Speaking about your future profession.

I am a student of the “Underwater robotic systems and devices” department of Bauman University.

I chose it because I wanted to combine engineering and programing, and that’s exactly what we do at our department.

Some of the subjects we study are: Information devices and systems of underwater robots, Electrical engineering and hydraulics.

To illustrate the complexity of our discipline, I can describe a typical ROV.

An ROV stands for Remotely Operated Vehicle. It is a highly specialized underwater robot that is controlled by an operator on the surface of the water. ROVs are used for a wide range of underwater tasks in industries such as oil and gas, marine research, underwater inspections, salvage operations, and exploration.

These vehicles are connected to the surface vessel by a tether, which not only provides power and communication capabilities but also allows operators to control the ROV's movements and functions. ROVs are equipped with cameras, lights, sensors, thrusters, manipulator arms, and other tools to perform various tasks in challenging underwater environments.

ROVs are crucial in situations where it is dangerous, impractical, or impossible for humans to reach, providing valuable access to deep-sea locations or hazardous underwater environments. They are essential tools for exploring the ocean depths, conducting scientific research, inspecting underwater infrastructure, and carrying out underwater maintenance and repair activities

My term project this year is devoted to development of design documentation I am developing an actuator gearbox and calculating it for accuracy.

Next year, we are supposed to choose our major.

I think I’ll work with hydraulics or underwater manipulators. Now, ROVs can’t operate without such a technology, making them very tempting to research.

The most interesting aspect of my research are Z-transformations. That’s special section of math that was designed especially for discrete controllers. There simple integrals and derivatives from simple mathematics take on a complex form

In the future, I would like to continue working on my development and apply for a post-graduate course at our department because

Be ready for the questions:

What degree will you get when you graduate from the university?

What degree would you get if you completed a post-graduate course?

What subjects did you study in the first and second year at the university?

Can you name any general engineering subjects?

What faculty (department) do you study at?

What other sub-departments of your faculty do you know?

Do you have a scientific adviser?

What would you prefer – a scientific career or work in industry?

What engineering work would you prefer –design or technical (project) management or R&D?

Who is the head of your sub-department?

What are the directions of research at your sub-department?

What are the (recent) developments at your sub-department?

Who made a significant contribution to your major?