SUMMER SCHOOL

Achievements and applications of contemporary informatics, mathematics and physics

2015

Student Science Association

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X Summer School “Achievements and Applications
of Contemporary Informatics, Mathematics and Physics”

National Technical University of Ukraine
“Kyiv Polytechnic Institute”

August 4-18, 2015 — Kyiv, Ukraine

http://summerschool.ssa.org.ua/

Welcome

The Summer School “Achievements and Applications of Contemporary Informatics, Mathematics and Physics” is an annual project organized and held by Student Science Association and the National Technical University of Ukraine “Kyiv Polytechnic Institute” in Kyiv, Ukraine. The prior aim of the project is to promote science among the young adults.

The courses are held by highly qualified lecturers and scientists from Ukraine, Canada, the USA, Germany, UK, Turkey, Estonia, Russia, France and other countries. Such variety of the lecturers countributes to the multinational environment for discussions on the hot topics of contemporary science and technology. Different formats are used at the Summer School including lectures, workshops, round tables and presentations. Apart from the educational program, exciting leisure activities such as excursions, debates and quest, cinema club, and parties are prepared for the participants.

This summer we will be offering four streams covering the most intriguing and contemporary academic fields — Applied Computer Science, Computational Neuroscience, 3D-printing and Smart Cities: Operational Research, Energy and Urbanistics. All of our courses are designed to challenge and inspire you in the field that holds your interest. In Kyiv, an ancient city known for design, technology and a vibrant cultural life, you will find the perfect environment for studying, making new friends and having fun!

Organizers

National Technical University of Ukraine “Kyiv Polytechnic Institute” founded in 1898 is one of the oldest higher education institutions in Ukraine. It ranks first nationally among technical universities and has educational partners all over the world. NTUU "KPI" maintains its solid reputation for highly skilled specialists preparation — the ones recognized both by scientific community and employers.

Student Science Association (SSA) is a team of young and motivated people, which creates a scientific environment with a help of the implementation of successful projects that are aimed at supporting knowledge-intensive ideas, innovation and knowledge sharing.

The projects of SSA are aimed at active people who are interested in obtaining, sharing and creating new knowledge and technologies at KPI, Ukraine and the all over the world.

Project team

Oleksii Pasichnyi
Strategic development & academic program SC

Kate Pereverza
Academic program SC

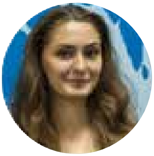
Dmytro Fishman
Academic program ACS & CNS

Irina Smolina
Academic program 3D printing

Oleksii Molchanovskyi
Academic program ACS & CNS, Infomation campaing

Liudmyla Pavlenko
Academic program SC & work with partners, logistics

Oksana Dziuba
Secretariat & finance, work with AACIMP team, accomodation

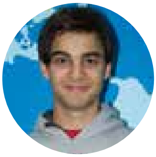


Sandra Yaremchuk
Work with lecturers, participants, meals

Marina Kozar
Logistics, infrastructure, PR, social program

AACIMP team


Danylo Batulin
CNS coordinator


Hleb Berezovsky
Technical support

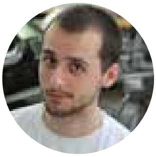

Olha Bolhar
Graphical designer


Daria Botvynko
Work with lecturers


Kateryna Dashko
PR production

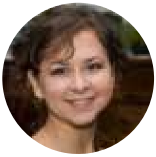

Ivanna Diachuk
Photo, video


Yaroslav Holovenko
Infrastructure support


Pavlo Ilchyk
ACS technical support


Maksym Khamrovskyi
ACS coordinator


Tetiana Klymenko
CNS coordinator


Alona Kravchenko
Social program


Yevheniia Kuhuk
Work with lecturers

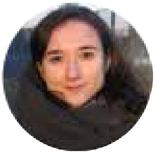
Illia Luzan
3D printing coordinator

Liubov Mietielieva
Web-site

Nataliia Mykhailenko
Social program

Oksana Naumenko
SC coorginator

Yuliia Puzanova
Secretary

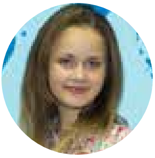


Yelyzaveta Rud
Social program
coordinator

Olha Shandra
Work with lecturers

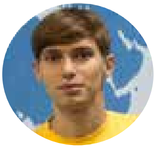
Mariia Shchurska
Work with partners

Iuliia Shevchenko
Work with participants



Yevheniia Shumitska
Meals coordinator

Oleksandra Tkalich
Work with lecturers



Dymitr Yovchev
Work with participants

Plenary lecture

“Business Analytics and Data Science — Opportunities for Ukraine and for the World”

