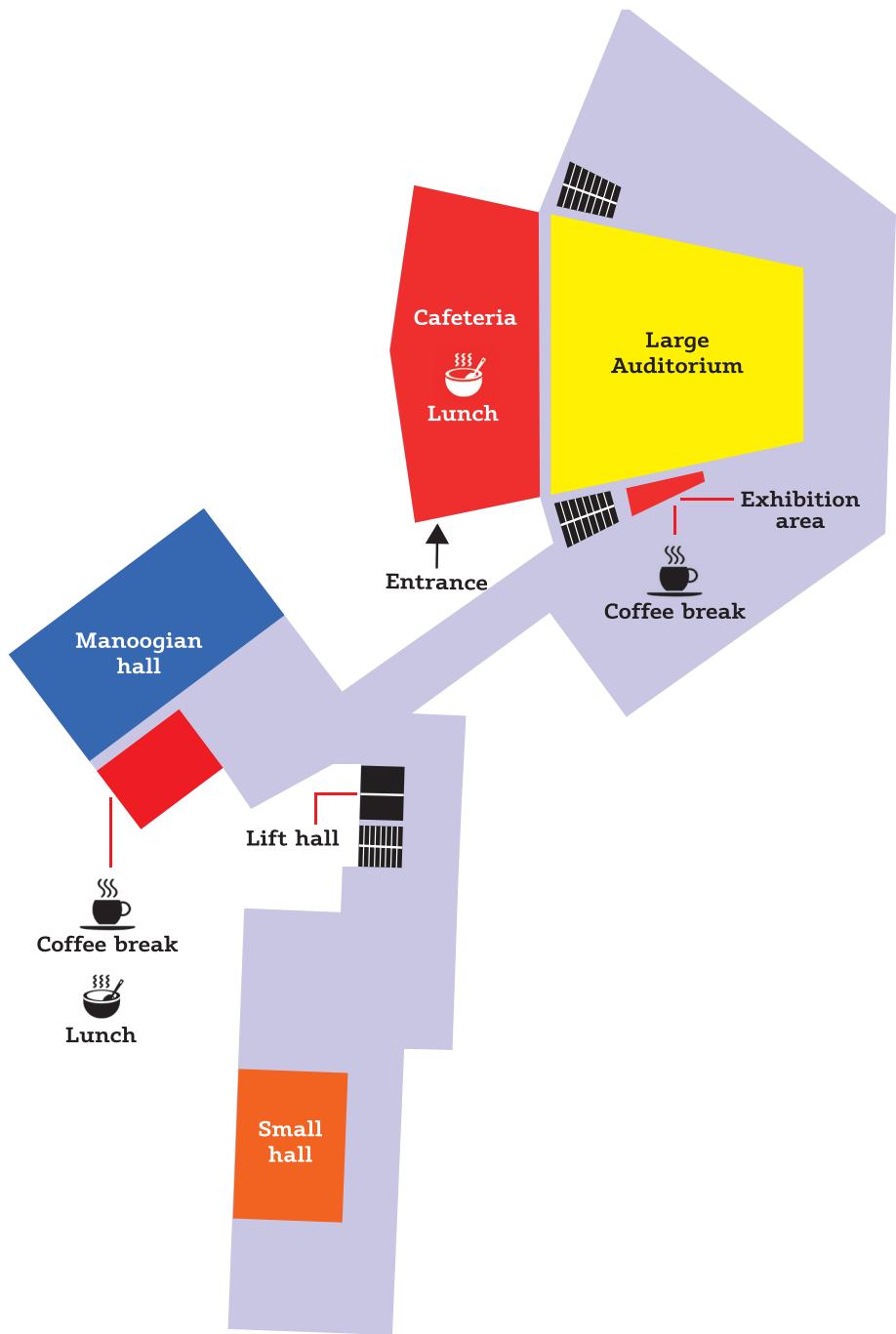
We will host a party with live music on March 7 at 19:30pm in Hard Rock Cafe



We have volunteers working in conference venue, you can find them by white sweaters with OpenTalks.AI print. They will help you if needed



Smoking is strictly prohibited on the AUA site, including in the toilets and on the stairs. If you do smoke, you will need to go outside





Dear friends!

I warmly welcome you on OpenTalks.AI conference in Yerevan!

Several last years, every year I used to say, that this year is very different... And I was sure it was! But this year... you know...))) it is very, very different. For all of us.

For 5 years OpenTalks.AI was a great place to meet in Moscow and talk about AI with top professionals. But in 2022 a lot of AI folks left their countries for good: to Armenia, Georgia, Kazakhstan, Uzbekistan, Turkey, UAE, Israel, UK, USA... Many of them are disconnected from usual community, from colleagues and friends.

