

Saint Petersburg Electrotechnical University "LETI" (SPb ETU "LETI")
197376, Saint Petersburg, Russian Federation
Professor Popova str., 5





Professor Mikhail Kupriyanov

Saint Petersburg Electrotechnical University "LETI" (SPb ETU "LETI"), Saint Petersburg, Russian Federation

Education

- Engineer in the field of automatics, computer science and engineering (1973, faculty of Automatics, Computer Science and Engineering, SPb ETU "LETI")
- PhD in automatics, computer science and engineering (1977, faculty of Automatics, Computer Science and Engineering, SPb ETU "LETI")
- Dr. of Sci. in Computer Science and Engineering (1988, faculty of Computer Technologies and Informatics, SPb ETU "LETI")

Current roles at SPb ETU "LETI"

- Dean of the faculty (faculty of Computer Technologies and Informatics) since 2010
- Head of the department (Department of Computer Science and Engineering) since 2014
- Current member of Academic and Methodical Council "Information Systems and Technologies"
- Head of Academic and Pedagogical School "Theory, Design and Application of Electronic Systems"
- Head of Resource Center "Distributed Systems and Technologies"
- Head of Research and Academic Center "Microprocessor Technologies" since 1993
- Head of the master's program "Software for Information and Computational Systems"
- Head of Research Center "Hardware and Software for Problem-oriented Systems of Information Processing and Control"

- Member of two Dissertation Councils in SPb ETU "LETI" since 1993
- Head of research and academic projects at the faculty of Computer Technologies and Informatics since 2010

- Honoured Science Worker of the Russian Federation

Currently lecturing the following courses

- Software project management (bachelor / 50 students) - lectures, seminars, practical training

Research areas and publications

machine learning, data mining, neural networks, multidimensional visualization, computational technologies, distributed systems, parallel systems and algorithms, embedded systems, software engineering, digital signal processing, real-time signal processing, decision-making support systems, information systems, microprocessor technologies, multiprocessor systems, network technologies, databases, cloud computing, hydroacoustics, wideband monitoring

250 publications, 70 author's certificates and patents

Current research

- Simulation of agent search engines with self-recovery
- Development of digital signal processing algorithms for hydroacoustic monitoring tasks
- Design of self-organizing distributed systems
- Development of parallel algorithms for big data processing
- Development of algorithms for intellectual analysis of data (data mining algorithms) in distributed systems
- Development of algorithms for multidimensional visualization of data
- Development of real-time data mining algorithms and their software and hardware implementation

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research



Associate Professor Dmitry Klionskiy

**Saint Petersburg Electrotechnical University
"LETI" (SPb ETU "LETI"), Saint Petersburg, Russian
Federation**

Education

- Bachelor of Science in Applied Mathematics and Computer Programming (2007, Department of Software Engineering and Computer Applications, SPb ETU "LETI")
- Master of Science in Applied Mathematics and Computer Programming (2009, Department of Software Engineering and Computer Applications, SPb ETU "LETI")
- PhD in Applied Mathematics and Computer Science (2013, faculty of Computer Technologies and Informatics, SPb ETU "LETI")
- Bachelor of Science in Linguistics (2011, Saint Petersburg State University)

Current roles at SPb ETU "LETI"

- Associate professor (Departments of Software Engineering and Computer Applications, Department of Computer Science and Engineering, Department of Automated Information Processing and Control Systems) since 2014
- Deputy dean for international affairs (faculty of Computer Technologies and Informatics) since 2015
- Senior researcher (faculty of Computer Technologies and Informatics) since 2014
- Head of the research center of Digital Signal Processing (faculty of Computer Technologies and Informatics) since 2014

Currently lecturing the following courses

- Digital signal processing, digital information processing (bachelor / 50 students; master / 30 students, 3-4 credits) - lectures, seminars, practical training
- Structural and spectral analysis of information (master / 30 students, 3-4 credits) - lectures, seminars, practical training
- Informatics (bachelor / 30 students, 3 credits) - lectures, practical training
- Mathematics (bachelor / 30 students, 3 credits) - lectures, practical training
- Technical English (bachelor / 30 students, 2 credits) - lectures, practical training

Research areas and publications

digital signal processing, wavelets, spectral analysis, digital filtering, empirical mode decomposition, digital filter banks, adaptive filters, vibration signal processing, hydroacoustics, radio monitoring, reconfigurable systems, data mining, MATLAB, CUDA, educational technologies, technical English

90 publications, 5 patents

Current research

- Development of mathematical models, methods, and algorithms for hydroacoustic monitoring tasks
- Development of mathematical models, methods, and algorithms for radio monitoring tasks
- Development of new mathematical and software tools for telemetric signal processing
- Development of new modifications of reconfigurable structures
- Software implementation of algorithms in MATLAB

