

*Dr. Sergey Andreev*

## CURRICULUM VITAE

Up-to-date CV is also available at: [http://www.cs.tut.fi/~andreev/data/andreev\\_CV.pdf](http://www.cs.tut.fi/~andreev/data/andreev_CV.pdf)

### 1. General information

- Name: Sergey Andreev, <http://www.cs.tut.fi/~andreev>
- Gender: Male
- Date: 2017, January 23



### 2. Date and place of birth, nationality, current residence

- Date of birth: 1984, October 21
- Place of birth: St. Petersburg, Russia
- Citizenship: Russian Federation
- Current residence: Tampere, Finland
- Primary contacts: Room TG417, Korkeakoulunkatu 1, FI-33720 Tampere, Finland, tel.: +358-44-329-42-00, e-mail: sergey.andreev@tut.fi

### 3. Education and degrees awarded

- Degree titles:
  - Tampere University of Technology : **Doctor of Technology** : 05.09.2012 : With Distinction
  - St. Petersburg State University of Aerospace Instrumentation (SUAI) : Candidate of Engineering Sciences (equivalent to Licentiate) : 20.10.2009
  - St. Petersburg SUAI : Master's degree equivalent in Information Systems Security : 31.05.2006 : Diploma with Honors, GPA 5.0 out of 5.0
  - High School with advanced education in mathematics, physics, and computer science : Graduation certificate : 31.05.2001 : Gold Medal, GPA 5.0 out of 5.0
- Research career:
  - **Postdoctoral Researcher**: Tampere University of Technology (Department of Electronics and Communications Engineering) : Research and teaching staff (5G+ and 5G Networks, Information Systems Security, Energy Efficiency, Cooperative Communication, Heterogeneous Networks, Machine-to-Machine Applications) : Jan 2013 – *present time*
  - **Researcher** : Tampere University of Technology (Department of Communications Engineering) : Research and teaching staff (Wireless Networking, Wireless Communications Technologies, Ad Hoc Networking) : Jan 2010 – Dec 2012

- **Teaching Assistant** : St. Petersburg SUAI (Department of Information Systems Security) : Research and teaching staff (Applied Programming, Data Networks, Reliability Theory) : Sep 2006 – Dec 2009

#### 4. Other education and training, qualifications and skills

- Study module: Pedagogical Skills for Teachers in Higher Education (10 credits)
- Training programme: Project Management for New Project Managers
- Various trainings, courses, and seminars (including Erasmus+ teacher mobility)

#### 5. Linguistic skills

- English : fluent, FCE certificate (A-level), CAE certificate (B-level)
- French : intermediate
- Finnish : basic
- Russian : native language

#### 6. Major research funding and student supervision

- Substantial research funding acquired:
  - EEPOS programme fund for research visits, 2016
  - Nokia Foundation, Jorma Ollila fund, 2015-2017
  - **Academy of Finland, PI of a sub-project, 2014-2016**
  - **Academy of Finland, Postdoctoral researcher funding, 2014-2017**
  - Short-Term Scientific Mission grant by COST IC0906 WiNeMO, 2012 and 2013
  - HPY Research Foundation grants, 2010 and 2011
  - Nokia Foundation scholarships, 2010 and 2011
  - TISE funding support, 2010-2012
- (Co-)supervision of research work:
  - Luis Filipe Dias de Sousa, "MAC Regenerative Analysis of Wireless Ad Hoc Networks," MSc thesis, 2010
  - Alexander Pyattaev, "System Level Performance Evaluation of Client Cooperation in Wireless Cellular Networks," MSc thesis (*with distinction*), 2011
  - Mikhail Gerasimenko, "Protocol-Level Simulations of Massive Medium Access for Machine-Type Communications," MSc thesis (*with distinction*), 2013
  - Amir Mehdi Ahmadian Tehrani, "Modeling Contention Behavior of Machine-type Devices over Multiple Wireless Channels," MSc thesis (*with distinction*), 2014
  - Olga Galinina, "Analytical Performance Evaluation of Cooperative and Multi-Radio Concepts in Emerging Wireless Networks," PhD thesis (funded by GETA, acceptance ratio of 15%), *with distinction*, 2015

- Alexander Pyattaev, "Technological and Architectural Enablers for Direct Device Connectivity in LTE Cellular Networks," PhD thesis (funded by TISE), *with distinction*, 2016
- Roman Florea, "Networking Solutions for Integrated Heterogeneous Wireless Ecosystem," MSc thesis (*with distinction*), 2016
- Aleksandr Ometov, "Enabling Secure Direct Connectivity Under Intermittent Cellular Network Assistance," MSc thesis (*with distinction*), 2016