For this reason, we set new OpenTalks.AI mission – to become a point of reunion of this dissolved AI community. Now it is not only the conference, that you love, with top level speakers and talks. It is also a great place to see your friends and share your stories. Big talks in the afternoon and small chats in the evenings, we believe both are important.

That's why conference also left for good – to Yerevan. This was not easy; we had many troubles on this way. But, I hope, you will excuse all our issues and bugs, because we tried to save the very soul of OpenTalks.AI and give you just another two great days with the people you really admire and respect. I hope we did)

Enjoy your time!

Warm regards,
Igor Pivovarov

Partners /

Organizing partner /

AUA AKIAN COLLEGE *of*
SCIENCE & ENGINEERING

Bronze partners /



kaspersky

Yandex

Section partners /



SCALET[®]BRCH

Program committee /



/ Sergey Shumsky,
MIPT



/ Andrei Ustyuzhanin,
HSE



/ Igor Pivovarov,
OpenTalks.AI

06.03.2023

09:00	09:00 10:00	Registration & coffee	
10:00	10:00 10:10	Opening remarks Igor Pivovarov Habet Madoyan	
11:00	10:10 10:40	AI Technologies for Digital Characters and Avatars Dmitry Korobchenko	
		10:40 11:25	
Large Auditorium			
Coffee break			
12:00	Computer Vision in medicine Boris Zingerman Evgeny Sidorov Daria Suslova	Datasets, markup and testing Fedor Zhdanov Yulduz Fattakhova Evgeny Nikitin	AI in legal practice Armen Manasyan Ignat Postny Elena Melnikova
	Large Auditorium	Manoogian Hall	Small hall
Coffee break			
13:00	Generative models in business Sergey Lukashkin Alexander Notchenko Svetlana Korobkova	Robots and drones – research & development Alexander Platonov Nikita Andriyanov Alexey Voropaev	Natural Language Processing – research & development Roman Doronin Maria Tikhonova
	Large Auditorium	Manoogian Hall	Small hall
14:00	Lunch		
15:00	15:00 15:45	Reinforcement Learning – main in 2022 Alexander Panov	
16:00	15:45 16:30	Generative and diffusion models – main in 2022 Andrey Vaynov	
	Large Auditorium	Manoogian Hall	
Coffee break			
17:00	Reinforcement Learning in business Anton Kolomin Oleg Svidchenko	Computer Vision – research & development Anton Ganichev Maxim Kuprashevich Alexey Trekin	Machine learning – academic talks Edward Poposian Iurii Katser
	Large Auditorium	Manoogian Hall	Small hall
Coffee break			
18:00	Computer Vision in business Alexey Sidoruk Konstantin Panfilov Oleg Kartashev	Dubai, Almaty, Yerevan, Tbilisi, London, Singapore – Russian experience Roman Doronin Victor Lempitsky	Machine learning – academic talks Sergey Kuznetsov Dmitry Ivanov
	Large Auditorium	Manoogian Hall	Small hall
19:00			

06.03 / CV & RL Day

09:00 / Registration & coffee

10:00

10:00 / Opening remarks

10:05



Igor Pivovarov,
OpenTalks.AI

Conference spotlights, main ideas, figures

10:05 / Opening remarks

10:10



Habet Madoyan,
AUA

Welcome speech from the DS AUA Program Chair

10:10 / Plenary 1 – reviews

Large Auditorium



10:10
10:40

Dmitry Korobchenko,
NVIDIA

AI Technologies for Digital
Characters and Avatars



10:40
11:25

Alexey Dosovitskiy, (online)
Google Brain

Computer vision – main
in 2022

11:25 / Coffee break

11:45

11:45
12:45

Computer Vision in medicine

Large Auditorium



Boris Zingerman
NBMZ

Moderator



Evgeny Sidorov,
Third Opinion AI

Multi-view pathology
detection



Daria Suslova,
JSC «NCI»

Exploring for new AI-application in healthcare



Elizaveta Dakhova,
AIRI



Polina Postnikova,
Research Institute
of Rheumatology.
V.A. Nasonova

Automated evaluation of hand radiographs in patients with rheumatoid arthritis



Sergey Morozov, (online)
Osimis

Going global: how to deploy AI at EU27 hospitals.

