

NRC KI and JINR workshop. January 29, 2015

Round table discussion panel :

Prof. Shantenu Jha, Rutgers University, AIMS/RADICAL/SAGA projects leader, USA

Dr. Massimo Lamanna, CERN, Storage Data Group section leader

Prof. Simon C. Lin, Project Director, Academia Sinica Grid Computing Center, Taiwan

Dr. Alberto Pace, CERN, Storage Data Group Head, CERN School of Computing Director

Dr. Markus Schulz, CERN, Support for Distributed Computing Group Head

NRC KI Researchers, PhD students and students

1. Tertychnyy Ivan

MSU graduated physics specialist.

Research interests: Distributed computing systems, PanDA, Hadoop, BigData analysis.

Work fields: 'PanDA beyond ATLAS' projects (PanDA for biology).

2. Aulov Vasiliy

PhD student of NRC "Kurchatov Institute".

Research interests: Parallel data processing, System programming (mostly Python).

MA work topic: "Satellite data processing using parallel conveyor methods".

Work fields: PanDA system in NRC Kurchatov Institute (backuping, documentation, installation, etc).

3. Kurachenko Anatoliy

PhD student of NRC "Kurchatov Institute" in "Mathematics and Software Engineering for Computers, Computer Systems and Networks".

Research interests: Distributed computing systems, BigData analysis, Cloud computing.

Subject of dissertation: "Development environment based on cloud computing for genomic sequencing CloudNA".

In 2012 was a member of "Summer Student Program in CERN". In collaboration tested performance a distributed file system HDFS for virtualization data in HEP (High Energy Physics) (ATLAS) based on StratusLab cloud.

4. Drizhuk Daniel

Student of the Moscow Institute of Physics and Technology State University (Master's).

Work fields:

- Data visualization, Manipulation and processing with use of parallel methods in modern browsers.

— Installation and multiprocess module development for the PanDA system, built in CERN

5. Gudovskih Dmitry

PhD student of NRC "Kurchatov Institute".

Research interests: Technologies of data analysis using mathematical algorithms and different combinations of machine learning methods, Analysis of unstructured text information, Modeling trends in the development of socio-economic situations.

Subject of dissertation: "Selecting and modeling trends in the development of socio-economic situations based on information processing from the Internet through cloud computing".

During the last three years studied on courses of virtualization and big data: VMware vSphere, Citrix XenApp.

6. Rybka Roman

PhD student of NRC "Kurchatov Institute".

Research interests: Mastering techniques of data analysis using mathematical algorithms (in particular, the development of tools for parsing texts on natural language based on a combination of neural network and probabilistic methods).

Subject of dissertation: "Analysis of textual information based on a combination of neural network and probabilistic approaches".

During the last three years studied on courses of virtualization and big data: VMware vSphere, Citrix XenApp, IBM BigData Fundamentals, IBM Infosphere Dataexplorer.

7. Moloshnikov Ivan

PhD student of NRC "Kurchatov Institute".

Research interests: Machine learning, Data analysis, Text mining, Neural Networks, Semantic analysis of texts, BigData technology in the text mining and the machine learning.

Subject of dissertation: "Intelligent selection system of thematically similar documents by information processing with BigData technology".

8. Berestenyov Vladislav

Sixth-year student of the BMSTU (Bauman Moscow State Technical University).

Work fields:

- Mathematical modeling of technical systems with using numerical methods. Working on modeling of optical vortices, formed on the wave front of the laser beams, and numerical methods applied for solving problems of heat conduction, fluid dynamics and gas.
- Interactive visualization and analysis of core's scalable images together with the down-hole's geological and geophysical studies materials and laboratory analyzes of rock material and formation fluids for wells data. High-resolution image of the core and the numerical series of geophysical parameters for ultra-deep wells occupy a large amount of data and their synchronous processing requires large computational resources