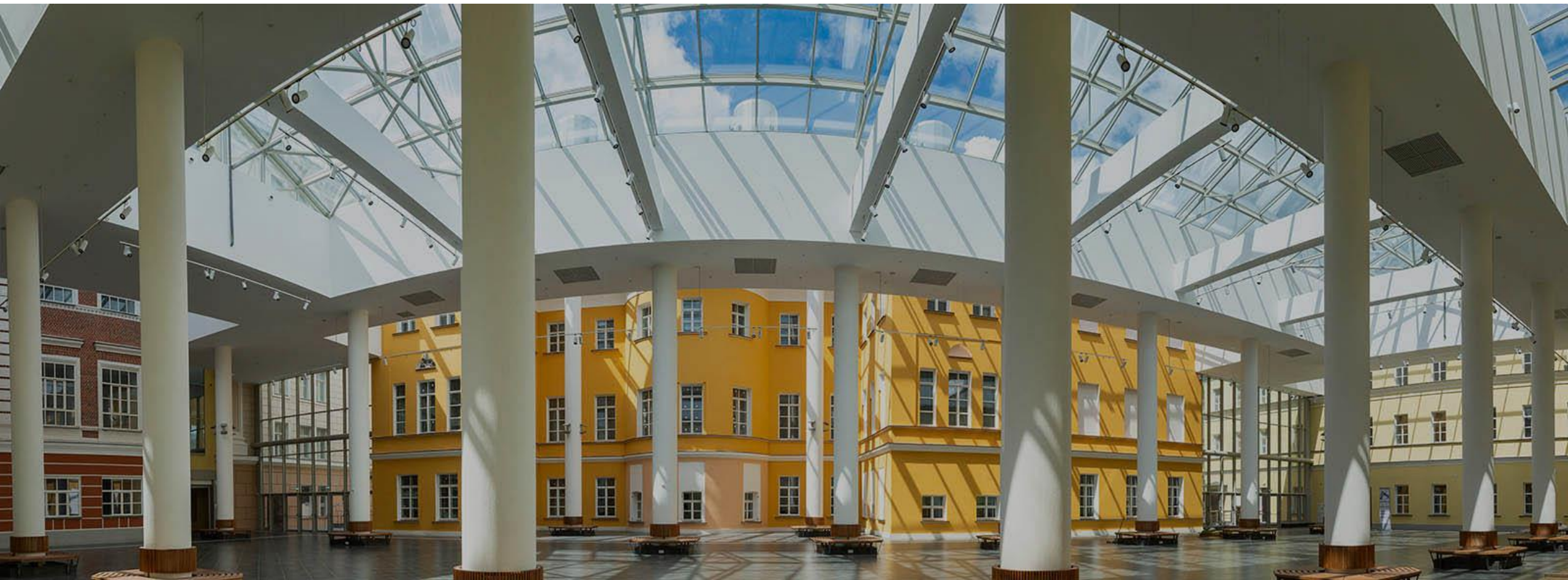




Faculty of Computer Science



About the Faculty

Founded in March 2014

5

bachelor's
programmes

16

laboratories

10

master's
programmes

1

research center

1

doctoral school

500

employees

5000

students

13

Russian Science Foundation
grants

433

foreign
students

22

vocational education
programmes

About the Faculty



Bachelor's programmes

- Applied Mathematics and Information Science
- Software Engineering
- Data Science and Business Analytics
- Computing and Data Analysis (online)
- Economics and Data Analysis



Center for Student Competitions



HSE Students Win Gold and Silver at ICPC Semifinal



On December 6–7, 2022, the semifinal of the International Collegiate Programming Contest (ICPC) took place in St Petersburg. Two teams from the HSE Faculty of Computer Science won medals at NERC 2022: FFTilted took overall 2nd place and received the gold medal, and It Has To Work took 8th place (silver medal). Two teams from HSE University—FFTilted (Moscow) and Just3Keks (St Petersburg)—will take part in the ICPC finals, which will be held in Egypt in 2023.



FCS Students Win at International Mathematics Competition



Three bachelor's students from the HSE Faculty of Computer Science programme in 'Applied Mathematics and Information Science' recently participated in the International Mathematics Competition for University Students (IMC), winning two first prizes and a second prize.

