|  |  |
| --- | --- |
| Research advisor | Research topic |
| [**Vladimir Alexandrovich Fomichov**](http://www.hse.ru/en/org/persons/67739) | A study of the approaches to semantic search on the Web |
| A study of the approaches to using semantic-syntactic processing for automatic extraction of opinions from texts |
| A study of the approaches to constructing the transformers of OWL-expressions into natural language texts |
| A study of the approaches to the use of a controlled natural language for forming and updating ontologies |
| A study of the approaches to creating semantic mashups |
| Algorithmization of transforming natural language queries into SPARQL queries |
| [**Nikolay Kazantsev**](http://www.hse.ru/en/org/persons/14266114) | Novel architectural models for cloud computing in support of workflow execution |
| Cloud workflow architecture |
| Cloud resource management |
| Scientific computing in the cloud |
| Workflow management for big data processing |
| Programming models for cloud computing |
| Access control and authorization for workflow execution |
| Workflow scheduling in cloud computing |
| Utility models and service pricing |
| Service enabled workflow applications |
| Privacy, security, risk and trust issues in cloud computing |
| Social issues in cloud computing |
| Green ICT and smart metering in Big Data |
| Cloud workflow applications |
| Service based workflow modeling |
| Service Delivery and Composition in CC |
| Service Level Agreements (SLAs) Negotiation, Automation and Orchestration of cloud business services |
| Quality of Services for workflow execution |
| Services Repository and Registry |
| Service Security, Privacy and Trust for workflow modeling and execution |
| **Alisa Melikyan** | Business Analytics Software for Analyzing Big Data (by the example of IBM SPSS Analytic Catalyst). |
| Content Analysis in an Era of Big Data (by the example of Social Network Content Analysis). |
| [**Andrey Victorovich Dmitriev**](http://www.hse.ru/en/org/persons/98405261) | Reconstruction of the Navier-Stokes equations for big financial series |
| Reconstruction of uncertain 3D  dynamical system on big financial series |
| Search and interpretation of pre-crisis intervals in big financial series |
| Generalized Lotka-Volterra model in modeling "virus-antivirus" systems in global networks with big data streams |
| Genetic algorithms in Map Reduce approach improving |
| [**Nikolay**](http://www.hse.ru/en/org/persons/14266114) **Markov** | The development of self-organizing neural network model of the financial systems in the context of big data |
| Two-layer interval weighted graphs in assessing the market risks on big data |
| Identification and parameterization of fractal structures in big data |
| Dynamic analysis of big stream data using a financial platform |
| Fuzzy logic for compression and storage of big data |
| **Yevgeni Koucheryavy** | Extraction of useful analytics in Big Data |
| Big Data of Internet of Things: challenges and issues |
| Connectivity issues in distributed Big Data |
| Quality of Service requirements for critical Big Data analysis |
| Fine tuning of Wireless Technologies for Smart Grid |
| Big Data collection in 5G networks |
| Big Data for Future Regulatory Decisions |