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research

Previous positions

- Assistant lecturer (Department of Software Engineering and Computer Applications, 2010-2014)
- Junior researcher (faculty of Computer Technologies and Informatics, 2010-2014)



Professor Yulia Shichkina

**Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation**

Education

- Master of Science in Theoretical Mathematics (1995, faculty of Mathematics and Mechanics, Tomsk State University, Russian Federation)
- PhD in Applied Mathematics (2004, faculty of Mathematics and Mechanics, Tomsk State University, Russian Federation)
- Dr. of Sci. in Applied Mathematics (2014, faculty of Computer Technologies and Informatics, SPb ETU "LETI")

Current roles at SPb ETU "LETI"

- Professor (Department of Computer Science and Engineering) since 2015
- Deputy head for academic affairs (Department of Computer Science and Engineering) since 2014
- Senior researcher (faculty of Computer Technologies and Informatics) since 2014

Currently lecturing the following courses

- Data management (bachelor / 30 students, 3 credits) - lectures, seminars, practical training
- Parallel programming (bachelor / 30 students, 3 credits) - lectures, seminars, practical training
- Programming languages and translation methods (bachelor / 30 students, 3-4 credits) - lectures, seminars, practical training
- Parallel algorithms and systems (master / 40 students, 3-4 credits) - lectures, practical training

Research areas and publications

parallel computing, databases, decision-making theory, computer algebra, high-performance computing, machine learning, data mining, programming languages

100 publications, 10 patents

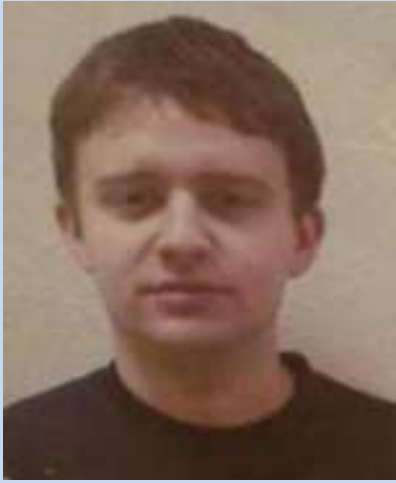
Current research

- **Development of efficient parallel algorithms for big data processing**
- **Development of new techniques for construction and optimization of information graphs of parallel algorithms**
- **Development of high-performance computing systems**
- **Development of decision-making tools**
- **Development of software tools for parallel data processing**

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research

Previous positions

- **Associate professor (Department of Theoretical Mathematics, Tomsk State University, Russian Federation, 2005-2007)**
- **Head of the Department (Department of Discrete Mathematics and Information Processing, Tomsk State University, Russian Federation, 2007-2014)**
- **Associate professor (Department of Computer Science and Engineering, SPb ETU "LETI", 2014-2015)**



Associate professor Dmitry Kaplun
Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation

Education

- Bachelor of Science in Automatics and Control Theory (2003, Department of Automation and Control Processes, SPb ETU "LETI")
- Master of Science in Automatics and Control Theory (2005, Department of Automation and Control Processes, SPb ETU "LETI")
- PhD in Automatics and Control Theory (2009, faculty of Computer Technologies and Informatics, SPb ETU "LETI")

Current roles at SPb ETU "LETI"

- Associate Professor (Department of Automation and Control Processes) since 2014
- Senior researcher (faculty of Computer Technologies and Informatics) since 2013

Currently lecturing the following courses

- Mathematical fundamentals of system theory (bachelor / 50 students, 3 credits) - lectures, seminars, practical training
- Microprocessor systems (bachelor / 50 students, 3 credits) - lectures, seminars, practical training
- Digital signal processing (master / 30 students, 3-4 credits) - lectures, seminars, practical training

Research areas and publications

digital signal processing, digital filtering, digital filter banks, hydroacoustics, radio monitoring, reconfigurable systems, microprocessor systems, distributed arithmetic, FPGA, MATLAB, CUDA
50 publications, 5 patents

Current research

- **Development of mathematical models, methods, and algorithms for hydroacoustic monitoring tasks**
- **Development of mathematical models, methods, and algorithms for radio monitoring tasks**
- **Development of new modifications of reconfigurable structures**
- **Software implementation of digital signal processing algorithms using MATLAB and CUDA**
- **Hardware implementation of digital signal processing algorithms using FPGA and digital signal processors**
- **Development of microprocessor systems**

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research

Previous positions

- **Assistant lecturer (Department of Automation and Control Processes, 2003-2014)**
- **Junior researcher (faculty of Computer Technologies and Informatics, 2010-2013)**
- **Researcher and programmer (Research Institute "Vektor", Saint Petersburg, Russian Federation, since 2007)**



Associate professor **Kirill Krinkin**

**Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation**

Education

- Master of Science in Computer Science and Engineering (2000, Department of Computer Science, Engineering, and Automated Systems, Komsomolsk-on-Amur State University, Russian Federation)
- PhD in Computational Science and Engineering (2004, faculty of Computer Technologies and Informatics, SPb ETU "LETI")

