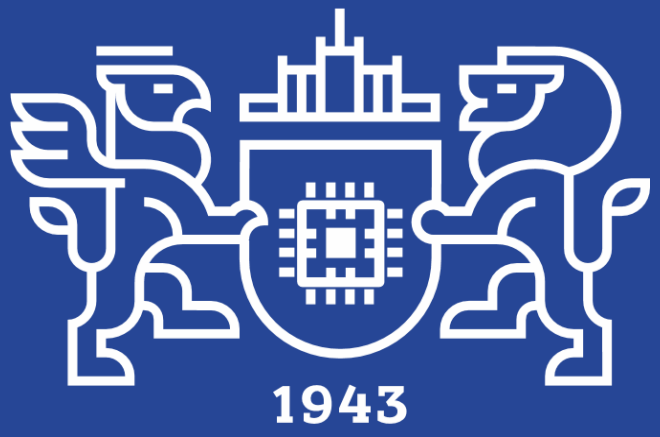


South Ural
State University

National research university

School of Electronic Engineering
and Computer Science

Bachelor Degree in
Fundamental Computer Science and Information Technology

Major: Informatics and Computer Science

Aleksander Hollai
Director of EECS, SUSU

Bachelor Degree in

Fundamental Computer Science and Information Technology

Major: Informatics and Computer Science

Aleksander Hollai

Director of School of Electronic Engineering and Computer Science

South Ural State University, Chelyabinsk, Russia

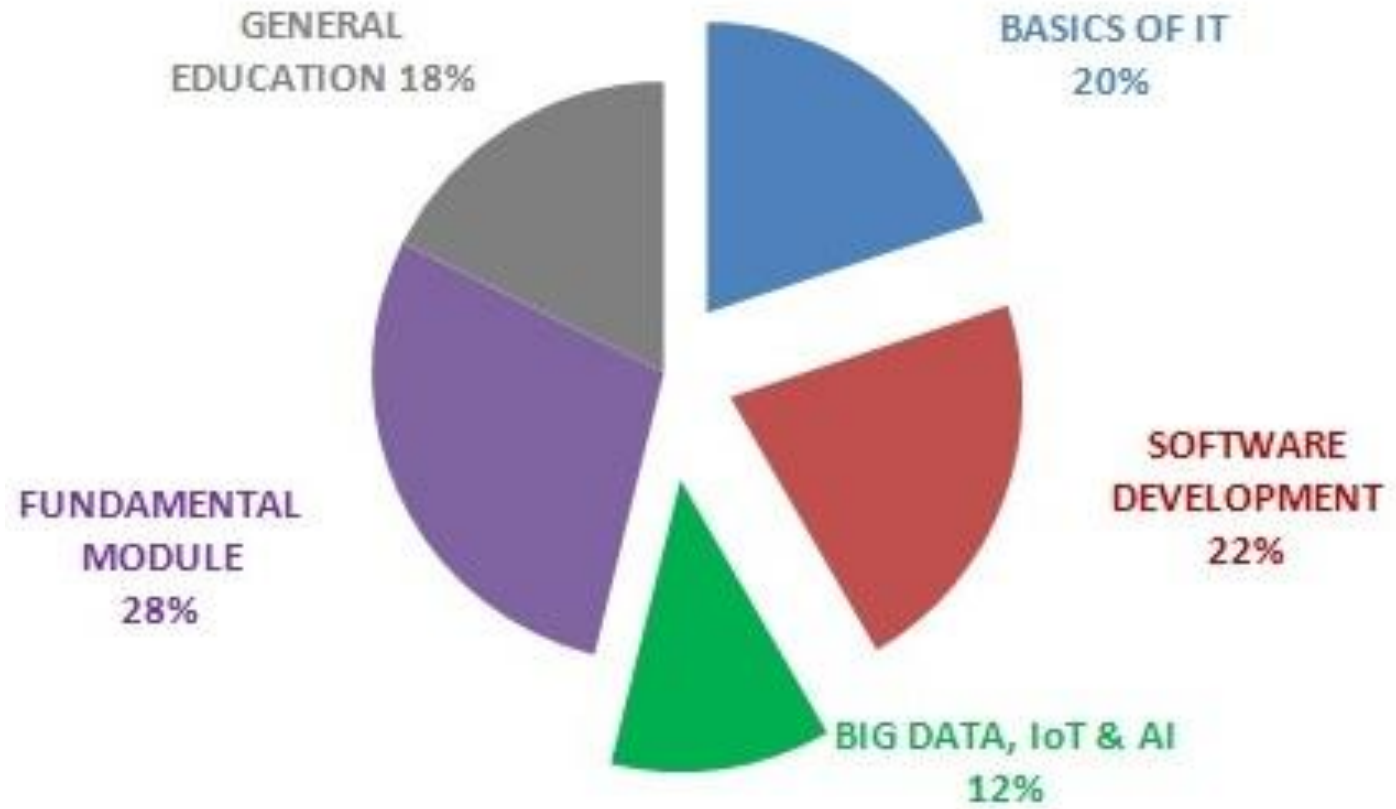
Programme outline

Today we are living in the digital age, and information technologies are rapidly developing with increasing speed. "Industry 4.0", "Deep Learning", "Data Mining", "Artificial Intelligence", "Internet of Things", "E-commerce", "Parallel and Distributed Programming" are the concepts that are changing the world around us now. In this regard, companies worldwide are experiencing