Studying at the Faculty: scholarships

- Scholarship for International Olympiad for High School Students Winners
- Scholarship for Research Achievements
- Scholarship for the Best Study Assistants
- 1C:Scholarship
- Ivannikov Institute for System Programming Scholarship
- Ilya Segalovich Scholarship
- Student Competition Participants' Scholarship for the first-year students
- Young Entrepreneur Scholarship
- Scholarship for Study Excellence for the second-year students
- Competitive Programming Achievements Scholarship

Studying at the Faculty: features

- ▶ Studying in modules with short exam sessions
- ▶ Grading system, importance of accumulated grade
- ▶ Balanced courses
- ▶ Large volume of homework
- ▶ Elective courses
- ▶ Research workshops
- ▶ International academic mobility
- ▶ High level of self-reliance
- ▶ English-taught courses in every study programmes
- ▶ Study assistants

Programme comparison

303

Applied
Mathematics
and Computer
Science

145 state-paid spots

Russian, some courses
in English

Research

A lot of basic math

289

Data Science
and Business
Analytics

Paid tuition only

English

Applied data analysis

A lot of basic math

289

Software
Engineering

135 state-paid spots

Russian, some courses
in English

Software development

Less basic math, more
software development

Computing and
Data Analysis

Paid tuition only

Russian, online
programme

Research and software
development

A lot of basic math

387

Economics and
Data Analysis

205* state-paid spots

Russian, some courses
in English

Data analysis in
economics

A lot of economics

* for three study programmes at the Faculty of
Economics

Master's programmes

- Data Science (joint with the Kharkevich Institute for Information Transmission Problems)
- Data Analysis in Biology and Medicine
- Math of Machine Learning (in English, joint with Skoltech)
- Financial Technologies and Data Analysis (joint with Sber)
- Machine Learning and Data-Intensive Systems (online)
- Master of Data Science (online, joint with Yandex)
- Modern Computer Sciences (joint with Yandex)
- System and Software Engineering
- System Programming (joint with Ivannikov Institute for System Programming)
- Data Analysis in Development (joint with Samolet)

Joint departments

- Yandex
- Sber
- 1C
- Tinkoff Bank
- MTS
- Russian Academy of Sciences' institutes
 - Ivannikov Institute for System Programming
 - Information Science and Control Federal Research Center
 - Steklov Mathematical Institute



Teaching



Research



Topics for theses



Scholarships



Projects



Internships



Training



Workshops

Research: laboratories

- ▶ Centre of Deep Learning and Bayesian Methods
- ▶ International Laboratory for Intelligent Systems and Structural Analysis
- ▶ International Laboratory of Stochastic Algorithms and High-Dimensional Inference
- ▶ International Laboratory of Theoretical Computer Science
- ▶ International Laboratory of Algebraic Topology and Its Applications
- ▶ International Laboratory of Bioinformatics
- ▶ Yandex Laboratory
- ▶ Laboratory of Methods for Big Data Analysis
- ▶ Laboratory of Process-Aware Information Systems
- ▶ Laboratory of Complex Systems Modelling and Control
- ▶ Laboratory of Models and Methods of Computational Pragmatics
- ▶ Laboratory on AI for Computational Biology
- ▶ Laboratory on Algebraic Transformation Groups

Research: AI Centre

HSE University was one of six chosen to create artificial intelligence research centres via the federal programme

Partners:

Yandex



25 projects

Ecology, ethics, linguistics, law are just some of the areas where AI may be useful

AI Centre cooperates with other departments of HSE University

Schools

- Fintech School
- Summer School on Machine Learning in Bioinformatics
- Winter School on Software Engineering
- Fall into ML
- Summer School on Entrepreneurship



Centre for Internships, Projects and Entrepreneurship

- **Projects:** research or applied projects for students
- **Team projects:** students learn to work in teams
- **Internships and trainings hosted by enterprises**
- **Support for entrepreneurial activities of the students**

