Program of

Artificial Intelligence and Natural Language

&

Information Extraction, Social Media and Web Search AINL-ISMW FRUCT

Conference

9-14 November 2015

Gaudeamus igitur,
Juvenes dum sumus!
Post jucundam juventutem,
Post molestam senectutem
Nos habebit humus·

Ubi sunt, qui ante nos
In mundo fuere?
Vadite ad superos,
Transite ad inferos,
Ubi jam fuere·

Vita nostra brevis est,
Brevi finietur,
Venit mors velociter,
Rapit nos atrociter,
Nemini parcetur·

Vivat Academia,
Vivant professores!
Vivat membrum quodlibet,
Vivant membra quaelibet!
Semper sint in flore!

Vivant omnes virgines
Faciles, formosae!
Vivant et mulieres,
Tenerae, amabiles,
Bonae, laboriosae!

Vivat et respublica,
Et qui illam regit!
Vivat nostra civitas,
Maecenatum caritas,
Quae nos hic protegit

Pereat tristitia,
Pereant dolores,
Pereat diabolus,
Quivis antiburschius,
Atque irrisores!

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Andrey Kutuzov, University of Oslo, Norway

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Practical Information

The AINL-ISMW FRUCT conference will be held at the historical center of St. Petersburg in the main building of Saint-Petersburg State University (Address 1) and in the building of National Research University of Information Technologies, Mechanics and Optics «ITMO University» (Address 2).

Address 1: St. Petersburg, Vasilievskiy Island, Universitetskaya nab., 7-9 (Actoviy zal).
Address 2: St. Petersburg, Vasilievskiy Island, Birzhevaya liniya 14

Transportation: You can get there using a public transportation that goes to the "Universitetskaya nabereznaya" stop. Nearest metro station **Admiralteyskaya**, Sportivnaya or Nevskiy Prospect.
Please note, that metro station **Vasileostrovskaya is not working!**

Registration and information stand will be open:

- Monday-Wednesday in the ground-floor hall at Birzhevaya liniya 14 (Address 2, ITMO University)
- Thursday-Saturday in the ground-floor hall at Universitetskaya nab., 7-9 (Address 1, Saint-Petersburg State University, in the map point "Mendeleevskaya liniya, 2")

All information about rooms numbers will available in registration/informational stand
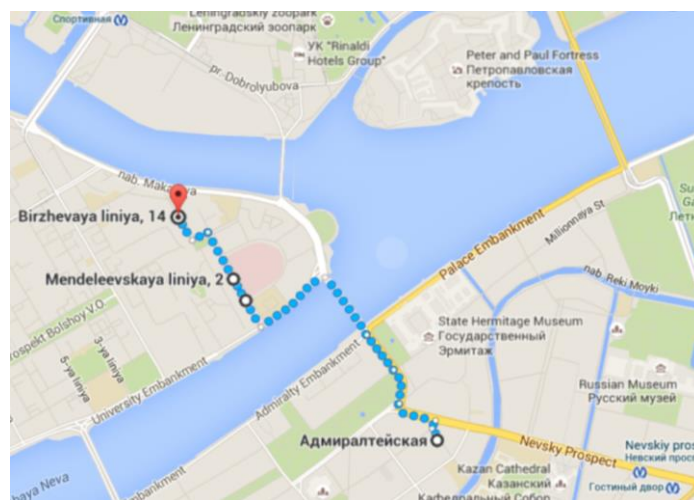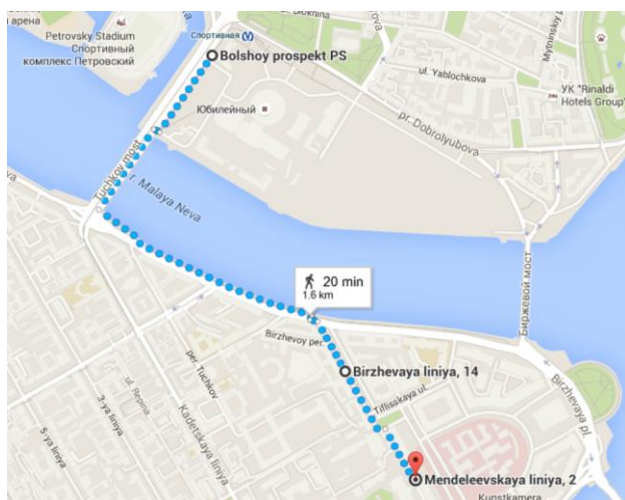
The program of AINL-ISMW FRUCT conference
November 9-14, 2015, Saint-Petersburg, Russia

