# Albert Skalt

**github:** Arrias
**atcoder:** Arrias
**stepik:** Arrias
**codeforces:** rapira

**Email** : allber971@gmail.com
**Mobile** : +79094301315
**Telegram:** @Arrias

## PROFILE

A young programmer, who like olympiad in mathematics and computer science since high school. Interested in the development and improving of high-load systems. I am ready to study new technologies and their application. Now I am looking for an internship where I could prove myself and gain new experience.

## EDUCATION

- **Saint Petersburg State University** — Saint Petersburg, Russia
  *Bachelor of Computer Science* — *Sep. 2020 – Present*

## EDUCATIONAL PROGRAMS

- **Moscow International Workshop 2021**
  *training level A* — *2021*

- **Olympiad Training School of Innopolis University**
  *training levels B, A* — *2018, 2019*

- **Algorithmic courses of Tinkoff**
  *training level A'* — *2019 – 2020*

- **Courses of the "Sirius" Educational Center**
  *olympiad informatics and algorithms* — *2018, 2019*

## TEACHING EXPERIENCE

- **Rostov-on-don school of Olympiad programming**
  *algorithms and data structures* — *2022*

## SELECTED PROJECTS

- **Huffman Archiver**: Archiver with canonical Huffman codes designed for fast and memory-efficient encoding and decoding of the big files. An university assignment written in **C++**.

- **Elf-file disassembler**: Tool that builds text index and allows for fast queries on the analyzed data. An university assignment written in **C++**.

- **Algolib**: implementation of well-known algorithms, such as Cartesian tree, red-black tree, prime tests, graph algorithms and so on, written in **C++**

- **CDCL SAT Solver**: SAT-solver based on CDCL algorithm. An university assignment written in **C++**.

- **Simply typed lambda calculus**: A library that can $\beta$-reduce lambda terms and solve issues of their $\alpha\beta$-equivalence. The Hindley - Milner algorithm is implemented for type inference. An university assignment written in **Haskell**.

- **VK mini app "Mood"**: A tracker of mood, anxiety and stress, where you can share your records and statistics with close friends. **JavaScript, React**.

- **Formula Normalizer**: The translator of formulas into normal forms: Negative Normal Form, Disjunctive Normal Form, Conjunctive Normal Form. An university assignment written in **Haskell**.

- **Simple talk-chat implementation**: Chat on a local network with GUI. An university assignment written in **Kotlin, SQL**.

## Academic Achievements

- **ICPC Northwestern Russia Regional Contest.**
  *12th place.* *2021*

- **All - Siberian Olympiad in Informatics**
  *1st degree diploma in finals.* *2020*

- **All Russian Olympiad in Informatics**
  *Finalist* *2019*

- **Olympiad of schoolchildren in informatics and programming**
  *1st degree diploma in finals.* *2020*

- **Moscow Olympiad in informatics**
  *1st degree diploma in finals.* *2020*

- **Olympiad of schoolchildren of St. Petersburg State University in informatics**
  *2nd degree diploma in finals.* *2020*

- **All-Russian Olympiad of schoolchildren "The highest test" in informatics**
  *2nd degree diploma in finals.* *2020*

- **All-Russian Team Olympiad of schoolchildren in programming**
  *3rd degree diploma in finals.* *2019, 2020*

- **Rucode command contest (div C/D)**
  *1st degree diploma in finals.* *2021*

- **VI Open Championship of the South of Russia "ContestSFedU-2022"**
  *3rd degree diploma in finals.* *2022*

## Programming Skills

- **Languages**: C++, Kotlin, Haskell, JavaScript, SQL

- **Technologies**: PostgreSQL, ReactJS