August 4, 11^{00}, Academic Council Hall

Dr. Oleksandr Romanko
(Canada, Ukraine)
Ph.D., Senior Research Analyst at IBM Canada and Adjunct Professor at University of Toronto

Business analytics is a process of analyzing information to support decision making process in business sphere. It includes methods for data collecting and processing, risk assessment, modelling and forecasting using information and telecommunication technologies.

But what opportunities can be obtained through analytics? In order to clarify this, we will look at the examples of practical application of business analytics in risk management, finance, healthcare, industrial production and human services. Also it is interesting to analyze such spheres like marketing, crime prevention, effective urban management, web analytics and social media, personal analytics.

Business analytics and forecasting allow hundreds of companies and countries to save lives and preserve resources. We try to understand, what opportunities exist for Ukraine and the whole world due to analytics.

Student projects

The key element of this year Summer School program is student’s projects. These projects are based on real-life problems, proposed by the representatives of city counsuls and companies, organizations, as well as citizens and researchers that will supervise students during their work in the multidisciplinary teams. The participants will be provided with necessary tools to accomplish their projects. The project teams will present the results of their work publicly at the end of the School.

Project fair

Project fair is aimed at bringing students and project coordinators together in order to set up groups for project work. The project fair will start with general overview of the students project work in the AACIMP. After that project supervisors will briefly pitch their projects and provide more details whille Q&A sessions coming after. Then the students will submit their project preferences, selecting several options by priority. Program team and supervisors will assign each student to one of the projects according to their preferences and skills.

Projects

P1 Using Neural Networks for Diabetic Retinopathy Detection in Eye Images. **Dmytro Fishman**
P2 Smart Career Planning and Skill Development via Personal Analytics. **Oleksandr Romanko**
P3 Plasticity of Neural Circuits and Neurobiology of Learning. **Jenia Jitsev**
P4 Creating a virtual reality object. **Dmytro Biriukov**
P5 Content-based Image Recommendations for Online Social Networks. **Dmytro Karamshuk**
P6 Modeling neuronal networks for metric representation of space and spatial navigation. **Andrey Stepanyuk**
P7 Multimodal Neural Language Models. **Sergii Gavrilov**
P8 Improvement of Traffic Signaling System Data. **Anton Hagen**
P9 Characteristics of spikes in different neuron models (exponential integrate-and-fire, Hodgkin-Huxley, and Izhikevich models) as fuctions of not only input (synaptic) current but input conductance as well. **Anton Chizhov**
P10 The concept of industrial design. **Alexander Nesterenko**
P11 Linear Systems. Analysis of Complex Nonlinear Data Sets and Model Development. Meta Modelling vs Mechanistic Modelling. **Serge Gale**
P12 Computational Models of Pitch Perception. **Vincent Adam**
P13 Air Solar Collector. **Andrii Zakovorotniy**
P14 Harvesting information from video surveillance systems. **Andrey Lyubonko**
P15 Muscle-computer interface for neurorehabilitation purposes. **Bohdan Kolomiiets**
P16 Creation of Ukrainian language NER system. **Vsevolod Dyomkin**
P17 Brain-Computer Interface. **Dorottya Cserpan**
P18 3D printing of heat pipes. **Sergej Khairnasov**
P19 Normalization of Noisy Text. **Vsevolod Dyomkin**
P20 Sustainable Campus: PR. **Alana Lajoie-O’Malley**
P21 Sustainable Campus: Engineering. **Alana Lajoie-O’Malley.**
P22 Ukrainian trends: identifying significant words in news articles. **Vsevolod Dyomkin**
P23 Satellite Image Processing. **Alexey Leonov**

Applied computer science

ACS stream focuses on Data Science and Data Analysis. In the modern world these fields are especially eminent due to the dramatically growing amount of data produced by the mankind.