11:45
12:45

Datasets, markup and testing

Manoogian Hall



Fedor Zhdanov,
Toloka
Moderator



Yulduz Fattakhova,
Sber

Generating synthetic data
and training models
on them



Evgeny Nikitin,
Celsus

Learning annotator's style in medical imaging



Victoria Dochkina,
Gazprombank



Lavrenty Grigoryan,
Gazprombank

Testing machine learning system



Roman Kucev,
TrainingData.Pro

How to get high quality labeled data

11:45
12:45

AI in legal practice

Small hall



Armen Manasyan
Global research
& development
solutions
Moderator



Ignat Postny,
LLC «TAG Consulting»
AI-based claims analysis
system



Elena Melnikova,
ITMO
The ML model through
the eyes of a lawyer:
legal nature, protection of
rights, responsibility



Anna Romanova,
MIPT
Autonomous director and
autonomous BoD systems
based on AI and ML



Maxim Puchin,
GARANT-SERVICE-
UNIVERSITY
Development of a No-code
platform for creating
search microservices

12:45
13:00

Coffee break

13:00
14:00

Generative models in business

Large Auditorium



Sergey Lukashkin,
VTB
Moderator



Alexander Notchenko,
Deepcake
Generative AI for Creative
Industries



Svetlana Korobkova,
Docet TI

Image generation for
social media content



Andrey Kuznetsov,
Sber

Creative AI models
design. New trends and
applications.



Vladimir Novoselov,
Realweb

Development and practice of using tools based on generative neural
networks in the work of a Digital agency



Anastasia Myshkina,
Realweb

13:00 / Robots and drones – research & development
Manoogian Hall



Alexander Platonov,
Poehali.ru

Moderator



Nikita Andriyanov,
Fin. University

Computer vision for an
agrobot-manipulator for
picking apples



Alexey Voropaev,
Evocargo

Autonomous Truck
Perception System for
Closed Areas



Andrey Kuzminykh,
DocetTI

Synthetic data:
Learning self-driving
cars in simulation



Alexey Postnikov,
Sber Robotics Laboratory

What can large sequential
models bring to robotics?

13:00
14:00

Natural Language Processing – research & development

Small hall



Roman Doronin

EORA
Moderator



Maria Tikhonova,
SaluteDevices, HSE

Overview of Controllable
Text Style Transfer



Irina Piontkovskaya,
Huawei Noah's Ark Lab

Topology meets
BERTology: Topological
Data Analysis for
the understanding
of Transformers



Anastasia Semenova,
CleverData

Disassembly and
Modification of TiSASRec

14:00
15:00

Lunch

15:00
16:30

Plenary 2 – reviews

Large Auditorium



15:00
15:45

Aleksandr Panov,

MIPT, AIRI, FRC CSC RAS

Reinforcement Learning –
main in 2022



15:45
16:30

Andrey Voynov, (online)
Google

Generative and diffusion
models – main in 2022

15:00 / **Pitch session of startups**
16:30 *Manoogian Hall*

16:30 / **Coffee break**
16:45

16:45 / **Reinforcement Learning in business**
Large Auditorium



Anton Kolonin,
NSU

Adaptive Multi-Agent
Active Portfolio
Management



Oleg Svidchenko,
«AI in Industry»

Reinforcement Learning
in Real Life: applications,
cases and challenges



Denis Komarov,
CyberLympha

Autonomous multi-agent system for detecting attacks on industrial
networks: analysis of unknown protocols and search for anomalies



Alexey Sinadsky,
CyberLympha

16:45
17:45

Computer Vision – research & development

Manoogian Hall



**Anton Ganichev,
HSE**

Moderator



**Maxim Kuprashevich,
SberDevices**

Computer Vision and
Artificial Intelligence In
Advertising



**Alexey Trekin,
Gealert LLC**

Case-driven CV in satellite
image processing



**Dmitry Anzhiganov,
MSU, Research Institute
of Nuclear Physics**

Hunting for ultraviolet
transients with a neural
network



**Mikhail Zotov,
MSU, Research Institute
of Nuclear Physics**

Hunting for ultraviolet
transients with a neural
network



**Denis Dimitrov,
Sber AI**

FusionBrain: research
project on multimodal and
multitasking learning

16:45
17:45

Machine learning – academic talks

Small hall



Edward Pogossian,
Institute for Informatics
and Automation Problems
of NAS RA
Moderator



Mikhail Hushchyn,
HSE

Fast Simulation of a Data
Storage System based on
Generative Models



Iurii Katser,
waico.tech, Skoltech
Neural networks for
the problem of finding
anomalies in time series
in industry



Yuri Chernyshov,
Cyberlympha

Interpretable Anomaly
Detection Models
in Cyber-Physical Systems

17:45
18:00

Coffee break

18:00
19:00

Computer Vision in business

Large Auditorium



Alexey Sidoryuk,
ANO «Digital Economy»

Moderator



Konstantin Panfilov,
CG Samolet

Review of cases
of application of machine
learning models
in development problems



Kartashev Oleg,
Severstal Digital

Metric Learning, Anomaly
Detection and Synthetic
Data for preventing chain
conveyor outages



Dmitry Pshichenko,
HSE

Mining industry cases on
the application of machine
learning and computer
vision: a business
perspective



Alan Dzogoev,
FRISSON

Predicting electricity
consumption for every
hour of the day.

