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<td>Chair: Mykola Nikitchenko</td>
<td>Chairs: Vyacheslav Kharchenko, Bogdan Volochiy</td>
<td>Chairs: Mariya Shyshkina, Yuliya Nosenko</td>
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**WS TheRMIT 2017 Chairs Welcome**
Vyacheslav Kharchenko. IT-Industry Challenges in Context of Reliability, Safety, Security Assessment and Assurance
Miroslav Kvassay, Elena Zaitseva and Vitaly Levashenko. Minimal Cut and Minimal Path Vectors in Reliability Analysis of Binary- and Multi-State Systems

**WS 3L-Person 2017 Chairs Welcome**
Mariya Shyshkina, Ulyana Kohut and Maya Popel. The Systems of Computer Mathematics in the Cloud-based Learning Environment of the Educational Institutions
Maria Shyshkina, Svitlana Shokalyuk and Maya Popel. The Learning Technique of the SageMathCloud Use for Students Collaboration Support
Maryna Rassovytyska and Andrii Striuk. Mechanical Engineers’ Training in Using Cloud and Mobile Services in Professional Activity
Vasyl Oleksiuk, Olessia Oleksiuk and Mykola Berezitskyi. Planning and Implementation of the Project “Cloud Services to Each School”

**Discussion**
## WORKSHOPS SESSION 2

<table>
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<td><strong>Chair</strong>: Mykola Nikitchenko</td>
<td><strong>Chair</strong>: Dmitry Maevsky, Juri Vain Lytvynova</td>
<td><strong>Chairs</strong>: Alexander Burov, Svitlana Lytvynova</td>
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### WS RMSE SESSION 2: Rigorous Methods in Software Engineering
- Oleksandr Mulyak, Bohdan Volochiy, Vitaliy Yakovyna and Vyacheslav Kharchenko. *Availability Model of Critical NPP I&C Systems with K-phase Erlang Distribution of Software Update*
- Vyacheslav Kharchenko and Svitlana Yaremchuk. *Technology Oriented Assessment of Software Reliability: Big Data Based Search of Similar Programs*
- Dmitry Maevsky, Elena Maevskaya and Lyudmila Shapa. *Software Reliability Model’s Assumptions in Context of the Secondary Defects Discussion*

### WS TheRMIT SESSION 2: Models of Software Systems Reliability
- Svitlana Lytvynova and Oleksandr Burov. *Methods, forms and safety of learning in corporate social networks*
- Volodymyr Morkun, Serhiy Semerikov, Svitlana Hryshchenko and Kateryna Slovak. *Environmental Geo-information Technologies as a Tool of Pre-service Mining Engineer’s Training for Sustainable Development of Mining Industry*
- Pavlo Nechypurenko and Serhiy Semerikov. *VlabEmbed – the New Plugin Moodle for the Chemistry Education*
- Taras Kobylnyk. *Statistical Software in the Higher School Educational Process*

### WS 3L-Person SESSION 2: Tools and Methods of Professional Training and Self-Learning
- Alexander Godlevskyi, Aleksander Letichevskyi, Vladimir Peschanenko, Oleksandr Letychevskyi, Maryna Morokhovets, Volodymyr Skobelev and Maksym Poltorackiy. *Formalization and Algebraic Verification of Legal Requirements*
- Michael Lvov, Vladimir Peschanenko, Oleksandr Letychevskyi and Yulia Tarasich. *The Canonical Forms of Logical Formulae Over the Data Types and Their Using in Programs Verification*

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## 12:30 - 14:00

### LUNCH

14:00 - 15:30

## WORKSHOPS SESSION 3

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<td><strong>Chair</strong>: Grygoriy Zholtkevych</td>
<td><strong>Chair</strong>: Oleksandr Drozd, Alex Gordeev</td>
<td><strong>Chairs</strong>: Yuliya Nosenko, Olga Pinchuk</td>
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### WS RMSE SESSION 3: Rigorous Methods in Software Engineering

### WS TheRMIT SESSION 3: Formal Methods for Security and Trustworthiness
- Dmitriy Maevsky, Elena Maevskaya and Lyudmila Shapa. *Software Reliability Model’s Assumptions in Context of the Secondary Defects Discussion*

### WS 3L-Person SESSION 3: E-learning in Social Systems and Life Long Learning
Vladimir Pevnev. **Pseudoprime Numbers: Basic Concepts and the Problem of Security**

Larysa Ruban, Maria Leshchenko Leshchenko and Larysa Tymchuk. **Digital Storytelling in a Foreign Language Classroom of Higher Educational Establishments**

Oleksandr Gordieiev, Vyacheslav Kharchenko and Kate Vereschchak. **Usable Security Versus Secure Usability: an Assessment of Attributes Interaction**

Svitlana Lytvynova and Olga Pinchuk. **The Evolution of Teaching Methods of Students in Electronic Social Networks**

Yuliya Nosenko and Zhanna Matyukh. **The Implementation of Multimedia Technology in Ukrainian Inclusive Pre-school Education**