## 6. Other scientific or academic merits and activities

- Membership and positions of trust in scientific societies:
  - Editor of *IEEE Wireless Communications Letters* (WCL)
  - TPC Co-Chair of 2014 IEEE Symposium on Computational Intelligence for Communication Systems and Networks (CICOMMS 2014)
  - TPC Co-chair and the *founder* of 1st – 7th International Workshop on Recent Advances in Broadband Access Networks (RABAN 2010-2016)
  - TPC Chair of 12th/13th/14th/15th International Conferences on Internet of Things, Smart Spaces, and Next Generation Networking (NEW2AN 2012-2015)
  - Exemplary Reviewer by *IEEE Communications Letters* in 2013
  - Management Committee member of COST Action IC0906
  - TPC member and reviewer for numerous professional conferences and workshops
- Refereeing for top-level scientific journals, including **IEEE JSAC**, **IEEE Commag**, **IEEE WCM**, **IEEE TWireless**, **IEEE TCOM**, **IEEE CL**, **IEEE/ACM TON**, etc.

## 7. Scientific and societal impact of research

- Total number of publications *after doctoral graduation* in the late 2012
  - A1: **over 35 scientific articles** in internationally recognized journals (incl. many papers in IEEE JSAC, Comms. Mag., Wireless Comms. Mag., etc.)
  - A3: currently, **5 chapters** in research books on wireless communications topics
  - A4: **over 55 conference papers** in high-level peer-reviewed conferences (incl. top-level IEEE GLOBECOM, ICC, ISIT, VTC, and WCNC conferences)
- D4: over 20 standardization contributions to 3GPP and IEEE work/task groups
- H2: a number of invention disclosures on emerging networking topics (**3 US patents**)
- Multiple demos, prototypes, and industry-grade proof-of-concept demonstrators

In addition, Sergey Andreev served as an **invited expert** in 5G-PPP Expert Group Workshop, China-Finland 5G Workshop, Centire Mobile Computing Workshop, **featured as a keynote speaker** at the 4th International Spectrum Congress, the 38th International Conference on Telecommunications and Signal Processing, and the 40th Interdisciplinary Conference & School Information Technology and Systems 2016, as well as **held** numerous **guest lectures** at industry (Intel, Ericsson, Nokia/NSN/Bell Labs, etc.) and academia worldwide.

### **Text-format CV essentials:**

Demonstrating **excellent performance** (GPA 5.0 out of 5.0), Sergey Andreev has graduated with his MSc-level degree from one of the top-level universities in Russia, St. Petersburg State University of Aerospace Instrumentation, in 2006 (in the field of *Information Systems Security*) and then with the Candidate of Engineering Sciences (Licentiate equivalent) degree from the same university in 2009. When he joined TUT in 2010, Sergey had already formed an **extensive research network** with his colleagues and collaborators across academia and industry. He has contributed to TUT his experience in combining the fundamental and the applied research with a strong focus on specific targets agreed with both academia experts and industry professionals.

Over the years, Sergey has been with multiple research visits to the top universities in the US, Europe, Russia, and Asia, where he socialized with colleagues building a rich and diverse social network to refine the essentials of his Postdoc research. Examples include Stanford University, Princeton University, UT Austin, UC Berkeley, and many others. Importantly, he has also been with **longer research mobility** to the top-level universities in the US (University of California, Los Angeles), Canada (University of Manitoba, Carleton University), and Russia (RUDN University). To date, his international Postdoc experience abroad **exceeds one year** in total.

Sergey has joint publications with his collaborators from USA, Sweden, Denmark, Belgium, UK, Canada, Italy, Germany, Austria, Czech Republic, Russia, China, Pakistan, Belarus, Slovakia, and Hungary. He also **co-authored** research papers with Ericsson Finland and Sweden, Intel US, Germany, and Denmark, Telekom Austria, Nokia (ex-NSN) Russia, T-Mobile Czech Republic.

Importantly, Sergey has also had an opportunity to learn the **industry vision** and sync up on the latest research developments in the course of his many visits to Intel Labs (CA and OR), Nokia Finland and France, Ericsson Finland and Sweden, as well as other companies. All these active contacts ensure the adequateness of Sergey's research agenda as well as its *high societal impact*.

In addition, Sergey has also demonstrated **technical leadership** abilities by establishing and guiding a research group on emerging 5G/IoT topics (<http://winter-group.net/>). His research and innovation activity has been well **covered in media** on both national and international levels:

<http://www.tut.fi/interface/articles/2014/1/5g-networks-would-enrich-our-lives-in-ways-never-seen-before>

<http://www.eurescom.eu/news-and-events/eurescommessage/eurescom-message-1-2014/interview-with-5g-expert-sergey-andreev.html>

Transferring knowledge to younger members of his research group, Sergey supervises MSc and PhD thesis work, as well as continues collaboration with the recently-graduated Postdocs.

To date, he has been provided with financial support from the **Academy of Finland** in various forms, including the very prestigious Postdoctoral Researcher Funding (2014-2017). The chances of success in the latter call have been 9% (only 35 out of 387 applications were funded).