

CURRICULUM VITAE

Personal information

Full name: Christina Brester
Citizenship: Russian
Date of Birth: 17.02.1991
Marital Status: Single

Contacts

E-mail:
christina.brester@gmail.com
Phone: +7-923-288-92-52

Scientific Interests

- Evolutionary Computation,
- Neuroevolutionary Algorithms,
- Multi-objective Optimization,
- Stochastic Algorithms in Speech Analysis,
- Automated Design of Mathematical Models,
- Machine Learning,
- Data Analysis.



Education

In April 2016 I defended the PhD thesis ‘**Cooperative Evolutionary Method for Multi-Objective Optimization in Speech Analysis**’.

Siberian State Aerospace University, Krasnoyarsk, Russia (SibSAU),
Institute of Computer Science and Telecommunications (ICST):

- *Sep 2014 – Aug 2016: **PhD student in Computer Science and Engineering***
- *Sep 2012 – Jun 2014: **Master’s degree of technics and technologies** in System Analysis and Control, *Diploma with Honor**
- *Sep 2008 – Jun 2012: **Bachelor’s degree of technics and technologies** in System Analysis and Control, *Diploma with Honor**

Work experience

- *Sep 2016 – till now: **Senior Lecturer**, Siberian State Aerospace University, Krasnoyarsk, Russia*
- *Oct 2015 – Jul 2016: **Researcher**, University of Eastern Finland, Kuopio, Finland*
- *Oct 2012–Oct 2015: **Junior Research Fellow**, Siberian State Aerospace University, Krasnoyarsk, Russia*
- *Apr 2012–Jan 2013: **Analyst**, ‘Siberian Integration Systems’, Krasnoyarsk, Russia*

Participation in International projects

1. *Sep 2013–Jun 2014: ‘Evolutionary Algorithms in Automated Recognition of Paralinguistic Signals’, Ulm University (‘Leonhard-Euler Scholarship Program’, DAAD, Germany), *student-implementer*.*
2. *Oct 2015–Jul 2016: ‘Automated Generation of Mathematical Models for Epidemiological Data’, University of Eastern Finland, Kuopio (Russian Federation Presidential Fellowship for research stay), *researcher*.*

Selected Publications

1. **Brester C.**, Kauhanen J., Tuomainen TP., Semenkin E., Kolehmainen M. Comparison of Two-Criterion Evolutionary Filtering Techniques in Cardiovascular Predictive Modeling. Proceedings of the 13th International Conference on Informatics in Control, Automation and Robotics (ICINCO’2016), Lisbon, Portugal, 2016, pp. 140-145.
2. **Brester C.**, Semenkin E., Sidorov M., Kovalev I., Zelenkov P. Evolutionary feature selection for emotion recognition in multilingual speech analysis. Proceedings of the IEEE Congress on Evolutionary Computation (CEC2015), Sendai, Japan, 2015, pp. 2406–2411.
3. **Brester C.**, Semenkin E., Sidorov M., Semenkina O. Multicriteria Neural Network Design in the Speech-Based Emotion Recognition Problem. Proceedings of the International Conference on Informatics in Control, Automation and Robotics (ICINCO’2015), Colmar, France, 2015, vol. 1, pp. 621– 628.
4. **Brester C.**, Semenkin E. Cooperative Multi-Objective Genetic Algorithm with Parallel Implementation. Proceedings of the Sixth International Conference on Swarm Intelligence (ICSI 2015), Beijing, China, 2015, pp. 471–478.

5. Sidorov M., **Brester C.**, Schmitt A. Contemporary Stochastic Feature Selection Algorithms for Speech-based Emotion Recognition. Proceedings of the Annual Conference of the International Speech Communication Association (INTERSPEECH'2015), Dresden, Germany, September 2015, pp. 2699-2703.
6. **Brester C.**, Sidorov M. and Semenkin E. Acoustic Emotion Recognition: Two Ways of Features Selection based on Self-Adaptive Multi-Objective Genetic Algorithm. Proceedings of the 11th International Conference on Informatics in Control, Automation and Robotics (ICINCO'2014), Vienna, Austria, 2014, vol. 2, pp. 851–855.
7. Sidorov M., **Brester C.**, Minker W., Semenkin E. Speech-Based Emotion Recognition: Feature Selection by Self-Adapted Multi-Criteria Genetic Algorithm. Proceedings of the 9th edition of the Language Resources and Evaluation Conference (LREC), Reykjavik, Iceland, 2014, pp. 3481–3485.

*And more than **thirty** papers in proceedings of different conferences and scientific journals.*

Selected Academic Awards

1. Recipient of the Russian Federation Presidential Fellowship for research stay abroad, 2015-2016.
2. Recipient of the Presidential scholarship for PhD students, Russian Federation, 2015-2016.
3. Recipient of the state award of Krasnoyarsk region for the high contribution to scientific research, Krasnoyarsk, 2015.
4. Winner of the competition 'Leonhard-Euler Scholarship Program' (DAAD, Germany, 2013-2014).
5. Recipient of the Presidential scholarship for students, Russian Federation, 2013-2014.
6. Laureate of the All-Russian competition of students in the area of System Analysis, Moscow, Russia, 2013, the 1st team place.
7. Laureate of the All-Russian competition of students' and Ph.D. candidates' research works in the area of technical sciences, St. Petersburg, Russia, 2012.

Selected Grants

1. Project 'Speech-based speakers and speakers' personal characteristics recognition' Krasnoyarsk, Russia, 2013-2016. *Head.*
2. Project 'Speech-based recognition of students and their emotional states with adaptive intelligent informational technologies' SibSAU, Russia (2013-2014). *Head.*
3. Project 'Models and algorithms of data mining systems with adaptation mechanism for solving of modeling and optimization problems in complex technical systems' supported by the President of the Russian Federation (MK-5391.2014.9) (2014-2015). *Implementer.*
4. Russian-German projects devoted to development of methods of intellectual data analysis in multi-linguistic systems (Federal Program, contracts No 11.519.11.4002 and 16.740.11.0742) (2013). *Implementer.*
5. Federal Program 'Development of methods and technologies of intellectual data analysis algorithms parallelization in multiprocessor and distributed computational systems' (2012). *Implementer.*

Additional qualifications

«CS188.1x: Artificial Intelligence» (successfully completed)	A course of study offered by BerkeleyX, an online learning initiative of the University of California, Berkeley through edX
«CS271: Introduction to Artificial Intelligence» (successfully completed with high distinction)	An online course of study offered by Professors Sebastian Thrun and Peter Norvig, Stanford University through Udacity
«CS373: Artificial Intelligence for Robotics» (successfully completed with high distinction)	An online course of study offered by Professor Sebastian Thrun, Stanford University through Udacity

Interests, skills and other information

Languages	Computer skills	Hobbies
Russian, native English, advanced German, elementary	Programming languages: C++ (mainly); Pascal, SQL, Python (some experience). Platforms: MathCad, Statistica, MS Visual Studio, InterSystems Ensemble, MATLAB, CodeBlocks, Embarcadero RAD Studio, WEKA, RapidMiner.	Reading, travelling, learning English, cooking