II International Conference "Cognitive Robotics", November 22-25, 2017, Tomsk, Russia, National Research Tomsk State University

The first information letter

The conference is organized by:

- The Russian Foundation for Basic Research
- National Research Tomsk State University. Tomsk, Russia
- National Research Tomsk Polytechnic University. Tomsk, Russia
- JSC Scientific-Research Institute of Semiconductor Devices, Tomsk; Russia
- Polzunov Altai State Technical University; Barnaul, Russia
- Karaganda State Technical University, Karaganda, Kazakhstan
- Information Satellite Systems named after Academician MF Reshetnev
- Association of Innovative Enterprises and Organizations of Tomsk and Tomsk Region
- "Radio-wave imaging" JSC. Tomsk, Russia
- Anhalt University of Applied Sciences, Germany
- National Instruments, USA.

Sponsors: National Instruments Corporation (USA)

Conference dates: November 22-25 2017

Conference venue: National Research Tomsk State University, 36, Lenin Avenue, Tomsk, Russia 634050.

CONFERENCE SECTIONS:

1. Cognitive technologies and artificial intelligence in control systems for land and air-based robotic systems, and robotic submarines.

- 2. Sensing technology for land and air-based robotic systems, and robotic submarines.
- 3. Design of robotic systems (UAVs, AUVs).
- 4. Psycho-emotional and socio-humanitarian aspects of robotics.
- 5. Educational robotics

CONFERENCE THEMES:

- Practical application of cognitive technologies;
- Land and air-based robotic systems, and robotic submarines;
- Design of robotic systems;
- Psycho-emotional and socio-humanitarian aspects of robotics;

- Intelligent reconfigurable systems for control, navigation and image processing for autonomous mobile robots;

- Algorithms and mathematical models of high-speed processing and analysis of images;
- Educational robotics.

ORGANIZING COMMITTEE

Conference chairman: **Vladimir I. Syryamkin,** D.Eng.Sc., professor, Head of the Department of Quality Control of the Faculty of Innovative Technologies, National Research Tomsk State University; academician of International Academy of Sciences of Higher Education and Russian Academy of Natural Sciences; Director of TSU scientific and educational center «Recognition: navigation, diagnostics, mechatronics».

Conference co-chairman - Eduard V. Galazhinsky, Doctor of Science (Psychology), Professor, academician of the Russian Academy of Education, Rector of Tomsk State University, Professor.

Conference co-chairman – **Stanislav V. Shidlovskiy** - D.Eng.Sc., Dean of the Faculty of Innovative Technologies of National Research Tomsk State University; Head of the Laboratory of high-performance reconfigurable systems (NR TSU); Professor of Tomsk Polytechnic University.

MEMBERS OF THE ORGANIZING COMMITTEE:

Ivan V. Ivonin, TSU Vice-Rector for Academic Research, Doctor of Physics and Mathematics, Professor

Eduard Siemens- professor, Anhalt University of Applied Sciences (Germany)

Ali D. Mehtiyev – Ph.D. in Eng.Sc., Head of the Department of Technologies and Communication Systems of Karaganda State Technical University

Alexander Yu. Verkhovskiy – Head of the Laboratory of Biochemistry of Transport Systems, Faculty of Innovative Technologies, National Research Tomsk State University

Anatoliy N. Soldatov – Dr. Sci. in Physics and Mathematics, professor, Head of the Regional Center of the Russian Association of Laser, Honored Inventor of the Russian Federation, dean of the FIT TSU

Maxim V. Syryamkin – director of the interacademic educational and scientific production center Technology Management, National Research Tomsk State University

Artem A. Ananin – Head of the scientific and educational projects of National instruments

Alexey A. Poguda – deputy Dean of the FIT TSU, coordinator of the conference site;

Denis N. Kuznetsov – FIT TSU, Conference Secretary, engineer of the Laboratory of high-performance reconfigurable systems.