18:00
19:00

**Dubai, Almaty, Yerevan, Tbilisi, Madrid,
Tel-Aviv – Russian experience**

Manoogian Hall



Roman Doronin,
Dubai



Victor Lempitsky,
Yerevan



Arkady Sandler,
Spain, Israel



Alexey Dral,
Kazakhstan

At the session, we will share our experience of moving to different countries – the cost of living in the country, working conditions, visas, the market, what kind of support you can get, etc. Real case studies first hand

18:00
19:00

Machine learning – academic talks

Small hall



Sergey Kuznetsov,
HSE

Moderator



Dmitry Ivanov,
Tsifrum, MSU

Continual Learning or
overcoming catastrophic
forgetting in neural
networks



Alexander Demidovsky,
Huawei



Marina Kazyulina,
Huawei

Hebbian learning for Convolutional Neural Networks: Overview



Anton Plaksin,
IMM UB RAS

Continuous Deep Q-Learning in Optimal Control Problems: Normalized
Advantage Functions Analysis

07.03.2023

09:00	09:00 / Registration & coffee 10:00		
10:00	10:00 / Opening remarks Igor Pivovarov		
11:00	10:10 / Natural Language Processing – main in 2022 Mikhail Burtsev	10:55 / Firechat: Investments in AI – a crisis or a time of new opportunities? Arkady Sandler	
	Large Auditorium		
		Coffee break	
12:00	Computing resources for AI Anton Mosharov Ksenia Melnikova Khalil El-Hajj	Natural Language Processing in business Inna Lizunova Sergey Ponomarenko	Diffusion models – tutorial. Part 1 Dmitry Vetrov
	Denis Afanasyev Alexander Borzunov	Daniel Korneev Diana Khasanova	
	Large Auditorium	Manoogian Hall	Small hall
13:00	Spiking neural networks and neuromorphic processors Mikhail Kislev Denis Larionov	Natural Language Processing – research & development Alexey Gorodilov Tatiana Shavrina Elizaveta Goncharova	Diffusion models – tutorial. Part 2 Dmitry Vetrov
	Andrey Lavrentiev Oleg Ygoylov	Vladimir Orshulevich Victor Nosko	
14:00	Large Auditorium	Manoogian Hall	Small hall
		Coffee break	
14:00	14:00 / Lunch 15:00		
15:00	Artificial General Intelligence (AGI) – reviews Sergey Shumsky Alexey Shpilman	Natural Language Processing – research & development Arsen Yeghiazaryan Nikolay Karpov Evgeny Burnaev	
16:00	Large Auditorium	Manoogian Hall	Murat Apishev Boris Khomyakov Andrey Valukhov
		Coffee break	
17:00	16:30 / 10 years of AI revolution – 10 works that shook the world Alexander Krainov Dmitry Vetrov Evgeny Burnaev Victor Lempitsky Mikhail Burtsev Tatyana Shavrina Irina Plotnikovskaya Alexey Shpilman		
	19:00		
18:00			
19:00	Large Auditorium		
	19:30 / Networking Party 22:00 Hard Rock Cafe		

07.03 / Natural Language Processing & Hardware

09:00 / Registration & coffee
10:00

10:00 / Opening remarks
10:10



Igor Pivovarov,
OpenTalks.AI

10:10 / Plenary 3 – reviews
11:25 Large Auditorium



10:10
10:50

Mikhail Burtsev,
DeepPavlov
Natural Language
Processing – main in 2022



10:50
11:25

Arkady Sandler
Docet TI
Firechat: Investments
in AI – a crisis or a time
of new opportunities?

11:25 / Coffee break
11:45

11:45
12:45

Computing resources for AI

Large Auditorium

SCALETORCH



Anton Mosharov
SberDevices
Moderator



Ksenia Melnikova,
Scaletorch
Make your AI compute
10x-1000x faster



Khalil El-Hajj,
JSC STC «Module»

Hardware for AI: domestic
hardware platform
NeuroMatrix.