All participants must be registered at www.fruct.org/ainl-ismw

DATE	TIME	PROGRAM	
09.11.15	09:30-10:00	**AINL-ISMW FRUCT Conference Registration**	
	10:00-11:00	Tutorial: SOCIAL MEDIA COMPUTING I, by Aleksandr Farseev	Tutorial: NEURAL NETWORKS I, by Andrey Filchenkov, Eugeny Putin
	11:20-13:30		Tutorial: INDUCTIVE MODELLING I , by Mikhail Alexandrov, Vadim Strijov
	13:30-14:30	**Lunch break (on your own)**	
	14:30-15:30	Tutorial: CLICK MODELS, by Ilya Markov	Tutorial: SEARCH USER INTERFACES I, by Christin Seifert
	15:40-19:10		Tutorial: INFORMATION EXTACTION, by Roman Yangarber
	19:10-20:00		Invited talk: Russian NER and IE shared task, by Maria Stepanova
	08:45-10:00	**AINL-ISMW FRUCT Conference Registration**	
10.11.15	9:00-10:00	Tutorial: SOCIAL MEDIA COMPUTING II, by Aleksandr Farseev	
	10:00-11:00		Section 1: Internet of Things and Healthcare services
	11:20-12:00		Section 2: Internet Protocols and Applications
	12:00-12:20	**Coffee break**	
	12:20-13:20	Section 4: Text Reuse and Paraphrase	Section 3: Robotics
	13:20-13:40	Invited talk: System view on modern Russian terminology (In Russian), by Stanislav Mikoni	
	13:40-14:30	**Lunch break (on your own)**	
	14:30-15:30	Section 5: Time Series Analysis	Tutorial: PLAGIARISM DETECTION I, by Alexey Romanov, Daria Beresneva, Alberto Barron Cedeno
	15:40-16:40	Tutorial: MATHEMATICAL MODELS OF SOCIAL PROCESSES I, by Olga Proncheva	
	16:40-17:00	**Coffee break**	
	17:00-18:00	Tutorial: MATHEMATICAL MODELS OF SOCIAL PROCESSES II, by Olga Proncheva	Tutorial: SEARCH USER INTERFACES II, by Christin Seifert

	18:10-19:10	Tutorial: INDUCTIVE MODELLING II , by Mikhail Alexandrov, Oleksiy Koshulko	Tutorial: SEARCH USER INTERFACES III, by Christin Seifert
	19:10-20:00		
11.11.15	09:30-10:00	**AINL-ISMW FRUCT Conference Registration**	
	10:00-12:10	Tutorial: NEURAL NETWORKS II, by Andrey Filchenkov, Eugeny Putin	Tutorial: PLAGIARISM DETECTION II, by Tommaso Fornaciari, Rita Kuznetsova, Andrey Ivahnenko, Alexey Romanov
	12:10-12:30	**Coffee break**	
	12:30-13:30	Section 6: Neural Networks applications	
	13:30-14:30	**Lunch break (on your own)**	
	14:30-15:30	Invited talk: by Alberto Barron-Cedeno	
	15:40-16:40	Invited talk: Testimonies' evaluation in forensic practices: from polygraph to NLP, by Tommaso Fornaciari	
	16:40-17:00	**Coffee break**	
	17:00-18:00	Invited talk: Visualization Techniques, by Christin Seifert	
	18:10-20:00	Panel discussion: Visualization	
12.11.15	09:30-10:00	**AINL-ISMW FRUCT Conference Registration**	
	10:00-10:50	Industrial talk: Analysing official documents using Compreno technology, by Anatoly Starostin, ABBYY	
	10:50-11:40	Industrial talk: Overall Acceptance Criterion in Online A/B Testing: Classical and Promising Approaches, by Alexey Drutsa, Yandex	
	11:40-12:00	**Coffee break**	
	12:00-13:00	Invited Talk: The current state of m-Health: Biomedical Engineering view, by Oleg Medvedev	
	13:30-14:30	**Lunch break (on your own)**	
	14:00-16:10	Tutorial: SOCIAL MEDIA COMPUTING IV, by Tat-Seng Chua and Aleksandr Farseev	Tutorial: NEURAL NETWORKS III, by Andrey Filchenkov, Eugeny Putin
	16:10-16:30	**Coffee break**	
	16:30-17:30	Open lecture: Criminal Profiling in police practices, science and fiction: from the origins to future perspectives, by Tommaso Fornaciari	Open lecture: The current state of m-Health : physician's and patient's view, by Oleg Medvedev

