

Personal information:

Full Name: Alexey Anatolievich KARPOV

Affiliation: Saint - Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences (SPIIRAS), Speech Informatics Group

Position: PhD student (2nd year) and part-time researcher (three years experience) in SPIIRAS

Birth date: 17.11.1978

Education:

Master of Sciences in specialty: "Computational and radio- electronic systems" in Saint- Petersburg State University of aerospace instrumentation

PhD student (2nd year) in specialty "Mathematical and software support of computers, complexes and computer networks". PhD thesis: "System of training of speaker- independent Russian speech recognition system"

Research experience (field + short summary of work done):

Development of the methods and algorithms for Digital Signal Processing (feature extraction, HMM creation and training) and Human- Computer Interaction (voice operated control systems, dialogue systems, multimodal systems for disabled people), programming using C++ (development of complex for ASR training, engine for ASR).

Main Publications (in relation with the workshop themes):

- 1) A.L. Ronzhin, A.A. Karpov. Voice Access System for Yellow Pages Service. In Proc. of 3- rd International IEEE Conference: Sciences of Electronic, Technologies of Information and Telecommunications SETIT- 2005, Tunisia, 2005.
- 2) A.L. Ronzhin, A.A. Karpov. Large Vocabulary Automatic Speech Recognition for Russian Language. In Proc. of Second Baltic Conference on Human Language Technologies, Estonia, 2005, pp. 329- 334.
- 3) A.A. Karpov. Robust method for determination of boundaries of speech on basis of spectral entropy. Scientific- theoretical journal "Artificial intelligence", Donetsk, Ukraine, 2004. Vol.4. pp. 601- 607.
- 4) A.A. Karpov, A.L. Ronzhin, A.I. Nechaev, S.E. Chernakova. Assistive multimodal system based on speech recognition and head tracking. 9th International Conference SPECOM'2004, Russia, 2004, St. Petersburg, Publishing house "Anatolya", 2004, pp.521- 530.
- 5) A.L. Ronzhin, A.A. Karpov. Implementation of morphemic analysis for Russian speech recognition. 9th International Conference SPECOM'2004, Russia, 2004, St. Petersburg, Publishing house "Anatolya", 2004, pp.291- 296.

Skills I can bring to the eINTERFACE projects:

- Programmer: MS Visual C++, Borland C++ Builder, Delphi, Telephone API, CORBA, COM, WinSockets, MS SQL Server, HTML, Assembler ;
- Digital Speech Processing Software: Hidden Markov Toolkit (HTK), Microsoft Speech API, CoolEdit, SPIIRAS Speech Recognition Technologies.

Other activities and Hobbies:

- football, ping- pong, rock music