University	Peter the Great St.Petersburg Polytechnic University
Level of English proficiency	Intermediate (B1)
Educational program and field of the educational program for which the applicant will be accepted	ENGINEERING &TECHNOLOGY 2.1.13. Radio engineering, including television systems and devices
List of research projects of the potential supervisor (participation/leadership)	2010 – Development of methods and algorithms for signal processing and analysis for wireless LTE systems; 2012 – Development of the special software for analysis of technical characteristics of OFDM signals; 2012 – Development of methods and algorithms for signal processing and analysis for wireless TD SCDMA systems; 2012 – Development of the software module for measuring of signal modulation characteristics; 2013 – The personal satellite communication system based on satellite transponders located in geostationary orbit; 2013 – Research and development of algorithms for location of radiation sources in telecommunication networks; 2013 – Improved algorithm for spectrum envelope estimation of the speech signal; 2014 – Improved algorithm for the parameterization of speech in the task of recognition of Conjoint Russian speech.
List of the topics offered for the prospective scientific research	Speech, audio and image processing; Systems and devices for signal processing.
 Research supervisor: Eugene A. Popov PhD	2.02. Electrical eng., electronic eng. Supervisor's research interests Statistical radio engineering, Digital signal processing, Information theory. Supervisor's specific requirements: Writing of scientific papers, participation in projects, conferences and seminars. Supervisor's main publications • Gelgor, A. Gorlov, E. Popov. Improving Energy Efficiency of Partial Response Signals by Using Coded Modulation. 3rd International Black Sea Conference on Communication and networking. May 18–21, 2015. Constanta, Romania. • Gelgor, A. Gorlov, E. Popov. Multicomponent Signals for Bandwidth-Efficient Single-Carrier Modulation. 3rd International Black Sea Conference on Communication and networking. May 18–21,2015. Constanta, Romania • Gelgor, A. Gorlov, E. Popov. On the Synthesis of Optimal Finite Pulse for Bandwidth and Energy Efficient Single-Carrier Modulation. Internet of Things, Smart Spaces, and Next Generation Networks and System. 15th International Conference, NEW2AN 2015 and 8th Conference, ruSMART 2015, St. Petersburg, Russia, August 26–28, 2015, Proceedings • Gelgor, A. Gorlov, P. Ivanov, E. Popov A. Arkhipkin, T. Gelgor. Improving BER Performance of Uplink LTE by Using Turbo Equalizer. Smart Spaces, and Next Generation

	Networks and System. 15th International Conference, NEW2AN 2015 and 8th Conference, ruSMART 2015, St. Petersburg, Russia, August 26–28, 2015, Proceedings • Дворников С.В., Крячко А.Ф., Попов Е.А. Дворников С.С., Томашевич С.В. Компенсация структурных помех в радиочастотных каналах управления робототехнических систем. Радиотехника, 2021, № 11. • Савищенко Н.В., Исса А. Ишимов А.С. Попов Е.А. Расчёт вероятности ошибки в канале с обобщёнными k-m-замираниями и аддитивным белым гауссовским шумом. Радиотехника 2023, № 3.
	Results of intellectual activity Development of telecommunication support for the intelligent transport system of St. Petersburg Development of a multichannel device for delivery, visualization and storage of auditory diagnostic signals for unconditionally reflex audiometry