	09:30-10:00	AINL-ISMW FRUCT Conference Registration	
	10:00-11:00	Invited talk: A Cognitive Computing Approach to Natural Language Semantics, by Chris Biemann	
	11:00-11:20	Coffee break	
	11:20-12:20	Invited talk: Social Media Analytics for Study of Public Events, User Mobility and Wellness, by Tat-Seng Chua	
13.11.15	12:30-13:30	Invited talk: Crowdsourcing for Entity-Centric Information Access, by Gianluca Demartini	
	13:30-14:30	Lunch break (on your own)	
	14:30-16:50	Tutorial: DISTRIBUTIONAL SEMANTICS I, by Andrey Kutuzov	Tutorial: CROWDSOURCING I, By Chris Biemann
	17:00-18:30	POSTER+DEMO Presentations (Pecha Kucha)	
	18:30-20:30	POSTER+DEMO+Social Event	

	09:20-10:00	AINL-ISMW FRUCT Conference Registration	
	10:00-11:00	Open lecture: Topic modeling as a key technology for exploratory search and social media mining by Konstantin Vorontsov	
	11:00-11:20	Coffee break	
	11:20-12:20	Open lecture: by Tat-Seng Chua	
	12:30-13:30	Open lecture: Generation and analysis of speech sounds: a new approach, by Vera Evdokimova and Pavel Skrelin	
	13:30-14:30	Lunch break (on your own)	
14.11.15	14:30-18:00	Tutorial: DISTRIBUTIONAL SEMANTICS II, by Aleksandr Panchenko	Tutorial: CROWDSOURCING II, by Gianluca Demartini
	18:10-18:30	Section 7: Machine learning techniques	Industrial talk: Yandex.Toloka, by Olga Megorskaya, Yandex
	18:30-18:50		Section 8: Crowdsourcing
	18:50-19:10		
	19:10-20:00	Industrial talk: Detailed Analysis of Interests of VKontakte Audience, by Felix Zinatullin, Cerebro Target	Panel discussion: Crowdsourcing
	20:00-20:10	Official closing of the AINL-ISMW FRUCT conference	

The program of AINL-ISMW FRUCT conference sections

November 10 (Tuesday)