a staff shortage in IT professionals who are ready to create software systems for various needs of people and business taking into account the latest achievements in IT and software development.

Within the framework of the bachelor program **Informatics and Computer Science** students would study the latest methods and technologies in IT and software development:

- programming on C++, C#, Java, Prolog, Ruby, Python;
- web-applications development;
- artificial intelligence technology;
- technology of parallel and distributed programming: MPI, OpenMP;
- mobile development;
- database technologies;
- algorithm analysis;
- computer games development.

Programme Structure



Basics of IT

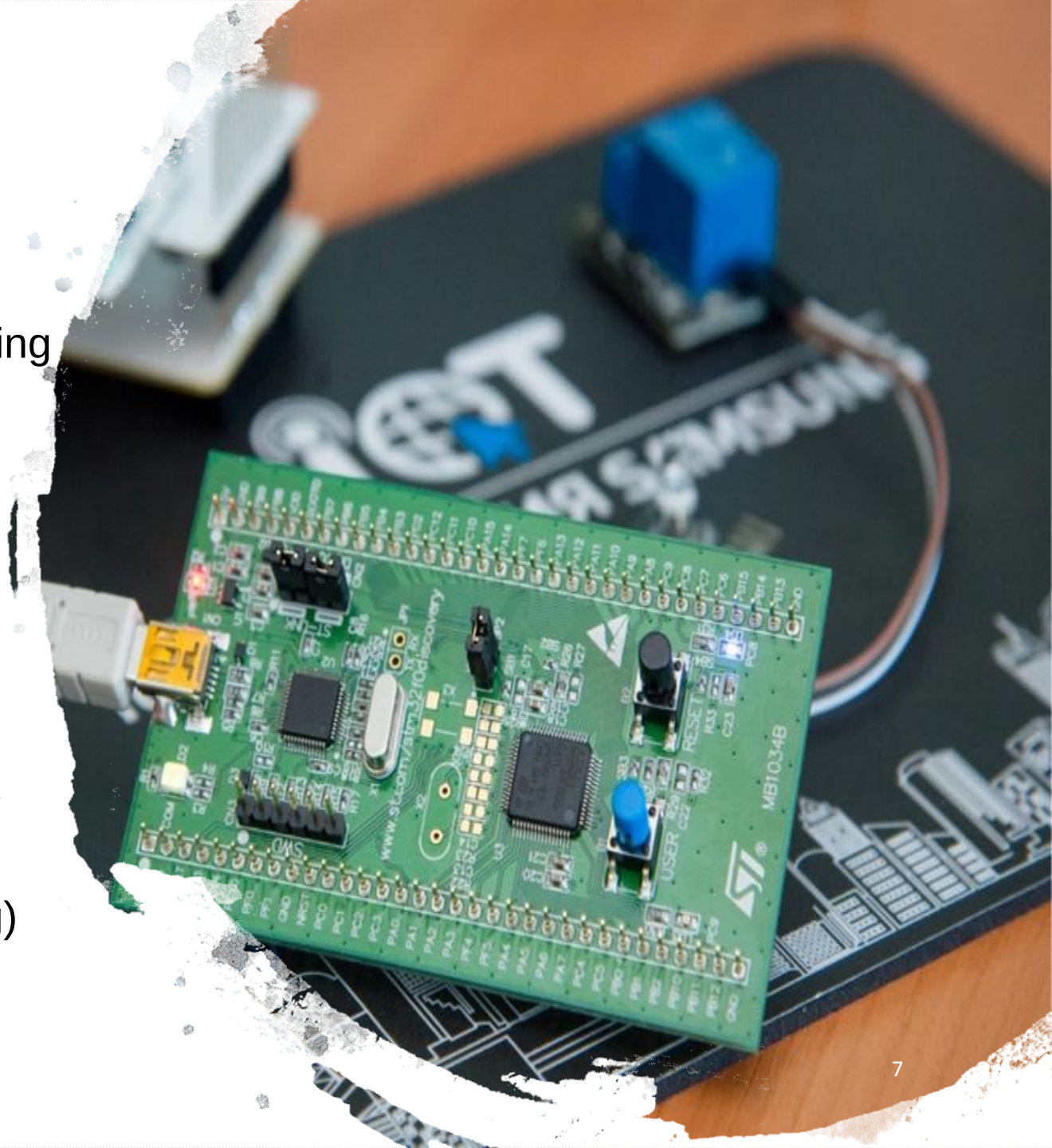
- Programming on High-level Languages
- Applied Software Packages
- Object-oriented programming
- Algorithms and Complexity Analysis
- Operating Systems
- Database Technologies
- Computer Networks
- Geoinformation Systems
- Functional and Logical Programming