Current roles at SPb ETU "LETI"

- Associate Professor (Department of Software Engineering and Computer Applications) since 2006
- Senior researcher (faculty of Computer Technologies and Informatics) since 2011
- Head of the research center of open-source software and open-source platforms (faculty of Computer Technologies and Informatics) since 2009

Currently lecturing the following courses

- Operating systems (bachelor / 30 students, 2 credits) - lectures, seminars, practical training
- Computer networks (bachelor / 20 students, 3 credits) - lectures, seminars, practical training
- Technologies of data storage (master / 25 students, 3 credits) - lectures, seminars, practical training
- Software engineering for mobile devices (master / 25 students, 3 credits) - lectures, seminars, practical training

Research areas and publications

wireless networks, virtualization, cloud computing, smart spaces, smart systems, software engineering, open-source development, software development for mobile devices, power saving in computer networks

60 publications, 10 patents

Current research

- Development of open platforms for services with geographical context
- Development of libraries for automatic testing performance on mobile devices
- Development of programming languages and integrated environment for testing high-precision instruments
- Development of dynamic libraries for embedded systems based on Linux

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research. Financial support is also provided by EMC, Parallels, Nokia, Digital Design

Previous positions

- Assistant lecturer (Department of Software Engineering and Computer Applications, 2003-2006)
- Junior researcher (faculty of Computer Technologies and Informatics, 2006-2011)
- Associate professor of the Department of Mathematical and Information Technologies (Academic University of the Russian Academy of Sciences, Saint Petersburg, Russian Federation, since 2010)
- On-line training courses (Introduction to computer infrastructure, Operating systems, Data storage technologies, Computer programming using Qt/QtQuick, System programming in Linux, since 2009)
- Membership in academic communities (IEEE, ACM, IARIA SMART Conference Technical Program Committee, ruSMART Conference Technical Program Committee, since 2009)



Associate professor Ivan Holod

**Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation**

Education

- **Master of Science in Computer Science, Engineering and Automated Systems (1998, Department of Computer Science, Engineering, and Automated Systems, Chuvashia State University, Cheboksary, Russian Federation)**
- **PhD in Computational Science and Engineering (2003, faculty of Computer Technologies and Informatics, SPb ETU "LETI")**

Current roles at SPb ETU "LETI"

- **Associate Professor (Department of Computer Science and Engineering) since 2005**
- **Senior researcher (faculty of Computer Technologies and Informatics) since 2013**

Currently lecturing the following courses

- **Programming languages, grammars, and automata (bachelor / 30 students, 2 credits) - lectures, seminars, practical training**
- **Software development technologies (master / 20 students, 3 credits) - lectures, seminars, practical training**
- **Intellectual data analysis and data extraction (master / 25 students, 3 credits) - lectures, seminars, practical training**

Research areas and publications

data mining, machine learning, intellectual data analysis, software engineering, parallel computing, cloud computing, high-performance systems, databases, decision-making theory

105 publications, 10 patents

Current research

- **Development of efficient parallel algorithms for big data processing**
- **Development of high-performance computing systems**
- **Development of decision-making tools**
- **Development of software tools for parallel data processing**
- **Development of algorithms for intellectual analysis of data (data mining algorithms) in distributed systems**
- **Development of real-time data mining algorithms and their software and hardware implementation**

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research.

Previous positions

- **Assistant lecturer (Department of Software Engineering and Computer Applications, 2001-2005)**
- **Junior researcher (faculty of Computer Technologies and Informatics, 2006-2011)**
- **Researcher and software developer (Research and Engineering Center of Saint Petersburg**

Electrotechnical University, 2001-2014)

- **Head of the department (Research and Engineering Center of Saint Petersburg Electrotechnical University, since 2014)**



Associate Professor **Evgeniy Vorobjev**

**Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation**

Education

- Engineer in the field of aviation industry (1986, Leningrad University of Aerospace Instrumentation, Saint Petersburg, Russian Federation)
- Graduate of the Military-space Academy after A.F. Mogaiskiy (2003, Saint Petersburg, Russian Federation)
- PhD in electronics and recognition systems (2003, Military-space Academy after A.F. Mogaiskiy, Saint Petersburg, Russian Federation)

Current roles at SPb ETU "LETI"

- Head of the Department (Department of Information Security) since 2014
- Senior researcher (faculty of Computer Technologies and Informatics) since 2014

Currently lecturing the following courses

- Information security (bachelor / 30 students, 3 credits) - lectures, seminars, practical training
- Methods and tools of information security (bachelor / 20 students, 3 credits) - lectures, seminars, practical training

Research areas and publications

information security, quantum engineering, quantum computing, telecommunications, aerospace industry, aviation, space technologies

120 publications, 12 patents

Current research

- **Development of algorithms and tools for information protection**
- **Development of algorithms for quantum computing**

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research.