Section 1: Internet of Things and Healthcare Services		
10:00	**20m**	Communication Between Emergency Medical System Equipped With Panic Buttons and Hospital Information Systems: Use Case and Interfaces, Ilya Paramonov, Andrey Vasilyev and Ivan Timofeev
10:20	**20m**	Applying the p-medians in the design of modern systems-on-chip, Nadezhda Matveeva, Elena Suvorova and Lev Kurbanov
10:40	**20m**	Implementation of the new REST API for open source LBS-platform Geo2Tag, Mark Zaslavskiy and Dmitry Mouromtsev
Session 2: Internet Protocols and Applications		
11:00	20m	Software-to-Hardware Tester for the STP-ISS Transport Protocol Verification, Valentin Olenev, Irina Lavrovskaya and Nadezhda Chumakova
11:20	20m	Twitter as a Transport Layer Platform, Dmitry Namiot
Session 3: Robotics		
12:20	20m	Design and implementation Raspberry Pi-based omni-wheel mobile robot, Kirill Krinkin, Elena Stotskaya and Yury Stotskiy
12:40	20m	Evaluation of the Modern Visual SLAM Methods, Artur Huletski, Dmitriy Kartashov and Kirill Krinkin
Session 4: Text Reuse and Paraphrase		
12:20	20m	Discovering Text Reuse in Large Collections of Documents: a Study of Theses in History Sciences, Anton Khritankov, Pavel Botov, Nikolay Surovenko, Sergey Tsarkov, Dmitriy Viuchnov and Yuri Chekhovich
12:40	20m	Monolingual Approach to Detection of Text Reuse in Russian-English Collection, Oleg Bahteev, Rita Kuznetsova, Alexey Romanov and Anton Khritankov
13:00	20m	Comparison of Sentence Similarity Measures for Russian Paraphrase Identification, Ekaterina Pronoza and Elena Yagunova
Session 5: Time Series Analysis		
14:30	20m	Introducing Government Contracts to Technology Forecasting, Nikita Nikitinsky, Dmitry Ustalov and Sergey Shashev
14:50	20m	Multi-representation approach to text regression of financial risks, Alexey Natekin, Roman Trusov, Pavel Kalaidin, Sergey Ovcharenko and Alois Knoll
15:10	20m	Revealing Potential Changes of Significant Terms in Streams of Textual Data Written in Natural Languages Using Windowing and Text Mining, Jan Žižka and František Dařena

November 11 (Wednesday)

Session 6: Neural Networks Applications		
12:30	20m	Morpho-syntactic parsing based on neural networks and Corpus dataset, Roman Rybka, Dmitry Gudovskikh, Ivan Moloshnikov and Alexandr Sboev
12:50	40m	Recurrent Neural Network-based Language Modeling for an Automatic Russian Speech Recognition System, Irina Kipyatkova and Alexey Karpov

November 14 (Saturday)

Session 7: Machine Learning Techniques		
18:10	20m	WFST Approach to German Compound Words Reconstruction for LVCSR, Nickolay Shamraev, Alexander Batalshchikov, Mikhail Zulkarneev, Sergey Repalov and Anna Shirokova
18:30	20m	Arabic manuscripts identification based on Feature Relation Graph, Vladislav Pavlov, Dmitry Shalymov, Oleg Redkin and Olga Bernikova
18:50	20m	Datasets Meta-Feature Description for Recommending Feature Selection Algorithm, Andrey Filchenkov and Arseniy Pendryak

Session 8: Crowdsourcing		
18:10	20m	Crowdsourcing Synset Relations with Genus-Species-Match, Dmitry Ustalov

Tutorials

SEARCH USER INTERFACES FOR DIGITAL LIBRARY CONTENT

Aims and Objectives:
- Provide an overview of human search models
- Outline potential scenarios for visual search interfaces
- Show case studies of visual search interfaces

Brief Description:
Digital library content is nowadays mostly accessible via Web interfaces. This also brought a larger, more diverse user base, that is accessing the content. Traditional user interfaces are targeted at content experts, i.e. librarians, and are not necessarily suitable for all users. This tutorial introduces alternative search user interfaces for digital library content.

List of Topics to be covered:
- Human Search Models
- Query Specification in Visual Search Interfaces
- Visualisation of Search Results
- Integrating User Feedback

CLICK MODELS FOR WEB SEARCH AND THEIR APPLICATIONS

Aims and Objectives:
Click models, probabilistic models of the behavior of search engine users, have been studied extensively by the information retrieval community during the last five years. We now have a handful of basic click models, inference methods, evaluation principles and applications for click models, that form the building blocks of ongoing research efforts in the area. The goal of this tutorial is to bring together current efforts in the area, summarize the research performed so far and give a holistic view on existing click models for web search.