Software Development

- Basics of Web Programming
- Programming on .NET
- Java Programming
- Software Engineering
- Web-design
- Basics of Game Development
- Computer Graphics
- Mobile development (Samsung)
- Cyber Security

Big Data, IoT and AI

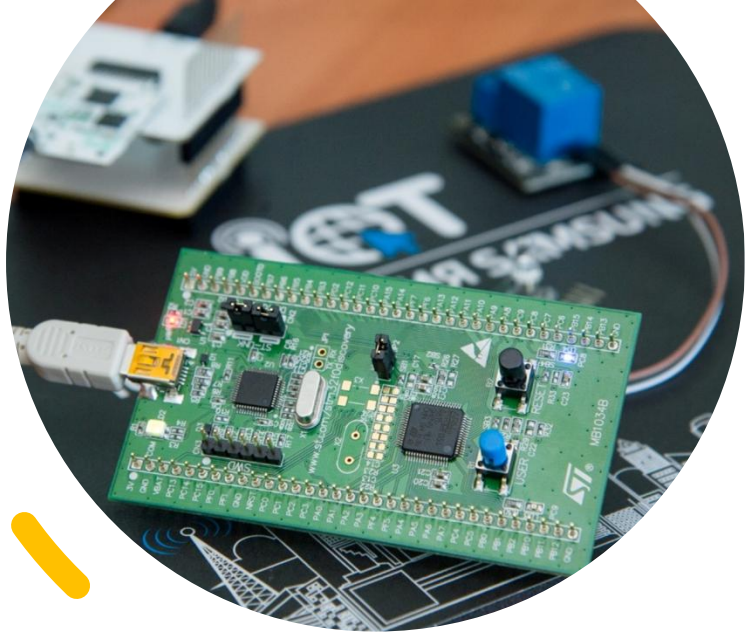
- Structures and algorithms of data processing
- Basics of parallel programming
- Intellectual Systems and Technologies
- Technologies for analytical processing of information
- Basics of Cloud Processing
- Internet of Things Technologies (Samsung)
- Artificial Intelligence (Samsung)