The ACS program will include classes on data retrieval, pre-processing and storage, data mining and machine learning techniques. The practical project topics will incorporate, among others, visual data analysis, natural language processing, social data analysis etc.

Lecturers

Mr. Vsevolod Dyomkin *(Ukraine)*
Tech lead at Grammarly, adjunct professor at NTUU "KPI", Grammarly, NTUU "KPI"

Mr. Serge Gale *(Ukraine / United Kingdom / Norway)*
PhD student,
Institute of Technical Cybernetics (ITK), NTNU

Mr. Sergii Gavrylov *(Ukraine)*
Junior research engineer, Grammarly

Dr. Dmytro Karamshuk *(Ukraine / United Kingdom)*
Department of Informatics, King's College London

Mr. Oleksii Leonov *(Ukraine)*
Chief Technology Officer at Cropio, M.Sc., System analysis, NTUU "KPI", Cropio, NTUU "KPI"

Mr. Andrey Lyubonko *(Ukraine)*
Lead Engineer, Samsung R&D Institute
Ukraine (SRK)

Mr. Konstantin Tretyakov *(Estonia)*
Researcher, University of Tartu

Mr. Dmytro Fishman *(Ukraine / Estonia)*
Junior researcher, PhD student,
University of Tartu

	04.08	05.08	06.08	07.08	08.08	09.08
08:30 09:30	*Breakfast*				*Breakfast*	*Breakfast*
9:30 10:20	Opening ceremony	**Mr. Konstantin Tretyakov** Introduction to Machine Learning	**Mr. Konstantin Tretyakov** Introduction to Machine Learning	**Oleksandr Romanko** Simulation, modelling and Optimization	Free day	**Mr. Andrey Lyubonko** Basics of Computer Vision
10:25 11:15	**Dr. Oleksandr Romanko** Plenary talk					
11:15 11:50	Intro lecture	*Coffeebreak*				*Coffeebreak*
11:50 13:35		**Mr. Konstantin Tretyakov** Introduction to Machine Learning	**Mr. Konstantin Tretyakov** Introduction to Machine Learning	**Oleksandr Romanko** Visualial Analytics and Knowledge Representation		**Mr. Dmytro Karamshuk** Recommendation system
14:00 15:00	*Lunch*					*Lunch*
15:00 16:45	**Mr. Dmytro Fishman** "Introduction to Python"	**Mr. Vsevolod Dyomkin** Basics of NLP	**Mr. Vsevolod Dyomkin** Basics of NLP	Project Fair		Project work
16:45 17:30	Free time					Free time
17:40 18:20	*Dinner*			Poster Session	*Dinner*	
18:30 21:00	Welcome party	Social program			Free day	Social program

	10.08	11.08	12.08	13.08	14.08	15.08	16.08	17.08	18.08
08:30 09:30	*Breakfast*			*Breakfast*	*Breakfast*				
09:30 11:15	**Mr. Oleksii Leonov** Satellite Image Processing	**Mr. Oleksii Leonov** Satellite Image Processing	**Dr. Serge Geil** Multivariate Data Analysis	Free day	Project work				
11:15 11:50	*Coffeebreak*				*Coffeebreak*				
11:50 13:35	**Dr. Dmytro Karamshuk** Basics of Social Network Analysis	**Dr. Dmytro Karamshuk** Link prediction and community detection	**Dr. Serge Geil** Model Development with MVA and Newtonian Mechanics		Project work				**Final presentaions** parallel sessions
14:00 15:00	*Lunch*				*Lunch*				
15:00 15:50	Project work				Inter-midiate presenta-tions	Project work			Projects results
15:55 16:45									Fair of the projects results
16:45 17:30	Free time				Free time				
17:40 18:20	*Dinner*			*Dinner*	*Dinner*				
18:30 21:00	Social program				Social program				Closing

Smart cities

Smart cities stream focuses on sustainable urban development empowered with analytical methods, ICT tools and emerging technologies.