List of Topics to be covered.
The aims of this tutorial are the following:
- Describe existing click models in a unified way, i.e., using common notation and terminology, so that different models can easily be related to each other
- Compare commonly used click models, discuss their advantages and limitations and provide a set of recommendations on their usage
- Provide ready-to-use formulas and implementations of existing click models and detail general inference procedures to facilitate the development of new ones
- Give an overview of existing datasets and tools for working with click models and develop new ones
- Provide an overview of click model applications and directions for future development of click models
- The tutorial will be accompanied by coding sessions (in Python). For these sessions, we will provide code examples and data samples. The participants will be able to either follow the examples on the slides or perform them live along with the presentation. To follow the examples live, the participants need to have a laptop with iPython and PyClick installed.

CROWDSOURCING

Part I: Crowdsourcing Linguistic Datasets

Aims and Objectives:
- Introduce crowdsourcing as an instrument to quickly acquire linguistic datasets for training and evaluation purposes
- Provide step-by-step instructions on how to realize simple and complex crowdsourcing projects
- Discuss general recommendations on designing and evolving successful crowdsourcing tasks

Brief Description:
Since the introduction of Amazon's Mechanical Turk crowdsourcing platform in 2005, crowdsourcing has become a means to quickly scale the collection of data from humans via paid work. Since then, there have been an ever-increasing number of publications that use crowdsourcing techniques for the collection of labeled datasets for computational linguistics and many other fields. The tutorial gives a general introduction to crowdsourcing as an instrument to quickly acquire linguistic datasets for training and evaluation purposes.

List of Topics to be covered:
- Crowdsourcing for language tasks
- Crowdsourcing platforms
- Successful design patterns

Part II Improving the quality of crowdsourced annotations

Aims and Objectives:

- Provide an overview of quality assurance techniques in crowdsourcing platforms
- Describe crowd answer aggregation techniques
- Look at the human dimension of crowdsourcing by understanding worker behaviours and by modelling their skills and knowledge

Brief Description:
Crowdsourcing platforms allow people to obtain manually annotated data at scale. However several challenges exists like, for example, the need for quality control and the lack of predictable completion time. This tutorial focuses on recent techniques to improve the quality of crowdsourced annotations by aggregating crowd answers as well as by modelling worker skills and behaviours.

List of Topics to be covered:
- Crowd Answer Aggregation Techniques
- Worker profiling, selection, and trust
- Malicious worker behaviours
- Worker types

DISTRIBUTIONAL SEMANTICS

Part I

Aims and Objectives:
- Learn the basics of the computational lexical semantics
- Get understanding of the resource-based approaches
- Get understanding of the data-driven approaches (distributional semantics)
- Learn about evaluation techniques and datasets in the field
- Understand how lexoco-semantic knowledge can be used in the framework of NLP applications

Brief Description:
Computational lexical semantics is a subfield of Natural Language Processing that studies computational models of lexical items, such as words, noun phrases and multiword expressions. Modeling semantic relations between words (e.g. synonyms) and word senses (e.g. python as programming language vs python as snake) is of practical interest in context of various language processing and information retrieval applications. We are going to discover how this kind of linguistic knowledge can be bootstrapped from text in a data-driven way with help of method of Distributional Semantics. The lectures will be complimented with a hands-on session on tools such as JoBimText, Serelex and word2vec.

List of Topics to be covered:
- Distributional semantics: vector-based, structure-based and neural approaches
- Semantic relations and resources
- Semantic similarity and relatedness
- Word sense induction and disambiguation
- Evaluation

Part II

Brief Description:
Word2vec and others buzzwords: unsupervised machine learning approach to distributional semantics. Recent boost of interest towards distributional semantics is related to employing simple and fast artificial neural networks to directly learn high-quality vector word representations (embeddings) from unannotated text data. They can be used in almost any nlp task you can think of. I will explain how this approach is different from more traditional vector space models of semantics, and demonstrate the results of applying it to russian language modeling.

SOCIAL MEDIA COMPUTING

Aims and Objectives:
This module introduces the background and present states of social networks and their analysis in terms of contents, users, social relations and applications. The social network to be covered include microblogs sites like Twitter, social communication sites like Facebook, location sharing sites like 4Square, and photo sharing sites like Instagram and Flicker. At the end of this module, participants are expected to have initial understanding of the background, design, analysis and implementation of social media analysis systems.

