

# Wireless Technologies and Internet of Things

National Technology Initiative  
Center of Excellence

Coordinator of the consortium of technological, scientific and educational organizations on the basis of Skolkovo Institute of Science and Technology

- Developing cross-cutting technology
- Creating partnerships among business, science and education
- Developing innovative infrastructure
- Transferring Technology
- Facilitating wide spread of advanced Wireless & IoT technologies across industries
- Equipping professionals with digital age competencies



# BRIEF FACTS

## Team

**112**

business practitioners,  
scientists and engineers

## Partners

**10+**

Huawei, Philips and others

## Projects

**2**

**19**

accomplished in progress

## Consortium

**40+**

Industrial  
partners

**11**

higher  
education  
institutions

## R&D Budget

**700** m rubles

until 2022

## Events

**5**

conferences

# CROSS-CUTTING TECHNOLOGY

## Industries:

- Wireless communication
- Industrial data processing
- Information security in IoT
  
- Connected vehicles
- Medical tech
  
- Smart industries:
  - City
  - Retail
  - Advertising and services industry
  - Agriculture and forestry

**SEE**

Collecting and transferring data

**ACT**

Applying changes

**UNDERSTAND**

Processing and visualizing data

# SOLUTIONS

## DATASKAI

### Industrial Data Processing Platform

- Propelling data-driven approach
- Quick assessment and decision-making
- Flexible integration into industrial processes
- Beginners-friendly
- Support for joint data and operation teams

## MOVASKAI

### Mobile Service Platform for Inventory Control

- Smart retail approach
- Automated in-store retail inventory management and other routine operations
- Flexible system with adaptation to a particular retail network

## OpenUNB

### National communication protocol standard for IoT

- Developing national communication standard for IoT
- Efficient in high-noise radio environment and suitable for long-range communication
- Transmitters run on a single battery for up to 10 years without recharging
- Minimizing costs: Open-source, Vendor-free, no operator payments or license fees

## 5G Solution

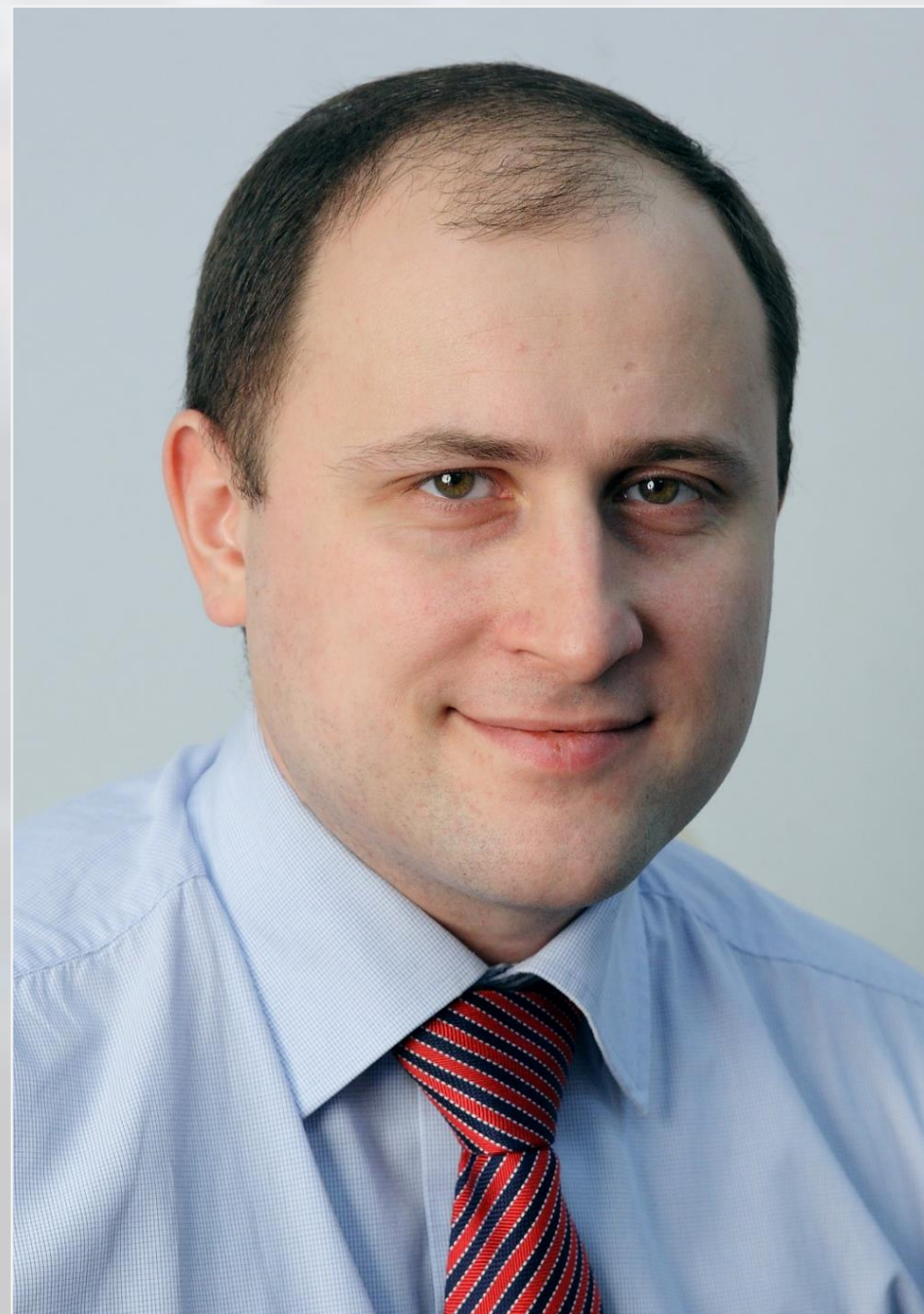
### Telecom operator solutions for 5G

- We operate a 5G pilot area in Skolkovo
- 5G for service providers, corporate and institutional networks, including critical and state-protected infrastructure
- Reliable certified national hardware and software solutions for service providers