The stream will start with brief introduction into basics of urbanistics, challenges of contemporary cities and “smart”-related concepts and approaches, i.e. internet of things and big data induced intelligence; urban system modelling, operations research and business analytics; user-centric city services and strategic planning.

Further the program will proceed to cases and applications for several key areas of smart cities: energy, mobility, security, planning and governance, as well as tools and methods to complete projects, which will be a core activity of the stream.

Lecturers

Mr. Mario Bodem *(Germany)*
Gesellschaft für Internationale Zusammenarbeit

Mr. Dmytro Chornenkyy *(Ukraine)*
Siemens Ukraine, Head of Mobility Department

Mr. Anton Hagen *(Ukraine)*
A+S Ukraine

Dr. Sergii Khairnasov *(Ukraine)*
PhD, DSc. at Thermal Power Department, National Technical University of Ukraine “KPI”

Mr. Bostjan Krajnc (*Slovenija)*
Director , KSSENA - Energy Agency of Savinjska, Šaleška and Koroška Region

Ms. Alana Lajoie-O’Malley *(Canada)*
Director, Campus Sustainability Office, The University of Winnipeg

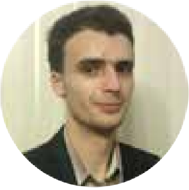
Mr. Ivan Pasichnyk *(Ukraine)*
Co Founder, CEO - EcoisMe

Dr. Oleksandr Romanko *(Canada, Ukraine)*
IBM Canada and University of Toronto

Dr. Benoit Sicre *(Switzerland)*
University of Applied Science of Lucerne/Switzerland –
Center for integrated building technologies ZIG

Mr. Urs Thomann *(Switzerland, Ukraine)*
Deputy Director, Vinnytsia Municipal
Centre of Urban planning and Architecture

Prof. Gerhard-Wilhelm Weber *(Turkey)*
Institute of Applied Mathematics,
East Technical University



Mr. Andrii Zakovorotnyi *(Ukraine)*
Institute of Engineering Thermophysics, NAS of
Ukraine.

Mr. Roman Zinchenko *(Ukraine)*
Greencubator

	04.08	05.08	06.08	07.08	08.08	09.08
08:30 09:30	*Breakfast*				*Breakfast*	*Breakfast*
9:30 10:20	Opening ceremony	**Mr. Urs Thomann** "Urbanistics"	**Prof. Gerhard-Wilhelm Weber** "OR for developing counries"	**Mr. Dmitriy Ocheretianyi** "Energy flows in smart cities: sensors, data and analysis"	Free day	**Mr. Anton Hagen** "Basics of Urban planning"
10:25 11:15	**Dr. Oleksandr Romanko** Plenary talk			**Mr. Anton Hagen** "Foreword: why transportation planing is so important?"		**Mr. Anton Hagen** "Transportation supply and demand"
11:15 11:50	Intro lecture	*Coffeebreak*				*Coffeebreak*
11:50 12:40		**Mr. Roman Zinchenko** "Energy for Smart Cities"	**Dr. Oleksandr Romanko** "Analytics for Businesses and Smart Cities"	**Mr. Urs Thomann** "Urban challenges"		**Kyle MacDonald** "Energy management system"
12:45 13:35						**Alana Lajoie-O'Malley, "Sustainability planning"**
14:00 15:00	*Lunch*					*Lunch*
15:00 15:50	**Mr. Dmytro Fishman** "Introduction to Python"	**Prof. Gerhard-Wilhelm Weber** "OR for developing counries"	**Ms. Alana Lajoie-O'Malley** "University as a driver for sustainability changes"	Project Fair		**Mr. Andrii Zakovorotnyi** "Energy management and control in Smart Cities"
15:55 16:45						
16:45 17:30	Free time					Free time
17:40 18:20	*Dinner*			Poster Session	*Dinner*	
18:30 21:00	Welcome party	Social program			Free day	Social program