Larysa Ruban, Maria Leshchenko Leshchenko and Larysa Tymchuk. **Digital Storytelling in a Foreign Language Classroom of Higher Educational Establishments**

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Yuliya Nosenko and Zhanna Matyukh. **The Implementation of Multimedia Technology in Ukrainian Inclusive Pre-school Education**

15:30 - 16:00

**COFFEE BREAK**

16:00 - 17:30

**WORKSHOPS SESSION 4**

**WS RMSE SESSION 4: Rigorous Methods in Software Engineering**

Room: **#46**

Chair: Volodymyr Peschanenko

Yuriy Kondratenko, Oleksiy Kozlov, Andriy Topalov and Oleksandr Gerasin. **Computerized System for Remote Level Control with Discrete Self-Testing**

Yuriy Pashchuk, Yuriy Salnyk and Serhiy Volochiy. **Reliability-Based Synthesis of Components of Flight Control System of Unmanned Aerial Vehicle**

Vladimir Sklyar and Vyacheslav Kharchenko. **Assurance Case Driven Design Based on the Harmonized Framework of Safety and Security Requirements**

Volodymyr Zaslavskyi and Maya

**WS TheRMIT SESSION 4: Safety and Assurance Cases for Industry Systems**

Room: **Assembly Hall**

Chairs: Yuriy Kondratenko, Miroslav Kvassay

Michael Lvov and Hanna Shmarova. **Generation of Test Tasks in Systems of Computer Mathematics for Educational Purposes**

Hennadiy Kravtsov and Vitaliy Kobets. **Implementation of Stakeholders’ Requirements and Innovations for ICT Curriculum Through Relevant Competences**

Serhiy Rakov, Mariia Mazorchuk and Viktoria Dobriak. **Data Processing Technologies for Calculating Prognostic Validity of Educational Achievement Tests**

Nadiia Balyk, Vasyl Oleksiuk and Galina

**WS 3L-Person SESSION 4: Evaluation and Testing in Professional Training and Life Long Learning**

Room: **#70**

Chairs: Hennadiy Kravtsov, Mariya Shyshkina

Martin Strecker. **Proving Description Logic Formulas with Tableau Methods and SAT Solvers**

Volodymyr Zaslavskyi and Maya

Yuliya Nosenko and Viktoriya Bohdan. **The Implementation of Cloud Services in Ukrainian Pre-School Educational Institution Management**

Yuliya Nosenko and Zhanna Matyukh. **The Implementation of Multimedia Technology in Ukrainian Inclusive Pre-school Education**
Pasichna. AHP-Based Comparative Analysis of Electricity Generating Portfolios for the Companies in EU and Ukraine: Criteria, Reliability, Safety

Shmyger. Development of E-Learning Quality Assessment Model in Pedagogical University

Olga Gnedkova. Adaptive Learning Organization in Distance Learning

Discussion

Final discussion. Closing remarks
12:30 - 13:30

LUNCH
13:30 - 15:00

CONFERENCE SESSION 2

ICTERI SESSION 2: ICT in Education - 1
Room: Assembly Hall
Chair: Vyacheslav Kharchenko

Paper 1: Jozef Kostolny and Monika Vaclavkova.
Learning system FRIMAN

Paper 2: Halyna Kuchakovska.
The organization of students' joint activity by means of popular network services

Quality Assessment of Teaching the Disciplines in the E-learning Environment of Sumy State University

ICTERI PhD Symposium 2
Room: 46
Chair: Grygoriy Zholtkevych

Paper 4: Hui Zhao, Ludovic Apvrille and Frédéric Mallet. Multi-View Design for Cyber-Physical Systems

Paper 5: Anastasiia Strielkina and Dmytro Uzun. Researching the Applicability of Mathematical Approaches for Modeling Cyber Security Processes

Paper 6: Keterina Isirova and Oleksandr Potii. Requirements and Security Models for Post-Quantum Cryptography Analysis

15:00 - 15:10

BREAK
15:10 - 16:40

ROOM 46

ICTERI PHD MENTORS PANEL
Chair: Vadim Ermolayev
Panelists: Prof. Yannis Dimitriadis, Prof. Heinrich C. Mayr, Prof. Mykola Tkachuk
The panel will include several short enlightning presentations by recognized Computer Science experts. They will share their thoughts and prognoses regarding an answer to one important question which has been posed to them:
If you were thinking about starting a (yet one more) PhD project of your own, what would be the topic of your choice? Why this?
In addition to the presentations of the experts, the panel will answer and discuss the questions from the audience.