# TEAM

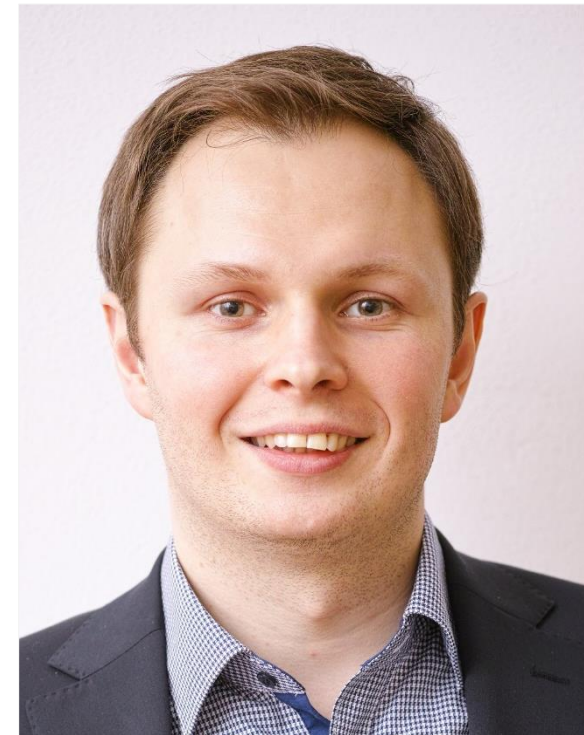
## **Dmitry Lakontsev**

Head of the Center  
Head of Internet of Things Laboratory  
PhD, Skoltech Associate Professor  
IPPI RAS, Telum, DATADVANCE



## **Victor Lobachev**

Deputy for R&D, PhD  
Yandex, Rochester University (USA), Space Research Institute



## **Andrei Somov**

Deputy for education, PhD  
University of Trento (IT), Berkeley (USA), Exeter (UK), FBK CREATE-NET, Google IoT Technology Research Award winner



## **Vitaly Shub**

Deputy for 5G, PhD  
AT&T, NSI / Lucent Technologies, Motorola, DellSystems, Ericsson, AFK Sistema, RTRS, IPG Photonics, TransTeleCom



## **Vladimir Valkovich**

Deputy for 5G  
Orange Business Services, Virgin Connect, Rostelecom



## **Peter M. Prokofiev**

Deputy for Business Development  
MegaFon, MegaLabs, Rostelecom, DATADVANCE



## **Dmitry Dylow**

Research team leader, PhD  
Princeton University (USA), GE, Edison Engineering Development Program



## **Maria Pukalchik**

Research team leader, PhD



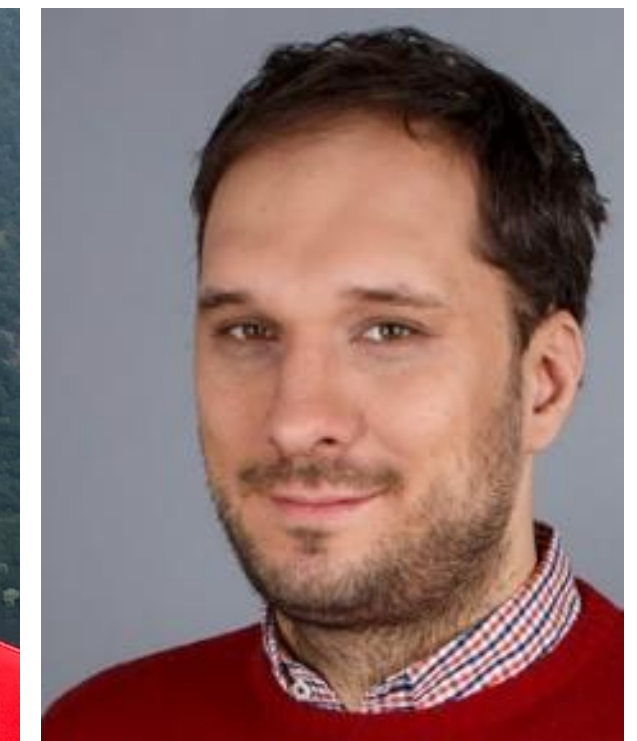
## **Evgeny Burnaev**

Research team leader, PhD  
MPTI, Higher School of Economics, Berlin Humboldt University, Laureate of the Moscow City Government



## **Alexei Frolov**

Research team leader, PhD  
Laureate of the Russian Government Award and Moscow Award



## **Ivan Oseledets**

Research team leader, PhD  
Laureate of the Russian President's Award