Brief Description:

The emergence of WWW, smart mobile devices and social networks has revolutionized the way we communicate, create, disseminate, and consume information. This has ushered in a new era of communications that involves complex information exchanges and user relationships. This module aims to study the social network phenomena by analyzing multi-modal user-generated contents from multiple social sources.

List of Topics to be covered:

• Introduction to social networks: types of social networks, the targeted users, social impacts, privacy and trust issues
• Overview of social media analysis framework; information gathering, storage and analysis; applications; truth and reliability
• The social media contents: text, images, location check-ins; their crawling, feature extraction, analysis, fusion
• Applications: social assistance and recommendations
• Future trends

MATHEMATICAL MODELS OF SOCIAL PROCESSES

Aims and Objectives:

- Introduce students to some models of social processes.

Brief Description:

Mathematical modeling is one of the main instruments of sociologic researches. In this tutorial will be presented some examples of such models. The main attention will be given to the models of information attack and information warfare.

List of Topics to be covered:

- Biparental model (that takes into account gender structure)
- Maltus model and logistic model
- Leslie model
- the model of the relations dynamics in a small group
- the model of imitative behavior
- the model of information attacks
- the model of information warfare

PLAGIARISM DETECTION

List of Topics to be covered:

- Intrinsic plagiarism:
  intrinsic plagiarism detection is a problem of finding reused text when no reference corpus is given. As a result you cannot compare text from the document being checked with other texts to find coincidences. In this talk we will present trending methods to intrinsic plagiarism detection using machine learning approach. Discuss performance of the methods and results to date.
- Extrinsic plagiarism
- How to detect deception through stylometric analyses:
  the tutorial will follow step by step the a research activity in the field of deception detection. The dataset employed is DeCour - DEception in COURts - a corpus constituted by transcripts of hearings

held in four Italian courts. The case which will be shown is a typical example of text classification carried out thorough stylometric techniques. Here the task is to train models to distinguish false from truthful statements, however the methodological approach is pretty similar to those applied in computational linguistics for other forensic tasks, such as author profiling, author attribution and plagiarism analysis.

The process will be examined from the data collection, through the preprocessing and the feature selection. In the end, the data analysis and the results will be discussed, taking into account possible perspectives for future researches.

- Strange documents and traduced plagiarism:
  Researchers made computers smart enough to generate well-looking texts and even scientific papers, Now there is a problem that these generated papers get published or defended as part of diploma or thesis. In this lecture we will discuss what are these texts, how they are created and contemporary approaches to detecting such texts. Several methods will be covered in detail, results presented.

- Systems for revealing plagiarism:
  In this lecture we will discuss existing systems and tools that detect text reuse and machine generated texts. Overall introduction will be given to Antiplagiat Software as a state of the art in exact extrinsic plagiarism engine. We sill show how can it be applied to detect text reuse in separate documents as well as a whole text corpus – a feature used for deep text analysis for reuse. Several tools for producing and detecting machine-generated scientific papers will be discusses, including SciGen and SciDetect, and other tools that use methods discussed earlier in the tutorial.

INTRODUCTION TO DEEP NEURAL NETWORKS

Aims and Objectives:
- Learn the basics neural networks
- Learn state-of-art neural deep learning models
- Understand how all this deep learning magic happens and what are the requirements and restrictions for deep learning network application
- Get practice in applying neural networks with Theano

Brief Description:
Three lectures from very basic concepts such as gradient descent and one-layer neural network to state-of-the-art models of deep networks are suited both for people who never looked inside artificial neural networks and know nothing about them as well as for the ones who is familiar with basic theory but wants to learn more about modern wildly-spoken paradigm of deep learning.

The first lecture is introduction to neural networks, so it is not obligatory if you are familiar with them (but it may still be useful to remain the fundamentals). The second and the third lectures are describing modern deep-learning network models and their applications.