PROGRAM COMMITTEE

Chairman: Alexey V. Yurchenko – D.Eng.Sc., professor, Senior Researcher of the international laboratory Vision Systems;

Co-chairman: Vladimir I. Syryamkin, D.Eng.Sc., professor, Head of the Department of Quality Control of the Faculty of Innovative Technologies, National Research Tomsk State University; academician of International Academy of Sciences of Higher Education and Russian Academy of Natural Sciences; Director of TSU scientific and educational center «Recognition: navigation, diagnostics, mechatronics»

Co-chairman: Stanislav V. Shidlovskiy - D.Eng.Sc., Dean of the Faculty of Innovative Technologies of National Research Tomsk State University; Head of the Laboratory of high-performance reconfigurable systems (NR TSU); Professor of Tomsk Polytechnic University.

MEMBERS OF THE PROGRAM COMMITTEE

V.S. Titov, D.Eng.Sc., professor, honored scientific worker of the Russian Federation, Head of the Department of Computer Science of Southwest State University (Kursk, Russia)

A.V. Lapota, Director-Chief constructor of the Russian State Scientific Center for Robotics and Technical Cybernetics, Saint-Petersburg, Russia

Anatoliy N. Soldatov – Dr. Sci. in Physics and Mathematics, professor, Head of the Regional Center of the Russian Association of Laser, Honored Inventor of the Russian Federation, dean of the FIT TSU

R. V. Mescheryakov, Vice-Rector of TUSUR for Research and Innovation, Chairman of the Russian National Committee of RoboCup

Nikola Sobutonov - Professor, Academician of the Bulgarian Academy of Sciences

Valery L. Vengrinovich – D.Eng.Sc., professor, Minsk, Belarus

Sergey B. Suntsov – JSC Information Satellite Systems named after Academician MF Reshetnev. (Krasnoyarsk);

Ali D. Mehtiyev – Ph.D. in Eng.Sc., Head of the Department of Technologies and Communication Systems of Karaganda State Technical University

Alexey G. Yakunin – Professor, Head of the Department of Computer Science, Computer Engineering and Information Security, Polzunov Altai State Technical University

Eduard Siemens- professor, Anhalt University of Applied Sciences (Germany);

Jurgen Schreiber CEO German-Korean Company «NUGA LAB GmbH», Prof. Fraunhofer Institute of Ceramic Technology and Systems (Germany)

E. S. Shandarov, head of the laboratory of robotics and artificial intelligence TUSUR, executive secretary of the Russian National Committee RoboCup.

CONFERENCE PARTICIPATION FEE

The registration fee for each participant is 3000 rubles (for students – 1500 rubles) when paying before November 1.

After November 1, the registration fee is 5000 rubles.

Registration fee includes the program and materials of the conference, participation in the work of sections, coffee breaks, etc. Bank account details and payment instructions will be sent to participants after papers approval.

CONFERENCE PAPERS

Instructions for authors are available at the Conference website.

Selected conference papers will be published in a scientific journal (Scopus database). The cost for publication is 5000 rubles. Language of publication is English.

Accommodation

For accommodation in Tomsk, please contact the conference organizing committee. The conference participants will be accommodated in the Hotel of Tomsk Polytechnic University (8 A. Ivanov St., Tomsk, Russia, tel.: +7 (3822) 417098.

PAPER SUBMISSION:

Participants must submit the application form via Internet site http://tic.tsu.ru/www/modules/liaise/?form_id=15

The deadline is November 11, 2017

CONTACT US

Address: Faculty of Innovative Technologies, National Research Tomsk State University, 36, Lenin Avenue, Tomsk, Russia 634050

Conference website: <u>http://tic.tsu.ru/www/conf/robot/2017/index.php?id=info</u>

Chairman of the organizing committee is Alexey V. Yurchenko, D.Eng.Sc., Senior Researcher of the International laboratory of Vision Systems of Tomsk State University. Tel.: +7 (913) 826-03-01, e-mail: niipp@inbox.ru

Conference secretaries: Rail N. Satarov and Denis Kuznetsov

E-mail: iit.robo.2017@gmail.com, tel. +79234034705.