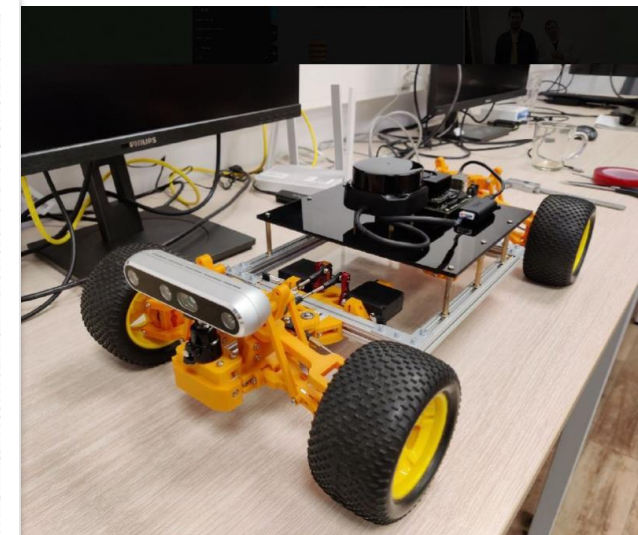
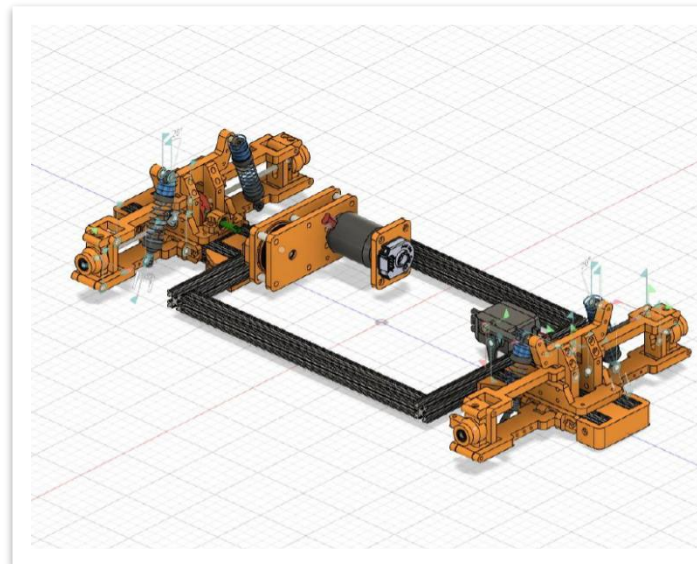
HSE Faculty of Computer Science Holds Summer School on Entrepreneurship

[Import to your division's website](#)



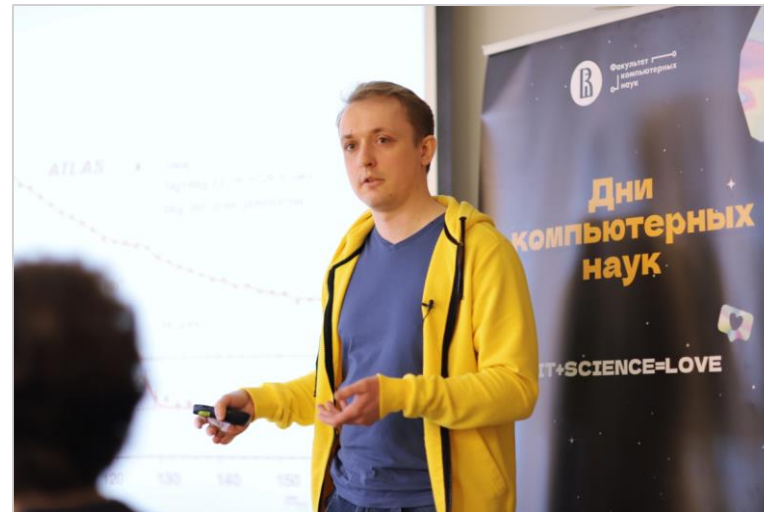
Research: robotics group

- Established in 2021
 - Headed by Denis Simagin
 - Available for summer student internships
 - Work on real tasks, not concepts
-
- One of the first completed tasks — CartPole — requires raising a pendulum into the unstable equilibrium by moving a carriage
 - One of the major aims is to create a walking robot



Faculty events

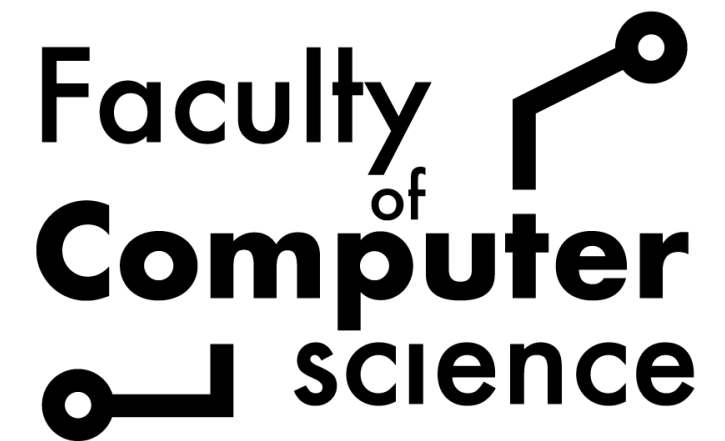
- Colloquium
- Mathematical workshop
- Computer Science Days
- IT lectures
- IDAO
- CSTATI events
- Hiking



Events for the prospective students

- Open days
 - Online days
 - Parents' meetings
 - Two days at the Faculty
 - Tours of the Faculty
 - CERN workshops
 - Trainings
 - Summer School in CS
 - Summer School in Mobile App Dev
- + Schools for information science teachers





computerscience@hse.ru
cs.hse.ru/en