The lectures will be accompanied by coding sessions in Python 3 with Theano library. For these sessions, we will provide code examples and data samples. The participants need to have a laptop with Python 3, Theano library installed.

List of Topics to be covered:
- Gradient descent
- Linear perceptron
- Multi-layer neural network
- Deep architecture
- Convolution neural network
- Recurrent neural network

Demo Session of the AINL-ISMW FRUCT conference

Time: 13 November 2015, 17:00-18:30   Place: St. Petersburg, Vasilievskiy island,
                                            Universitetskaya nab., 7-9, Actoviy zal

The Demo section of the AINL-ISMW FRUCT conference consists of a promotional section to present/introduce demo projects to the public. Presentations will be done following the Pecha Kucha style. Main idea of this section is to make people aware of the demo and become interested to visit the demo stand at the second part of the session. During the second part of demo session teams get a place to install the demo and poster. If you have some special requirements please contact organizing committee by email office@ainlfruct.com.

Pecha Kucha Presentation Format
Pecha Kucha is a presentation technique where a speaker shows a definite number of slides (usually 20 or 15), each for 20 seconds. The slides are changed automatically during the talk. The main intention for Pecha Kucha presentation style is to prevent participants from being too verbose and to make their talks more dynamic and impressive.
Pecha Kucha Night is an event where each speaker uses Pecha Kucha presentation, and speakers change each other in non-stop fashion. Initially invented by architects, this kind of event is often used to present creative projects or work; nowadays it is also used for R&D talks too. Pecha Kucha Night format allows all participants to make announcements about their demos in attractive and time-efficient way. That is why we have chosen this format for demo promotion section at FRUCT conference.

How to prepare Pecha Kucha presentation
Here is an instruction on how to prepare your Pecha Kucha style presentation for Demo promotion section. Your presentation must contain exactly 6 slides, and each of them will be displayed for 20 seconds. The slides will be changed automatically. So, the whole presentation will take exactly 2 minutes (it should be noted that usually Pecha Kucha presentation has 20 slides, but we have to reduce the number due to a large amount of submitted presentations). Provide the information about yourself and your presentation on the first slide (name, institution, title of your presentation).
The main purpose of your talk would be to interest people, so your presentation should make absolutely clear the main ideas of your project and explain what you plan to show at the demo stand. Make your presentation fascinating to attract attendees and avoid technical details in your talk. Reveal one main idea on each slide. Do not overload your slides with information. Remember, that each slide is displayed only for 20 seconds. Place no more than 2 lines of text per slide, or one big picture. Avoid using slide titles. Do not duplicate the same slides in your presentation — it is cheating! If you see that 20 seconds for a particular slide is not enough for you, try to decouple it into the two or more, or omit the details. Do not place "Thank you" or "Q&A" slides in the presentation. Pecha Kucha session does not imply any questions from the auditory. All the questions will be asked afterwards in a poster room. Prepare your speech thoroughly and beforehand. As you have only 20 seconds per slide, it is quite impossible to improvise during the talk. Rehearse your speech several times to be sure in the absence of pauses when you wait for the slide change, or accelerations when you fails to follow your slides. Try to speak in the same pace during all the presentation. It definitely depends on your text, so try to prepare near the same amount of text in speech for each slide.

Check list

- Use exactly 6 slides.
- Place information about yourself and your presentation (name, institution) on the first slide.
- Reveal one main idea on each slide.
- Place no more than 2 lines of text or 1 large image per slide.
- Do not duplicate the same slides, do not place "Thank you" or "Q&A" slides in the presentation.
- Do not use any slide change animation.
- Prepare your speech thoroughly and do not forget to rehearse it.