	10.08	11.08	12.08	13.08	14.08	15.08	16.08	17.08	18.08
08:30 09:30	*Breakfast*			*Breakfast*	*Breakfast*				
9:30 10:20	**Mr. Boštjan Krajnc** "Energy management in Smart Cities: Energy efficiency and transport"	**Mr. Anton Hagen** "Data layers required for analysis"	**Mr. Volodymyr Voloshchuk** "Heat pumps technology for Energy Efisiant Buildings"	Free day	**Dr. Sicre Benoit** "Domestic Hot Water systems for Smart Cities: challenges and solutions"	**Dr. Sicre Benoit** "Domestic Hot Water systems for Smart Cities: challenges and solutions"	Project work		
10:25 11:15		**Mr. Anton Hagen** "Future of transportation planning"							
11:15 11:50	*Coffeebreak*				*Coffeebreak*				
11:50 13:35	**Mario Bodem,Passive House:** A Standard for a Sustainable Future. Technical aspects of highly energy efficient construction and refurbishment	**Social sustainability**	**Mr. Ivan Pasichnyk** "Ecoisme"		Siemens, Smart transport and infrastructure solutions	Project work			**Final presentaions - parallel sessions**
14:00 15:00	*Lunch*				*Lunch*				
15:00 15:50	Project work				Intermidiate presentations	Project work			Projects results
15:55 16:45									Fair of the projects results
16:45 17:30	Free time				Free time				
17:40 18:20	*Dinner*			*Dinner*	*Dinner*				
18:30 21:00	Social program				Social program				Closing

3D printing

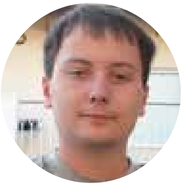
The 3D printing stream is dedicated basic principles of 3D printing: working with CAD models, scanning objects and installing a 3D printer for multifunctional details and prototypes production.
The classes are supplemented with multidisciplinary examples of additive manufacturing applications. During the second and third phases of the School the participants work on the cross-disciplinary projects in collaboration with students from other streams.

Lecturers

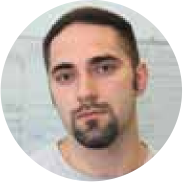
Mr. Dmytro Biriukov *(Ukraine)*
aDDDitive & KHackerSpace

Mr. Fedor Boytsov *(Ukraine)*
Pixelated Realities & aDDDitive

Mr. Stanislav Dzherikhov *(Ukraine)*
aDDDitive & aDDDlab



Mr. Oleksandr Feniks *(Ukraine)*
3dprinter.org.ua



Mr. Dmitriy Gorlov *(Ukraine)*
Functional Analyst, Materialise

Ms. Darya Kireyeva *(Ukraine)*
Materialise

Mr. Alexandr Nesterenko *(Ukraine)*
ARTKB

Mr. Pavlo Nesteruk *(Ukraine)*
ARTKB

Ms. Svitlana Savorona *(Ukraine)*
“School of Visual Communication”, “10project” design studio

Ms. Polina Telegeeva *(Ukraine)*
Materialise

Mr. Alexander Tubolets *(Ukraine)*
Materialise

	04.08	05.08	06.08	07.08	08.08	09.08
08:30 09:30	*Breakfast*				*Breakfast*	*Breakfast*
9:30 10:20	Opening ceremony	**Mr. Dmytro Biriukov** “3D Printing”	**Mr. Oleksandr Feniks** “Introduction to Solidworks”	**Ms. Darya Kireyeva** "3D Printing: Road to the Future"	Free day	**Dr. Dmitriy Gorlov** “Magics Training”
10:25 11:15	Plenary talk **Oleksandr Romanko**					
11:15 11:50	Intro lecture	*Coffeebreak*				*Coffeebreak*
11:50 13:35		**Mr. Dmytro Biriukov** “3D Printing”	**Mr. Oleksandr Feniks** “Introduction to Solidworks”	**Mr. Alexander Tubolets** “Robotic grippers: unusual application of 3D-printing”		**Dr. Dmitriy Gorlov** “Magics Training”
14:00 15:00	*Lunch*					*Lunch*
15:00 16:45	**Mr. Dmytro Biriukov** “Introduction to 3D printing: Teleport Robots to the Mars”	**Mr. Dmytro Biriukov** “3D Printing”	**Mr. Dmytro Biriukov** “3D Printing”	Project Fair		**Mr. Dmytro Biriukov** “3D Printing”
16:45 17:30	Free time					Free time
17:40 18:20	Dinner			Poster Session	Dinner	
18:30 21:00	Welcome party	Social program			Free day	Social program

