MEMORANDUM OF AGREEMENT BETWEEN THE COMPUTER RESEARCH INSTITUTE OF KOROLEV SAMARA STATE
AEROSPACE UNIVERSITY (SSAU) SAMARA, RUSSIA AND THE SCHOOL OF MATHEMATICS AND INFORMATION
TECHNOLOGIES OF ULYANOVSK STATE UNIVERSITY (USU) ULYANOVSK, RUSSIA AND THE COMPUTER SCIENCE
DEPARTMENT OF TEXAS TECH UNIVERSITY (TTU) AND THE LABORATORY FOR SERVICE-ORIENTED COMPUTING ENVIRONMENT (SORCER) LUBBOCK, TEXAS, U.S.A.

Globally, communication plays an important role in all fields. The development of architectural innovations by distributing service and context providers with grid infrastructure providers to enable execution of service-oriented programs, especially in an advancing country, still lags. To solve this issue, collaboration among nations in research and education is an essential component of building a bright future for rapid progress in distributed design of robust and optimized products within an advanced globally integrated web-based environment.

In view of the importance of international exchange to higher education, we, Computer Research Institute of Korolev Samara State Aerospace University, School of Mathematics and Information Technologies of Ulyanovsk State University, and the Computer Science Department of Texas Tech University and the Laboratory for Service-Oriented Computing Environment (SORCER) declare their intention to collaborate in research and education and to pursue the programs described in the appended protocols.

PROTOCOLS

1 ACADEMIC EXCHANGE

Visiting students may be classified as doctoral, postdoctoral, undergraduate, graduate, nondegree-seeking, or as visiting scholars pursuing course work, engaging in study and/or research as implied by their classification. The length of time committed is subject to the regulations of the host country and institution. Such academic exchange should be accomplished through Reciprocal and/or Consortium Study Abroad Programs to be established by agreements between the partner institutions. Reciprocal Study Abroad Programs allow students to pay tuition and fees at their home institution and will be balanced through various combinations of student, faculty, and other participation in this program. Consortium Study Abroad Programs allow students to pay tuition and fees directly to the host institution and ensure that the student remains eligible for the home university financial aid and scholarships, that the student does not need to apply for readmission, that the credit for course work completed while on the program will be accepted at the home university, and that the student's home department will determine how this credit will be applied toward his/her degree.

A. Eligibility of SSAU students to enter TTU

With demonstrated proficiency in the English language, SSAU students in their third or fourth year of study (screened and selected by SSAU) become eligible for study at TTU on a reciprocal exchange or consortium basis. The total number of these students at any time is fixed at the discretion of TTU. Courses taken at TTU will apply towards the students' degree plans at the discretion of SSAU.

B. Eligibility of TTU students to enter SSAU

Following at least two years of study at TTU, TTU students become eligible for research at SSAU on a consortium basis. The total number of these students at any time is fixed at the discretion of SSAU. Research at SSAU is performed in English. Russian language has a status "optional" for those TTU students wishing to take courses taught at SSAU in Russian. Proficiency in Russian sufficient for that can be acquired during a preparatory summer semester at a Russian Language Camp organized jointly (or by turns) by SSAU and USU. Courses taken at SSAU will apply towards the students' degree plan at the discretion of TTU.

C. Eligibility of USU students to enter TTU

With demonstrated proficiency in the English language, USU students in their third or fourth year of study (screened and selected by USU) become eligible for study at TTU on a reciprocal exchange or consortium basis. The total number of these students at any time is fixed at the discretion of TTU. Courses taken at TTU will apply towards the students' degree plans at the discretion of USU.

D. Eligibility of TTU students to enter USU

Following at least two years of study at TTU, TTU students become eligible for research at USU on a consortium basis. The total number of these students at any time is fixed at the discretion of USU. Research at USU is performed in English. Russian language has a status "optional" for those TTU students wishing to take courses taught at USU in Russian. Proficiency in Russian sufficient for that can be acquired during a preparatory summer semester at the Russian Language Camp organized jointly (or by turns) by SSAU and USU. Courses taken at USU will apply towards the students' degree plan at the discretion of TTU.

E. Eligibility of USU students to enter SSAU

Following at least three years of study at USU, USU students become eligible for study

at SSAU on a reciprocal exchange or consortium basis, or for research at SSAU on a consortium basis. The total number of these students at any time is fixed at the discretion of SSAU. Courses taken at SSAU will apply towards the students' degree plan at the discretion of USU.

