# Tomasz Nowak

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#### EXPERIENCE

#### • Jane Street – Software Developer Internship

London, 2022 and 2023

- 2023, first project: worked with a trader/researcher to implement a tool for analyzing and calculating some historical data of securities for determining risks and benefits of holding a bond.
- 2023, second project: made the OCaml language work with gdb/lldb debuggers: extended the OCaml compiler with debug info of variable types, implemented support for variant types and for OCaml in lldb. Before that, it was not possible to print the contents of OCaml variables in the debugger. Code is open source here and here.
- 2022, first project: extended a company product for their clients to support multiple types of securities.
- 2022, second project: designed and implemented an asynchronous system for retrieving and sending data across multiple sources, with a focus on reconnections, error handling and correctness.

#### **EDUCATION**

University of Warsaw

Bachelor's degree in Computer Science, GPA 4.95 / 5.00.

2020-2023

- One of the **2 students out of around 160** to receive an "Exceptional 5!" final grade.
- My thesis is about extending a linter for the Rust language that detects semantic versioning violations.

Wrote a blog post describing the important results of the thesis. Highly upvoted on reddit.com/r/rust.

My code in this project is now used by companies like **Google, Microsoft, Amazon, Mozilla and Adobe**, and by some of the biggest Rust libraries.

University of Warsaw

Master's degree in Computer Science, expected graduation: June 2025, currently GPA 5.00 / 5.00.

2023-2025

- Teaching: I'm conducting classes in *Text algorithms*. Got this unique offer while still being a bachelor's student.

## Competitions (sports programming)

- ICPC World Finals: finalist of ICPC WF 2022 and ICPC WF 2023 (both will happen in the future).
- ICPC Central Europe Regional Contest: golden medalist of CERC 2022 and 2023, medalist in 2021 and 2020.
- Central European Olympiad in Informatics: winner of CEOI 2020.
- International Olympiad in Informatics: medalist of IOI 2020.
- Polish Olympiad in Informatics: winner of POI 2020, medalist of POI 2019, finalist of POI 2018.

#### ORGANIZATION OF COMPETITIONS

- Vicechair of the Jury of the Polish Olympiad in Informatics (2023 2025).
  - Overseeing the competitions and making the main decisions.
  - Among other things, I hired people, changed how we advertised to high school students, redesigned e.g. posters, changed the format of the competition, re-initiated multiple projects.
  - Initiated and supervised:
    - \* <u>Tool for task preparation</u> mentored a student during its implementation by giving code review and by helping with decision-making. The tool is now widely used in the community.
    - \* An official course to prepare for the competition hired teachers and experienced people to make it.
    - \* An error-preventing library during task creation hired an engineer and reviewed his work.
- Member of the Jury and the Task Commission of the Polish Olympiad in Informatics (2020 Current).
- Team leader/deputy leader of the Polish national team in IOI 2021, CEOI 2021, BOI 2021, 2022, 2023 and 2024.
- Each year organizing one or two algorithmic camps for high school students to prepare them for competitions.

### LANGUAGES

Programming Languages

English, Polish, French

Rust, C++, OCaml, Python, C, Java, Haskell