	10.08	11.08	12.08	13.08	14.08	15.08	16.08	17.08	18.08
08:30 09:30	*Breakfast*			*Breakfast*	*Breakfast*				
9:30 10:20	**Mr. Pavlo Nesteruk** "Role of design in the new product development"	**Ms. Svitlana Savorona** "Application of 3D printing in fashion-industry"	**Ms. Polina Telegeeva** "3D printing in medicine"	Free day	Project work				
10:25 11:15									
11:15 11:50	*Coffeebreak*				*Coffeebreak*				
11:50 12:40	**Mr. Fedor Boytsov** "Low-cost 3D scanning"	**Mr. Fedor Boytsov** "Low-cost 3D scanning"	**Mr. Ivan Pasichnyk** "Ecoisme"		Project work				**Final presentaions** parallel sessions
12:45 13:35									
14:00 15:00	*Lunch*				*Lunch*				
15:00 15:50	**Mr. Fedor Boytsov** "Low-cost 3D scanning"	Project work			Inter-midiate presentations	Project work			Projects results
15:55 16:45									Fair of the projects results
16:45 17:30	Free time				Free time				
17:40 18:20	*Dinner*			*Dinner*	*Dinner*				
18:30 21:00	Social program				Social program				Closing

Computational neuroscience

CNS stream focuses on the computational aspects of the field. The program will provide insight into a broad range of topics, including neuromechanics of movement control, dynamical neuron systems, neuroimaging, neuron-computer and brain-computer interfaces.

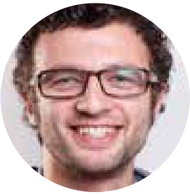
The CNS stream program aims to provide participants with an introductory review of the contemporary computational neuroscience field and to give a practical introduction to the principles of analysis and simulation packages.

Lecturers

Mr. Vincent Adam *(UK, France)*
Gatsby Computational Neuroscience Unit, UCL

Dr. Anton Chizhov *(Russia)*
Ioffe Physical-Technical Institute of the Russian Academy of Sciences

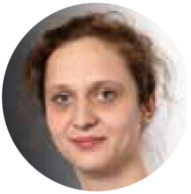
Ms. Dorottya Cserpan *(Hungary)*
Wigner Research Centre for Physics, Hungarian Academy of Sciences



Dr. Jenia Jitsev *(Germany)*
Institute for Neuroscience and Medicine (INM-6), Research Center Jülich

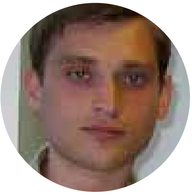
Mr. Dmytro Grytskyy *(Germany)*
Research Center Jülich,
Institute for Computational Neuroscience

Dr. Nikolai Kononenko *(Ukraine)*
Bogomoletz Institute of Physiology, NASU



Ms. Susanne Kunkel *(Germany)*
Research Center Jülich

Mr. Philipp Weidel *(Germany)*
Research Center Jülich,
Institute for Advanced Simulation (IAS-6),
Institute of Neuroscience and Medicine (INM-6)



