

# Aliaksandr Melnichenka

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## EDUCATION

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### Lyceum of Belarusian State University

Sep 2022 - May 2024

Excelled at Belarus's most competitive high school with a focus on Physics. GPA: 9.92/10.

## LEADERSHIP EXPERIENCE

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### Savchenko Solutions

Oct 2023 - Present

Founder, savchenkosolutions.com

- Established a pioneering peer-to-peer, student-led non-profit with **30k+ active users**, revolutionizing access to Savchenko Problems in Physics and democratizing advanced physics education.
- Directed a diverse, international team of over 10 contributors, ranging from high school students to university professors, producing and publishing **700+ original solutions** in Russian and English.
- Earned recognition as the only pinned resource in the physics section of Beyond Curriculum, Russia's leading Olympiad forum.
- Attracted **60k+ monthly pageviews** and **12k+ unique visitors**, solidifying the platform's role as a cornerstone of the physics education community.

### Belarusian Physics Olympiad Website

Sep 2023 - Dec 2023

Project Manager, Editor, Designer, belpho.org

- Coordinated the launch of the largest dataset of belarusian physics olympiads for the last 35 years, designed to enhance students' problem-solving skills and prepare them for regional and national competition stages.
- Official contact for the Republic of Belarus (BLR) on ipho-unofficial.org countries list.
- Recognized as the top resource for science olympiad preparation in Belarus, according to Yandex search.
- Partnered with distinguished National Physics Olympiad representatives, Dr. Markovich and Dr. Slabadzhanuk, while serving as the official media source for BelPhO-2024.
- 90% of silver and gold medalists of national physics olympiad have used the educational platform.

## OPEN SOURCE DEVELOPER

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Software developer, GitHub

- First to publish IPhO-2024 results, contributing to the IPhO unofficial database and resolving design issues.
- Ranked as a **Top-20 GitHub Contributor in Belarus**, for impactful open-source contributions.
- Developed a bike computer using Arduino and Hall Sensor; featured on the **Official Arduino Facebook**
- Created a Python library for downloading audio pronunciations from the Cambridge Dictionary.
- Built a Telegram bot for remote LED strip lighting control, leveraging the ESP8266 microcontroller.
- Simulated a Magnetic Gear model for a physical demonstration at the Belarusian Young Physics Tournament.

## SKILLS

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- **Languages:** Python, C++,  $\text{\LaTeX}$ , JavaScript.      **Natural Languages:** English (fluent), Belarussian (native).
- **WebDev:** PostgreSQL, Node.JS, Express, AWS, HTML, CSS.
- **Scientific Software:** Wolfram Mathematica, Matplotlib, NumPy.
- **Tools:** VS Code, PyCharm, Git, GitHub, Inkspace, Photoshop, Word, Excel, PowerPoint.
- **Additional Skills:** Web Scraping (BeautifulSoup, Requests, Selenium); String Manipulation (Regex in Python).

## AWARDS

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- **Belarus Physics Team.** Ranked among the top 10 physics students in Belarus (6th place) in the Belarusian Physics Olympiad, first reserve for the International Physics Olympiad (IPhO) team.
- Three-times winner in the final of Belarusian Physics Olympiad (Gold: 2022. Silver: 2024. Bronze: 2023.).
- Youngest national team member in Belarus for the International Young Physicists Tournament. Served as captain and led the team twice to the finals in the Belarusian Young Physicists Tournament.
- Recipient of the Presidential Award for Support of Gifted Youth, the nation's highest student honor.