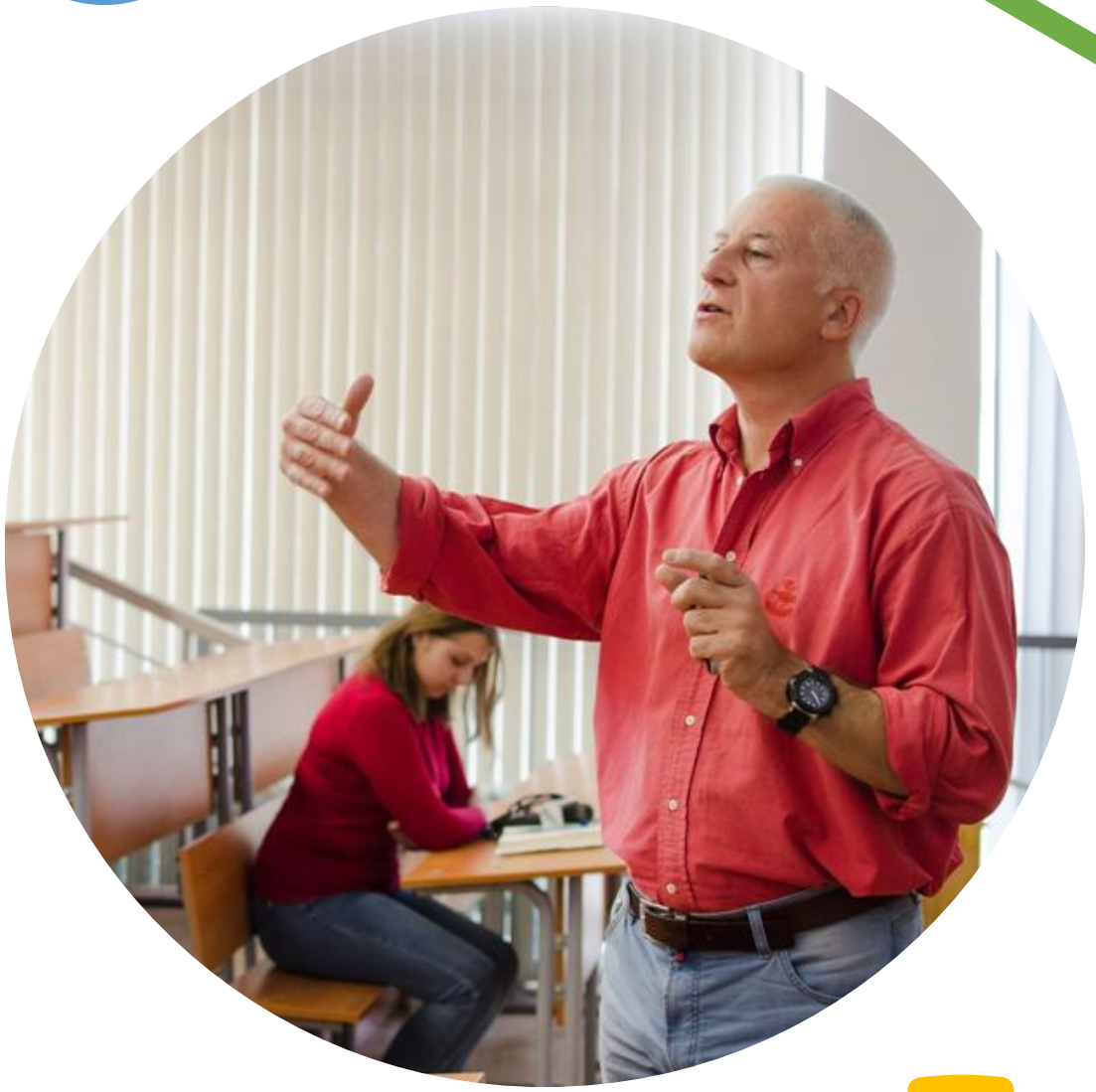


Infrastructure

Your education and project work would be provided using the facilities of such Laboratories of SUSU as

- Samsung IT Academy
- SUSU Supercomputer Center
- NapoleonIT Research and Education Center





Prof. Franck Leprevost

University of Luxembourg, head of Laboratory of Algorithmics, Cryptology and Security (LACS)

Head of the Programme

Questions?

454080, Russia, Chelyabinsk
Lenin Avenue, 87 (SUSU, Building 3), 492/3a.

eecs@susu.ru

https://eecs.susu.ru/en

https://vk.com/susu_eecs

+7-351-267-90-94