Dr. Andrey Stepanyuk *(Ukraine)*
Bogomoletz Institute of Physiology

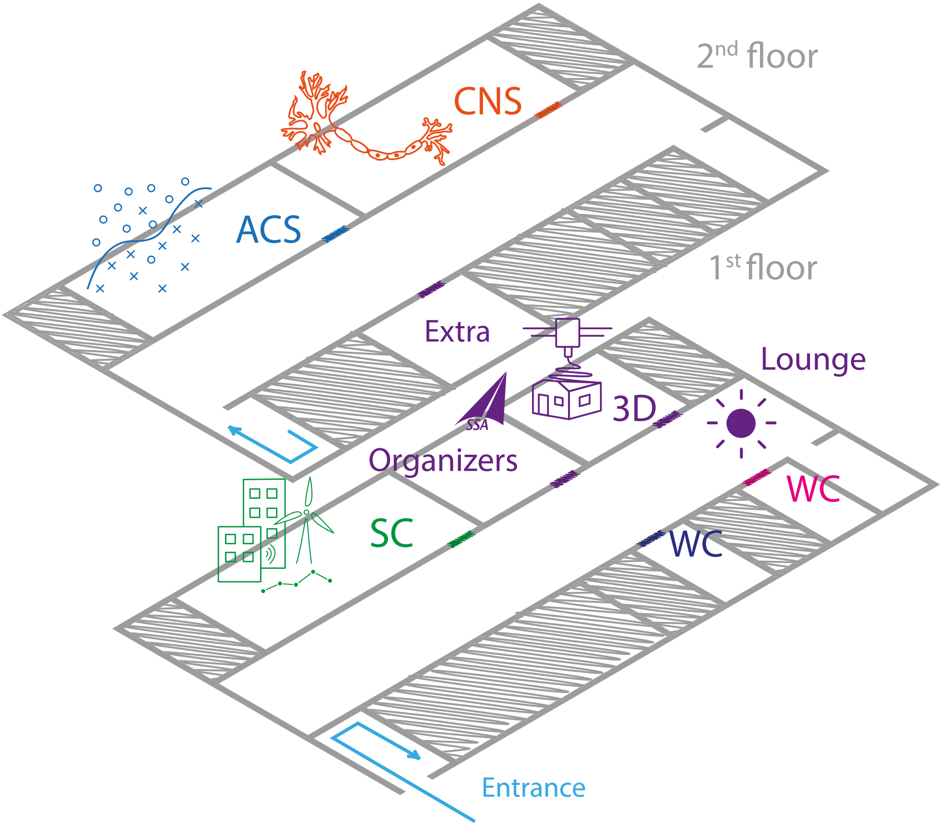
Dr. Sergiy Yakovenko *(USA)*
West Virginia University School of Medicine

	04.08	05.08	06.08	07.08	08.08	09.08
08:30 09:30	*Breakfast*				*Breakfast*	*Breakfast*
9:30 10:20	Opening ceremony	**Mr. Konstantin Tretyakov** “Introduction to Machine Learning”	**Dr. Sergiy Yakovenko** “IDM neuromusculo-skeletal models of locomotion”	**Dr. Sergiy Yakovenko** “Central Pattern Generator”	Free day	**Dr. Anton Chizhov** “Models of single neurons and neuron-computer interface”
10:25 11:15	**Dr. Oleksandr Romanko** Plenary talk					
11:15 11:50	Intro lecture	*Coffeebreak*				*Coffeebreak*
11:50 12:40		**Mr. Konstantin Tretyakov** “Introduction to Machine Learning”	**Dr. Sergiy Yakovenko** “FDM neuromusculo-skeletal models of locomotion”	**Ms. Dorottya Cserpán** “From single neurons to Brain-Computer Interfaces”		**Dr. Anton Chizhov** “Models of neuronal populations and visual cortex”
12:45 13:35						
14:00 15:00	*Lunch*					*Lunch*
15:00 15:50	**Dr. Sergiy Yakovenko** “Introduction to Matlab”	**Dr. Sergiy Yakovenko** “Passive Walker control”	**Mr. Dmytro Grytzkyy** “Neural field models and reaction-diffusion framework”	Project Fair		**Project work / Ms. Dorottya Cserpán** “Interpretation of electrophysiological data “
15:55 16:45						
16:45 17:30	Free time					Free time
17:40 18:20	Dinner			Poster Session	*Dinner*	
18:30 21:00	Welcome party				Free day	Social program

