University	Peter the Great St. Petersburg Polytechnic University
Level of English proficiency	Fluent
Courses and fields of studies offered for applicants	2.1.8 Design and construction of roads, subways, airfields, bridges and transport tunnels
Topics offered for prospective researches	1. Procedure for a highway profile formation with the use of optimization modeling tools. 2. Formation of a resource supply system for road construction projects with the use of mathematical modeling tools. 3. Justification of reliability indicators for the operation of transport infrastructure facilities with the use of mathematical modeling tools. 4. Procedure for creation of the work schedule within the technological process of highway construction with the use of optimization modeling tools.
 Research supervisor: Radaev Anton Evgenievich, Candidate of Technical Sciences, Candidate of Economic Sciences (Peter the Great St. Petersburg Polytechnic University)	*2.01. Civil engineering* *Construction & building technology*
	Supervisor's research interests Application of mathematical modeling tools to solve problems in the field of technology and organization of road construction.
	Study program highlights 1. Formalized description of the applied problems under consideration in the form of analytical, optimization and simulation models. 2. Application of computational algorithms available in modern software environments for optimization and simulation modeling to solve applied problems in the field of road construction
	Supervisor's specific requirements: 1. Education: higher technical 2. Level of higher education: master's degree 3. Number of scientific publications indexed in the international databases Web of Science, Scopus: at least 1 4. Level of English or Russian language proficiency: not lower than Upper Intermediate (B2) 5. Experience in conducting scientific research, preparing scientific articles, public speaking
	Supervisor's publications Total number of publications over the past 5 years: – in journals indexed by Web of Science – 4; – in journals indexed by Scopus – 14; – in journals indexed by RSCI – 5. The most significant publications: 1. Zanina, A., Lazarev, Y., Radaev, A. Determination of the structure for the road construction machinery fleet on the basis of fractional linear optimization // Transportation Research Procedia. 2022. Vol. 63. Pp. 27–40. DOI: 10.1016/j.trpro.2022.05.004. 2. Sturova, M., Novik, A., Radaev, A., Shangutov, A. Optimization model for the distribution of investment volumes by measures to reduce the impact of risks in road construction //

	Transportation Research Procedia. 2022. Vol. 63. Pp. 2866–2874. DOI: 10.1016/j.trpro.2022.06.333. 3. Fomicheva, V., Zanina, A., Radaev, A. Determination of optimal values for the technical characteristics of construction machinery unit with application of fractional linear programming // E3S Web of Conferences. 2021. Vol. 263. No. 04034. DOI: 10.1051/e3sconf/202126304034. 4. Matskina, M.M., Petrochenko, M.V., Radaev, A.E. Stochastic model of the construction process implemented with application of sliding formwork // Magazine of Civil Engineering. 2021. Vol. 101(1). No. 10111. DOI: 10.34910/MCE.101.11. 5. Rybitskiy, V., Radaev, A. Optimization Model for the Distribution of Production Resources by Elemental Sections of Railway Mainline // Lecture Notes in Civil Engineering. 2021. Vol. 150 LNCE. Pp. 356–368. DOI: 10.1007/978-3-030-72404-7_35.
	Impacts of Supervisor's research *(при наличии)* Certificate of state registration of computer program No. 2020665851 Russian Federation. Program for predictive assessment of the specific cost of thermal insulation material based on its technical characteristics: No. 2020664524: declared. 11/19/2020: published. 12/01/2020 / O. S. Gamayunova, A. E. Radaev, T. A. Musorina; applicant Federal State Autonomous Educational Institution of Higher Education "Peter the Great St. Petersburg Polytechnic University" (FSAEI HE "SPbPU"). – EDN AYSUMQ.