List of Interactive Presentations

Posters:

✓ Indirect Interaction of Agents in a Smart Space: Operation Efficiency and Fault Tolerance Support, Ivan Galov

✓ Teleboyarin—Mechanized Labor for Telegram, Dmitry Ustalov

✓ Writing Style Comparison Method Based on the KNN Two-Sample Test Approach for English and Russian Text Collections, Oleg Granichin, Natalia Kizhaeva, Dmitry Shalymov and Zeev Volkovich

✓ A corpus-driven estimation of association strength in lexical constructions, Ekaterina Protopopova, Grigoriy Bukia and Olga Mitrofanova

✓ Search for Answers in Ontological-Semantic Graphs, Anastasia Mochalova

✓ Esperus: the First Step to Build a Statistical Machine Translation System for Esperanto and Russian Languages, Darja Orlova

✓ STOPKA: Unbalanced Corpora Classification by Bootstrapping, Yulia Adaskina, Andrey Popov and Polina Rebrova

✓ Building dependency parsing model for Russian with MaltParser and MyStem tagset, Kira Droganova

✓ Rhetorical Structure Theory as a Feature for Deception Detection in News Reports in the Russian Language, Dina Pisarevska

✓ A Study of Teager-Kaiser Energy Operator Pertinence for R Peak Detection in ECG Recordings, Aleksandr Borodin and Artem Rudenya

✓ Towards a Linguistic Model of Stress, Well-being and Dark Traits in Russian Facebook Texts, Polina Panicheva, Victor Ivanov, Arseny Moskvichev, Olga Bogolyubova and Yanina Ledovaya

✓ Tie Activity Profiles in Social Networks, Vitaly Khudobakhshov

✓ Semantic Parser for Sentiment Analysis and the Emotional Computer Agents, Artemy Kotov, Anna Zinina and Alexander Fil

✓ RuWordNet - Russian WordNet by Extraction from RuThes, German Lashevich and Vladimir Ivanov

✓ Political Polarization: Case of Russian Social Media, Daria Kharkina and Valerii Nechai

✓ TSAAP: automatic analysis of users' adherence to a social group in a social network, Mikhalkova Elena

✓ The Museums Reviews Processing for Recommendation System and Usability for Improving Museum's Management, Maslennikova Aleksandra and Yagunova Elena

Demo (*preliminary list based on submissions done before November 2*)

✓ Computer-aided social post design, Popova Olga

✓ Russian Sentinet: new approach to sentiment analysis task, Kulakova Elena

✓ Octabrian neurointerfaces and applications, Akhmediyev Dmitriy

✓ Dependency relation investigation on usage of words that express a negative sentiment by online users and average per capita incomes in the Federal Districts of the Russian Federation, Boldyreva Anna

✓ Sanskrit morphological analyzer "Morpheus" v.0.2 - http://sa.diglossa.org, Bykov Michael

✓ Study structure of document corpus with the package VizAn, Alina Nasibullina and Mikhail Alexandrov

AINL-ISMW FRUCT Conference

Program

Saint-Petersburg, Russia
09-14 November 2015

Printed by ITMO University (Russia)

CALL FOR PARTICIPATION
18th Conference of Open Innovations
Association FRUCT
Saint-Petersburg, Russia, 18-22 April 2016

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- Extended abstracts (min 200 words, max 5 pages) - submission deadline is January 15, 2016
- Poster or demo summary (min 200 words, max 5 pages) - submission deadline is April 2, 2016

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- Location Based Services, Navigation, Logistics management, e-Tourism solutions
- Mobile Healthcare, Wellbeing, Automated diagnostics, Fitness, e-Health solutions
- Future services: Proactivity, IoT, Smart Spaces, Context Analysis, Recommender systems, Big Data, Data Mining
- Energy efficient design of sensors, integration of peripherals
- Cross-platform software, innovative mobile services, new approaches to application design, innovative UX
- Smart Systems, Inter-device connectivity, embedded networks

The list of additional topics is as follows:

- Mobile device security, management of personal and business privacy
- Modern network architectures, Emerging wireless technologies, Air interfaces and protocols
- Mobile multimedia and video services and solutions

All conference papers and abstracts will be published in FRUCT proceeding (ISSN 2305-7254), all Full papers will be published in IEEE Xplore (Scopus) and selected papers recommended (but not guaranteed) for CPCI indexing (Web of Science). The templates, conference news and other details can be found at http://www.fruct.org/conference18.