F. Eligibility of SSAU students to enter USU

Following at least three years of study at SSAU, SSAU students become eligible for study at USU on a reciprocal exchange or consortium basis, or for research at USU on a consortium basis. The total number of these students at any time is fixed at the discretion of USU. Courses taken at USU will apply towards the students' degree plan at the discretion of SSAU.

2 REGULAR MUTUAL VISITING FACULTY APPOINTMENTS FOR RE-SEARCH AND TEACHING

Three partner institutions will prepare lists of professors to be appointed Adjunct or Visiting Professors or researchers at TTU or SSAU or USU for emphasis on research and/or teaching. Each side decides on selection who will be appointed to work abroad. For example TTU CS department will decide who will go to Russia; obviously the Russian side can accept or reject the candidate. The host institution will decide who will be invited as Adjunct Professor or Visiting professor or researcher. Supporting documents for each Adjunct Professor or Visiting Professor or researcher will include a resume of scientific research and teaching experience as well as language skills. Adjunct and Visiting Professors will be eligible to offer courses according to the professors' availability and the need of the host institution. Inclusion in these lists does not obligate the institution in any manner, nor does it incur any financial liability. Arrangements for travel expenses and stipends are to be made on an individual basis as permitted by availability of funds.

3 GRADUATE EDUCATION

To foster, enrich, and broaden international experience at the doctoral and postdoctoral education level, a program will be developed to allow doctoral and postdoctoral students to pursue class work at the partner institution while conducting their research at the home institution in order to pursue researchable needs relevant to their home institution. For example, students from Russia would attend TTU to complete all required course work and would then return to Russia to conduct the research for their degree in country. The student graduate committee will be co-chaired by faculty members from the two of three partner institutions and require that, during the research phase, the co-chairs shall meet at least once early in the research program in the place where the research is located to assist in directing the research program. Both co-chairs should be present at the students' final defense.

4 COMPLETION OF COOPERATIVE RESEARCH PROGRAMS

To foster, enhance, and strengthen research opportunities, a program of cooperative research will be actively pursued between the partner institutions. Cooperative research that addresses researchable needs of mutual interest and opportunities for joint funding of projects will be actively pursued. Such research should offer graduate training and exchange of scientists for enrichment experiences and training in research techniques. It is visualized that such research will focus on computer science, particularly in the field of Service Federated Grids research.

5 CANCELLATION

Inasmuch as the success of this partnership is totally dependent upon the willingness of the faculty and the students of the partner institutions to participate in the programs, each institution is free to cancel this agreement six months prior to the end of the year.

6 OFFICIAL ACKNOWLEDGMENT AND LEGAL ADDRESSES

The following Parties have agreed with the terms described in the present Agreement:

• Texas Tech University Box 43104, Boston & 8th, Lubbock, TX 79409, USA Dr. Jon Whitmore President of Texas Tech University Signature Date Dr. William M. Marcy Senior Vice President and Provost Signature Date Ambassador Tibor Nagy Vice Provost for International Affairs Signature Date Prof. Michael W. Sobolewski SORCER Lab Director Signature Date

• Korolev Samara State Aerospace University

34 Moscowskoe Shosse, Samara 443086, RUSSIA

	Prof. Victor A. Soyfer, Corresponding Member of Russian Academy of Sciences	
Signature	Chancellor	Date
	Prof. Feodor V. Grechnikov, D.Sc. (Eng.)	
Signature	Provost for Academic Affairs	Date
	Prof. Eugene V. Shakhmatov, D.Sc. (Eng.)	
Signature	Provost for Research and Innovations	Date
	Alexander I. Danilin	
Signature	Head of Office for International Affairs	Date
	Prof. Vladimir A. Fursov, D.Sc. (Eng.)	
Signature	Director of Computer Research Institute, Head of Computer Science Department	Date
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	Prof. Boris M. Kostishko, D.Sc. (Phys. & Math.)	
Signature	Chancellor	Date
	Prof. Yuri V. Polyanskov, D.Sc. (Eng.)	
Signature	President	Date
	Prof. Tofik Z. Biktimirov, C.Sc. (Med.)	
Signature	Provost for Academic Affairs	Date

	Prof. Tatyana E. Nikitina	
Signature	Provost for International Relations and Social Policy	Date
	Prof. Alexander A. Butov, D.Sc. (Phys. & Math.)	
Signature	Dean	Date
	Prof. Innokentiy V. Semushin, D.Sc. (Eng.)	
Signature	Cooperation Program Coordinator	Date