Denis Afanasiev,
SberDevices
Taxonomy of Federated
Learning methods,
overview of existing
platforms and major
players, existing
challenges and industry
development trends



Alexander Borzunov,
Yandex, HSE

Petals: Collaborative
Inference and Fine-tuning
of Large Models

11:45
12:45

Natural Language Processing in business

Manoogian Hall



Inna Lizunova,
Speech Technology Center

Evolution of approaches
to thematization in cases
of speech analytics



Sergey Ponomarenko,
EORA

Barista in a coffee
machine: NLP technologies
in vending



Daniel Korneev,
DeepPavlov

Re-designing DeepPavlov
Dream around Large
Language Models



Diana Khasanova,
«RAINPHONE»

AI in the diagnosis
of brain diseases: the
challenge of the new time

11:45
12:45

Diffusion models – tutorial. Part 1

Small hall



Dmitry Vetrov,
HSE, AIRI

Introduction to diffusion models. From stochastic differential equations
to star-shaped models

12:45
13:00

Coffee break

13:00
14:00

Spiking neural networks and neuromorphic processors

Large Auditorium



Mikhail Kiselev,
Kaspersky Lab

Mathematics of
neuromorphic systems
and spiking neural
networks



Denis Larionov,
Cifrum, Rosatom

Overview of Neuromorphic
AI Systems



Andrey Lavrentiev,
Kaspersky Lab



Oleg Vygolov,
Kaspersky Lab

Kaspersky Neuromorphic Platform: Green AI for cyber-physical systems

13:00
14:00

Natural Language Processing – research & development

Manoogian Hall



Alexey Gorodilov,
Picsart

Moderator



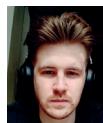
Tatiana Shavrina,
AIRI

The Future of Language
Modeling: from modeling
language to modeling
everything else



Elizaveta Goncharova,
AIRI, HSE

How Well do Pre-Trained
Models Understand Language?



Vladimir Orshulevich,
Unum

Semantic Multimodal
Multilingual retrieval
systems



Victor Nosko,
Avatar Machine

Explainit All: explainable and interpretable AI for generative neural network models transformer

13:00

14:00

Diffusion models – tutorial. Part 2

Small hall



Dmitry Vetrov,
HSE, AIRI

Introduction to diffusion
models. From stochastic
differential equations to
star-shaped models

14:00

15:00

Lunch

15:00

16:15

Artificial General Intelligence (AGI) – reviews

Large Auditorium



Sergey Shumsky, (online)
MIPT

Intelligence from general
principles



Alexey Shpilman,
Gazprom Neft

AGI is coming – an
overview of key works

15:00
16:15

Natural Language Processing – research & development

Manoogian Hall



Arsen Yeghiazaryan,
Portmind

Moderator



Nikolay Karpov,
NVIDIA

Fast prototyping with
NeMo and moving
to production



Evgeny Burnaev,
Skoltech, AIRI

Topology strikes back:
shape of your data
really matters!



Murat Apishev,
Just AI

On the way to
industrial NLP-
platform: transformers,
microservices,
architecture



Boris Khomyakov,
VS Robotics

AI-generator of scripts for the robot-operator



Andrey Valukhov,
VS Robotics

16:15
16:30

Coffee break

16:30
19:00

**10 years of AI revolution – 10 works that shook
the world**

Large Auditorium



Alexander Krainov,
Yandex

Moderator



Dmitry Vetrov,
HSE, AIRI



Evgeny Burnaev,
Skoltech, AIRI



Victor Lempitsky,
Cinemersive Labs



Mikhail Burtsev,
DeepPavlov



Tatyana Shavrina,
AIRI



Irina Piontkovskaya,
Huawei Noah's Ark Lab



Alexey Shpilman,
Gazprom Neft

19:30
22:00

Networking Party

Hard Rock Cafe

**19:30
22:00**

Networking Party
Hard Rock Cafe

Gde Stas?



Olga Vakhromeeva,
vocals



Igor Pivovarov,
guitar



Pavel Chobotov,
guitar



Ilya Khokhlov,
guitar



Stas Khokhlov,
bass guitar



Peter Gnezdin,
drums

Lost Village



Saro Hayrbedian
Co-founder /
Vocals / Electric
& Acoustic
Guitar



Raffi Balian
Piano /
Keyboards



Kevork Kochkerian
Drums /
Percussion



Grigor Ghazaryan
Bass Guitar



6-7
march
2023

**OPEN CONFERENCE
ON ARTIFICIAL
INTELLIGENCE**

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**Yerevan/
Armenia**