

Bartosz Włodarczyk

✉ bewuw@proton.me

🌐 bewuwy

🌐 bewu.dev

Education

- 2024 – 2027 📖 **Delft University of Technology** - Bachelor of Computer Science and Engineering
- 2020 – 2024 📖 **Batory High School in Warsaw** - International Baccalaureate Diploma Programme (Higher Level: Mathematics Analysis and Approaches, Physics, English)

Skills

- Languages 📖 **English** - fluent
German - B2+
Polish - mother tongue
- Coding 📖 Python, Rust, SQL, C++, C#, some experience in: Java, LaTeX
- Web Dev 📖 HTML, CSS, JavaScript, TypeScript, Tailwind CSS, Next.js, Angular

Awards and Achievements

- 2024 📖 **Best mathematician graduate award**, *Lukasiewicz award*, awarded by my high school annually to the best graduate in the field of Mathematics.
- 2023 📖 **Honorable mention**, 9th annual International Mathematical Modelling Challenge, a contest organised, among others, by Freudenthal Institute.
📖 **Special recognition award**, *Matużytkownicy* national mathematical modelling contest organised by Warsaw University of Technology.
- 2022 📖 **Merit Award**, Singapore International Mathematical and Computational Senior Challenge organised by National University of Singapore High School - won the silver medal.
📖 **Top 10% rank** in *Náboj 2022* Juniors international mathematical competition organised, among others, by ETH Zürich and University of Cambridge.

Experience

Training courses

- 2023 📖 Series of robotics and **Arduino** workshops at Warsaw University of Technology
- 2019 📖 **Python** “Young Programme” programming course at Warsaw University of Technology
- 2018 📖 **C++** “Young Programmer” programming course at Warsaw University of Technology

Professional experience

- 2024 📖 **QuickQueue** - a demo of a queue system with numbered tickets written in Next.js and using PostgreSQL for database. Source code: <https://github.com/bewuwy/quick-queue>
- 2023 📖 **Advent of code 2023** - I participated in Advent of code 2023 edition (solving a set of programming puzzles). Source code of my answers (written in Python): <https://github.com/bewuwy/adventofcode2023>
📖 **Battlecode 2023** - I worked together in a group to program an autonomous bot (in Java) for the tournament organised by MIT. Source code: <https://github.com/bewuwy/bc-23>
📖 **Neo Anki Leaderboard** - a simple extension for the Anki program adding a leaderboard written in Python. I also created a webpage in SvelteKit using a PostgreSQL database to host the leaderboard online. Source code: <https://github.com/bewuwy/Neo-Anki-Leaderboard>
📖 **Blog website** - I designed and deployed a simple blog site using 11ty and Tailwind CSS. Source code: <https://github.com/bewuwy/the-blog>

Experience (continued)

- 2022-2023 📌 **revers.io** - an online implementation of the Reversi board game supporting multiplayer games. The webpage was designed in Figma, written in Angular and is using Google's Firebase database. Source code: <https://github.com/bewuwy/revers.io/>
- 2022 📌 **Airplane boarding simulator** - I created this simulator in Python using PyGame for a math modeling problem I had to solve. Source code: <https://github.com/bewuwy/airplane-boarding>
- 📌 **Flappy Bevy** - a simple clone of Flappy Bird written in Rust programming language using the Bevy game engine. Source code: https://github.com/bewuwy/flappy_bevy
- 2020-2023 📌 **Personal website** - my personal (bewu.dev) website, which I have been designing and changing for the past three years. Currently running on Next.js with custom CSS stylesheet. Source code: <https://github.com/bewuwy/bewuwy>
- 2020 📌 **Minecraft plugin** - a simple Minecraft plugin I wrote in Java. Source code: <https://github.com/bewuwy/lives-plugin>

Academic experience

- 2023-2024 📌 **Mathematics Extended Essay** - "Exploring mathematics behind the Cody Dock bridge". I wrote a 30-page analysis of an unusual bridge located in London and how catenary curves were used in its construction. The topic of my research was calculating the road the bridge "rolled on" using calculus and Python-based approximations. Link to the essay: https://github.com/bewuwy/extended_essay/blob/main/main.pdf?raw=true
- 2023 📌 **Warsaw Science Slam** (a science conference) - My presentation "The quietest theft of the century - How AI stole art." was about the use of AI in art and a dive into how the image generating models like Stable Diffusion work.