	10.08	11.08	12.08	13.08	14.08	15.08	16.08	17.08	18.08
08:30 09:30	*Breakfast*			*Break-fast*	*Breakfast*				
09:30 11:15	**Mr. Vincent Adam** “Fundamentals of pitch Perception”	**Mr. Vincent Adam** “Processing of Pitch in the Auditory System”	**Mr. Vincent Adam** “Theories and Models of Pitch Perception”	Free day	**Dr. Nikolai Kononenko** “Circadian Clock in Mammals”	Project work			
11:15 11:50	*Coffeebreak*				*Coffeebreak*				
11:50 13:35	**Ms. Susanne Kunkel** “Simulation Technology for Large Scale Spiking Neural Networks.”	**Dr. Andrey Stepanyuk** “Neurophysiology of the spatial representation system in the medial temporal cortex”	**Dr. Jenia Jitsev** “Plasticity of Neural Circuits and Neurobiology of Learning”		Project work / **Dr. Nikolai Kononenko** “Circadian Clock in Mammals”	Project work			**Final pre-senttaions** parallel sessions
14:00 15:00	*Lunch*				*Lunch*				
15:00 15:50	**Mr. Vincent Adam** “Fundamentals of pitch Perception” / **Ms. Susanne Kunkel** ‘Simulation Technology for Large Scale Spiking Neural Networks ‘	**Mr. Vincent Adam** ‘Processing of Pitch in the Auditory System’/ **Dr. Andrey Stepanyuk** “Neural networks models for space representation and navigation “	**Mr. Vincent Adam** “Theories and Models of Pitch Perception “ / **Dr. Jenia Jitsev** “Plasticity and Learning in Biological Neural Circuits”		Inter-midiate presenta-tions	Project work			Projects results
15:55 16:45									Fair of the projects results
16:45 17:30	Free time				Free time				
17:40 18:20	*Dinner*			*Dinner*	*Dinner*				
18:30 21:00	Social program				Social program				Closing

Social program

Tue, 4	19:30	Welcome party
Wed, 5	19:00	Ancient Kiev
The, 6	19:00	Table games evening
Fri, 7	18:00	Project fair and poster session
Sat, 8	09:40	Pecherskaya Lavra visiting
Sun, 9	18:40	Master class evening
Mon, 10	18:40	Kapoeira master class
Tue, 11	18:40	Kiev city-tour
Wed, 12	18:40	Music-evening
Thu, 13	All day	Fun sport-day
Fri, 14	All day	Photo quest
Sat, 15	19:00	Actor masterclass, theatre performance
Sun, 16	19:00	Cinema club
Mon, 17	Free evening	
Tue, 18	Closing ceremony	



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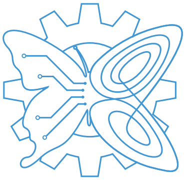
NOTEBOOK

SUMMER SCHOOL

Achievements and applications
of contemporary informatics,
mathematics and physics

2015



General rules for participants

Student identification, registration, and contact information

As a part of registration, an applicant is required to provide his/her full legal name (exactly as given in his\her passport or other government-issued photo ID), gender, date of birth, e-mail address and current functioning postal mailing address, because all the crucial Summer School announcements (e.g., the one about class cancellation) and registration information (e.g., registration confirmation, notice of admission) are sent via e-mail.

Rules for participants:

It is forbidden to drink alcohol and smoke inside the dormitory, on the territory of the KPI campus and in the public places, as well as attending the lectures under the influence of alcohol, drugs or other intoxicants.

The Summer School does not hold responsibility for the actions of the participants or for any loss of expensive things, documents or unpredicted expenses incurred during the Summer School.

All damage made by participant to the Summer School and NTUU “KPI” property and facilities must be compensated at participant’s own expense.

Due to security reasons in the studying area and while being in the public places, students have to wear a badge. It is required for the access to classes, social events and place of residence.

If student has a excuse for skipping the class, it is desirable to inform the Organizing committee and notify the reason in order not to be considered as an absentee. Attendance of social events is desirable but not compulsory.

The accommodation offered by the NTUU KPI implies compliance with the rules of the campus.

In case of misconduct participant may face the following consequences: warning, departure from the dormitory, exclusion from the Summer School program, written notification to the home university or/and to the scholarship support organization.