Previous positions

- **Senior lecturer of Advanced Training Courses for the Administration of Saint Petersburg (1999-2001)**
- **Associate professor and deputy head of the Department of Mathematical and Software tools (Military-space Academy after A.F. Mogaiskiy, 2001-2014)**
- **Expert of the Research Laboratory (Military-space Academy after A.F. Mogaiskiy, 2012-2013)**
- **Associate professor of the Department of Automated Information Processing and Control Systems (SPb ETU "LETI", 2014)**



Associate Professor Nadeжда Schegoleva

**Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation**

Education

- Master of Science in Computer Science and Engineering (1995, Department of Computer Science, Engineering, and Automated Systems, Komsomolsk-on-Amur State University, Russian Federation)
- PhD in Computational Science and Engineering (2000, faculty of Computer Technologies and Informatics, SPb ETU "LETI")

Current roles at SPb ETU "LETI"

- Associate Professor (Department of Software Engineering and Computer Applications) since 2007
- Senior researcher (faculty of Computer Technologies and Informatics) since 2011

Currently lecturing the following courses

- Computational mathematics (bachelor / 30 students, 3 credits) - lectures, seminars, practical training
- Verification, certification, and quality of software (bachelor / 20 students, 3 credits) - lectures, seminars, practical training
- Computerized techniques of personal identification (master / 20 students, 3 credits) - lectures, seminars, practical training
- Pattern recognition (master / 20 students, 3 credits) - lectures, seminars, practical training
- Digital image processing (master / 20 students, 3 credits) - lectures, seminars, practical training

Research areas and publications

biometrics, pattern recognition, face recognition, identification systems, image processing, signal processing, MATLAB, principal component analysis, classification, software verification, software testing, numerical methods

80 publications, 10 patents

Current research

- **Development of human face recognition algorithms**
- **Development of image recognition systems and their software implementation using MATLAB**
- **Development of two-dimensional principal component analysis for human face recognition**
- **Development of classification algorithms for multidimensional data processing**
- **Development of facial surface reconstruction algorithms**

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research.

Previous positions

- **Assistant lecturer (Department of Software Engineering and Computer Applications, 2000-2007)**
- **Junior Researcher (faculty of Computer Technologies and Informatics, 2000-2011)**
- **Senior Researcher and programmer of the Concern "Okeanpribor" (1997-2001)**
- **Senior Researcher and programmer of the Research and Engineering Center of Saint Petersburg Electrotechnical University (2007-2010)**



Professor Elena Solovjeva

**Saint Petersburg Electrotechnical University "LETI"
(SPb ETU "LETI"), Saint Petersburg, Russian Federation**

Education

- Engineer in the field of Information Technologies and Measurements (1987, Department of Radio engineering and Telecommunications, SPb ETU "LETI")
- PhD in electrical engineering (1990, Department of Theoretical Fundamentals of Electrical Engineering, faculty of Radio engineering and Telecommunications, SPb ETU "LETI")
- Dr. of Sci. in electrical engineering (2002, Department of Theoretical Fundamentals of Electrical Engineering, faculty of Radio engineering and Telecommunications, SPb ETU "LETI")

Current roles at SPb ETU "LETI"

- Head of the Department (Department of Theoretical Fundamentals of Electrical Engineering) since 2008
- Senior researcher (Department of Theoretical Fundamentals of Electrical Engineering) since 2008

Currently lecturing the following courses

- Theoretical fundamentals of Electrical Engineering (bachelor / 80 students, 4 credits) - lectures, seminars, practical training
- Digital Signal Processing (bachelor / 50 students, 3 credits) - lectures, seminars, practical training
- Fundamentals of Computer Simulation and Radio Electronic Device Design (bachelor / 40 students, 4 credits) - lectures, seminars, practical training

- Analysis and simulation of electric circuits (master / 30 students, 3 credits) - lectures, seminars, practical training

Research areas and publications

system identification, mathematical and computer modeling, electric circuits, non-linear systems, analogue systems, digital systems, digital signal processing, functional series, polynomials, neural networks

130 publications, 10 patents

Current research

- Development of new algorithms for signal processing using neural networks
- Development of computer simulation techniques for non-linear systems
- Development of new educational programs in the field of electrical engineering and computer simulation

The projects are funded by the Ministry of Education of the Russian Federation and the Russian Foundation for Basic Research.

Previous positions

- Assistant lecturer (Department of Theoretical Fundamentals of Electrical Engineering, 1990-1996)
- Associate Professor (Department of Theoretical Fundamentals of Electrical Engineering, 1996-2002)
- Professor (Department of Theoretical Fundamentals of Electrical Engineering, 2002-2008)