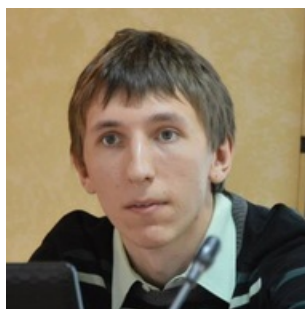




Sergey EFREMOV



PERSONAL DATA

PLACE AND DATE OF BIRTH: Moscow | 24 August 1987
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WORK EXPERIENCE (ACADEMIA)

Current - NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS:
Associate professor,
Deputy Head of the Department for Management of Information Systems
and Digital Infrastructure

Since | *School of Business Informatics*
SEP 2012 | Advanced programming (eng.) (Object-oriented programming in C#): course author and lecturer

Since | *ICEF HSE*
SEP 2015 | Programming and Data Processing (eng.): course author and lecturer

Previous experience:

AUG 2015 | *Moscow Institute of Electronics and Mathematics (MIEM)*
SEP 2012 | Computer network equipment: course author and lecturer

2015 | Student research laboratory: WiseNetLab
2007 | Member (2007-2010) and supervisor (2010-2015)

AUG 2010 | Research fellow at MIEM
SEP 2008 | Works related to the personal UMNIG grant (Development of autonomous monitoring and control system)

Awards and accomplishments (HSE)

- Best Teacher (2014-2018)
- Grant for academic achievements (2017)
- Rector grant (2014)
- Young Faculty Support Program (2014)

ACADEMIC TITLES

- 2013 Candidate of Sciences in Mathematical Modelling, Numerical Methods and Complexes of Programs
Higher School of Economics
Thesis title: "Lifetime modelling of dynamically reconfigurable sensor networks with mobile sink" | Supervisor: Prof. Leonid Voskov

EDUCATION

- JUNE 2010 MSc in COMPUTER SCIENCE
Moscow State Institute of Electronics and Mathematics
Diploma with Distinction
Thesis: "Mobile sensor networks with autonomous power supplies"
Supervisor: Prof. Leonid Voskov
- JUNE 2008 BSc in COMPUTER SCIENCE
Moscow State Institute of Electronics and Mathematics
Diploma with Distinction

SELECTED PUBLICATIONS

- Lysogor I. I., Voskov L., Efremov S. G. Survey of Data Exchange Formats for Heterogeneous LPWAN-Satellite IoT Networks, in: 2018 Moscow Workshop on Electronic and Networking Technologies (MWENT). Proceedings. M. : IEEE, 2018. P. 1-5.
- A. Dvornikov, P. Abramov, S. Efremov, L. Voskov. QoS metrics measurement in Long Range IoT networks. To appear in Proceedings of the 19th IEEE Conference on Business Informatics - CBI'17, Greece.
- (rus) N. Pilipenko, L. Voskov, S. Efremov. Dynamic assignment of protocols for interconnecting smart sensors in the Industrial Internet of Things. *Sensors and Systems*. 2016. No 3. pp. 3-8.
- S. Efremov, N. Pilipenko, L. Voskov, M. Komarov. Cloud IoT platforms: a solid foundation for the future Web or a temporary workaround? in: *Lecture Notes in Computer Science / Edited by.: S. Balandin, S. Andreev, Y. Koucheryavy. Vol. 9247: Internet of Things, Smart Spaces, and Next Generation Networks and Systems*. Springer International Publishing, 2015. P. 47-55.
- S. Efremov, N. Pilipenko, L. Voskov. An integrated approach to common problems in the Internet of Things, in: *Procedia Engineering Vol. 100: 25th DAAAM International Symposium on Intelligent Manufacturing and Automation, 2014. , 2015. P. 1215-1223*.
- (rus) L. Voskov, S. Efremov. The task of improving lifetime of autonomous wireless sensor networks in data acquisition systems and its solution // *Sensors and systems*. 2013. No 4(167). p. 2-9.

- Andrews D., Baber C., Komarov M. M., Efremov S. G. Creating and Using Interactive Narratives: Reading and Writing Branching Comics, in: CHI '12 Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems : ACM, 2012. P. 1703-1712.

SCHOLARSHIPS | CERTIFICATES | CONTESTS

- MAY 2016 MIT Professional education:
“Internet of Things: Roadmap to a Connected World”
- MAR. 2016 IoT Hackathon at the Bauman State Technical University (team supervisor)
- AUG. 2014 Microsoft Certified Professional (Programming in C#)
- MAR. 2013 Microsoft Imagine Cup regional final winner
- NOV. 2012 BerkeleyX 169.1x “Software as a Service”
BerkeleyX 188.1x “Artificial intelligence”
- JAN-AUG 2011 Internship at the University of Birmingham

LANGUAGES

- RUSSIAN: Native
- ENGLISH: Fluent
- GERMAN, FRENCH: Basic Knowledge

PROFESSIONAL SKILLS

- Programming: C#, C, C++, Python, Java, IA32 Assembly
- Other: Hardware protocols, Network simulation tools, Wireshark, SQL, HTML, Linux, \LaTeX , MS Office

PARTICIPATION IN COMMERCIAL IT PROJECTS AND STARTUPS

- [Thinger](#): Social Web of Smart Things (2013 - 2017): system design, analytics, development of backend software
- Self-service car wash [system](#) (2014 - 2017): system analysis, protocol design, development of user applications
- Data acquisition system for intra-logistics. Joint Russian-German research project with Fraunhofer IML (2010): lead developer of microcontroller software
- Smart Chalk interactive system (2009-2013): lead developer

INTERESTS AND ACTIVITIES

- Technological entrepreneurship
- E-learning platforms
- Startup projects
- Travelling, sports, photography