16:40 - 17:00

COFFEE BREAK
17:00 - 18:00

CONFERENCE SESSION 3

ICTERI SESSION 3: Academia / Industry ICT Cooperation - 1
Room: Assembly Hall
Chair: Heinrich C. Mayr

Paper 1: Yaroslava Samchynska and Maxim Vinnyk.
Decision Making in Information Technologies Governance of Companies

Paper 2: Alla Ivashchenko, Yuliia Sybirianska and Yevheniia Polischuk.
Information and Communication Platform as a Complex Approach for Solving Information Asymmetry Problems

ICTERI 2017 WELCOME RECEPTION
Welcome reception will start with a concert by
Mike Kaufman-Portnikov
Royal Man
The entire life is just 88 royal keys
A pianoman and composer, actor and director
Laureat of international piano contests, jazz and theatre festivals
Place: Assembly hall

8:30 - 9:30
REGISTRATION
09:30-10:30
ROOM 46

PLENARY SESSION 2
Chair: Vadim Ermolayev
Keynote Talk: Designing for Learning: Patterns, Architectures and Tools
Keynote Speaker: Yannis Dimitriadis
10:30 - 11:00

COFFEE BREAK
11:00 - 12:30

CONFERENCE SESSION 4

ICTERI SESSION 4 : ICT in Education - 2
Room: 46
Chair: Oleksandr Burov

Is knowledge of mathematics a key for success for studying ICT?

E-Learning Managers Training at Universities: Projection, Design and Efficiency Indicators

FULL

Paper 7: Illia Otlev. Descriptive Modeling of System Dynamics at Different Stages

FULL

Paper 8: Hennadii Dobrovolskyi and Nataliya Keberle. Principal Component Analysis in Topic Modelling of Short Text Document Collections

ICTERI PhD Symposium 3
Room: 70
Chair: Frederic Mallet
12:30 - 14:00

LUNCH
14:00 - 15:30

CONFERENCE SESSION 5

ICTERI SESSION 5: ICT in Education - 3

Room: 46
Chair: Mykola Tkachuk

Paper 7: Oleksandr Spivakovskiy, Nataliya Kushnir, Natalya Valko and Maksym Vinnyk. ICT advanced training of teachers of university

Paper 10: Inna Kolesnyk, Artem Perepelitsyn and Vitaliy Kulanov. Providing of FPGA Resources as a Service: Technologies, Deployment and Case-Study

FULL PhD Symposium closing

15:30 - 16:00

COFFEE BREAK
16:00 - 17:30

CONFERENCE SESSION 6

ICTERI SESSION 6: Advances in ICT Research - 1

Room: 70
Chair: Vadim Ermolayev

Paper 1: Yuriy Kondratenko, Oleksiy Kozlov, Oleksiy Korobko and Andriy Topalov. Internet of Things Approach for Automation of the Complex Industrial Systems

FULL Title: LEAN thinking. The way to synergy

Paper 2: Sergey Orekhov, Michail Godlevsky and Elena Orekhova. Theoretical fundamentals of search engine optimization

DISC Plan: - What is LEAN Philosophy?
based on machine learning

- Why do we need LEAN?
- Constant improvement, myth or reality?
- Why to adopt changes? Does it really necessary?
- What is the goal of LEAN?
- What is competitive advantage of LEAN teams / organizations?
- How to became LEAN in reality?


19:00 - 20:00

CONFERENCE DINNER

08:30 - 09:00

REGISTRATION
09:00 - 10:00

ICTERI DEMONSTRATIONS
Room: 46
Chair: Yaroslav Prytula

Demo 1: Roberto Santos and Gil Miranda. iPKBuilder - a Lightweight Platform for Building Pictorial Keys
Demo 2: Oleksandr Khyzha and Igor Vysokopoyasny. Automatic Online Static Verification in E-Learning Programming

10:00 - 10:30

COFFEE BREAK
10:30-12:00

CONFERENCE SESSION 7

ICTERI SESSION 7:
ICT in Education - 4

Room: 70
Chair: Leo van Moergestel

DataArt IT Talks

Room: 46
Speaker: Oleksandr Tryshchenko

Paper 10: Juan Pablo Martinez Bastida, Andrey Chukhray and Elena Gavrilenko. Developing a Pedagogical Intervention Support based on Bayesian Networks

Title: Introduction to Front-End Architecture Patterns

Plan:
- Classic Back-End architecture patterns
- Origins of Front-End
- Main principles of Front-End development
- Contemporary Front-End architecture patterns

Paper 11: Aleksandra Mrelu and Oleksandr Sokolov. Rankings of students based on experts’ assessment of levels of verification of learning outcomes by test items

FULL

12:00-13:00
LUNCH
13:00-14:00
CONFERENCE SESSION 8

ICTERI SESSION 8:
Information Systems: Technology and Applications - 2

Room: 70
Chair: Anatoliy Doroshenko

Paper 4: Olena Tymchenko and Yuliia Sybirianska. ICT and Personal Income Tax Control in Ukraine

Paper 5: Oleksii Ignatenko. Game theoretic analysis of multi-processor schedulers: matrix multiplication example

14:00 - 14:30
COFFEE BREAK
14:30 - 15:30
CONFERENCE SESSION 9

ICTERI SESSION 9:
Academia / Industry ICT Cooperation - 2

Room: 70
Chair:

Paper 3: Oleksandr Burov. ICT for performance assessment of emergent technologies operators


15:30 - 16:00
AWARDS AND FAREWELL